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Revision of the Afrotropical Xantholinini (Coleoptera Staphylinidae)

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ABSTRACT

A revision of the staphylinids Xantholinini (Coleoptera) of the Afrotropical Region is presented including a historical review, a discussion of diagnostic characters, morphology and techniques and some conclusive remarks mostly on the zoogeography of this group in Africa south Sahara. Twenty-nine genera and 425 species are recognized, 14 genera and 273 species are described as new. *Linosomus* Kraatz, 1857 sensu nov. and *Notolinopsis* Casey, 1906 sensu nov. are redescribed. *Pedinolinus* Bernhauer, 1912 is placed in synonymy with *Nudobius* Thomson, 1860; *Elgonia* Bordoni, 2001 and *Echdisia* Bordoni, 2007 (n. g. for *Elgonia*, n. preoc.) with *Notolinopsis* Casey, 1906 sensu nov., and *Notolinus* Casey, 1907 with *Linosomus* Kraatz, 1857 sensu nov. On the specific level, *Leptacinus cephalotes* Coiffait, 1968 is placed in synonymy with *Microafra minutissima* (Cameron, 1959); *Xantholinus microphthalmus* Bernhauer, 1939 with *Nudobius micropterus* (Bernhauer, 1939); *Nudobius magnus* Cameron, 1956 with *N. nigrocyaneus* Chapman, 1939; *N. pulcher* Tottenham, 1956 with *N. burgeoni* Bernhauer, 1934; *N. opacinus* Tottenham, 1956 with *N. abessinus* Bernhauer, 1915; *N. concinnus* Tottenham, 1956, *N. meruensis* Cameron, 1951, *N. cinctipennis* Scheerpeltz, 1956 with *N. quadriceps* Cameron, 1929; *Pedinolinus subviridipennis* Bernhauer, 1912 with *Nudobius pictipennis* (Fauvel, 1904); *Gauropterus methneri* Bernhauer, 1908 with *G. nasutus* (Harold, 1879); *G. adjacens* Tottenham, 1939 with *G. hauseri* Bernhauer, 1937; *Xantholinus abessinus* Bernhauer, 1931, *X. aeneipennis* Bernhauer, 1934, *X. tripunctatus* Tottenham, 1951 with *Gyrohypnus remotus* (Eppelsheim, 1895); *Mitomorphus dubitans* Tottenham, 1956, *M. evanescens* Tottenham, 1956, *M. angolensis* Cameron, 1959, *M. gabonicus* Coiffait, 1968 with *Belinga africana* (Bernhauer, 1929); *Pachycorynus conradsi* Bernhauer, 1937 with *Aleutia marginella* (Fauvel, 1905); *Xantholinus capensis* Boheman, 1858 with *Notolinopsis fallax* Sachse, 1852; *Notolinopsis diligens* Casey, 1906 with *N. capensis* Casey, 1906; *Xantholinus bicoloripennis* Scheerpeltz, 1974 with *Linosomus tenuicornis* (Nordman, 1837); *Notolinus parvus* Casey, 1906, *Notolinopsis incultus* Casey, 1906, *Leptacinus caffer* Scheerpeltz, 1074, *L. natalensis* Scheerpeltz, 1974, *L. brincki* Scheerpeltz, 1974 with *Linosomus socius* (Fauvel, 1877); *Leptacinus aethiopicus* Bernhauer, 1931 with *Balchis abessina* (Bernhauer, 1931); *Leptacinus macropterus* Bernhauer, 1939 with *Agaporina elgonensis* Bernhauer, 1939; *Leptacinus luofuensis* Cameron, 1950 with *Byziniella abacta* (Tottenham, 1956); *Leptacinus pholeobius* Jeannel et Paulian, 1945 with *Byziniella hypsibatha* (Bernhauer, 1939); *Leptacinus parvus* Cameron, 1950 with *Byziniella debilis* (Cameron, 1950); *Leptacinus irritans* Tottenham, 1956, *L. pallescens* Tottenham, 1956 with *Byziniella shoutedeni* (Cameron, 1929); *Xantholinus longipennis* Cameron, 1950 with *Byziniella wittei* (Cameron, 1950); *Leptacinus vicinus* Coiffait, 1968 with *Leptacinus oculatus* (Coiffait, 1968). Lectotypes and sometimes paralectotypes are designed for *Pachycorynus pallidipennis* Fauvel, *Leptacinus minutissimus* Cameron, *Leptolinus congoensis* Bernhauer, *Metoponcus superbus* Bernhauer, *Homorocerus rufipennis* Boheman, *Xantholinus abessinus* Bernhauer, *X. arambourgi* Bernhauer, *X. apterus* Bernhauer, *X. capensis* Boheman, *X. fallax* Sachse, *X. jeanneli*

Bernhauer, *X. microps* Fauvel, *X. pictipennis* Fauvel, *Nudobius burgeoni* Bernhauer, *N. schlueteri* Scheerpeltz, *N. praecellens* Bernhauer, *N. abessinus* Bernhauer, *N. proximus* Bernhauer, *N. bipustulatus* Bernhauer, *Pedinolinus subviridipennis* Bernhauer, *Xantholinus nasutus* Harold, G*auropterus evansi* Bernhauer, *G. pustulatus* Bernhauer, *Mitomorphus africanus* Bernhauer, *M. angolensis* Bernhauer, *Pachycorynus marginellus* Fauvel, *Leptacinus tenuis* Cameron, *L. mandibularis* Cameron, *L. abessinus* Bernhauer, *L. aethiops* Bernhauer, *L. micropterus* Bernhauer, *L. elgonensis* Bernhauer, *L. macropterus* Bernhauer, *L. basipennis* Bernhauer, *L. cooperi* Bernhauer, *L. hypsibathus* Bernhauer, *L. machadoi* Cameron, *L. schoutedeni* Cameron, *L. testaceipennis* Bernhauer, *L. gerardi* Bernhauer, *L. aethiops* Cameron, *L. anommatophilus* Cameron, *L. niger* Cameron, *L. congoensis* Bernhauer, *L. spectabilis* Bernhauer. A key of the Xantholinini and a key of the species of all the genera of this Tribe of the Afrotropical Region are provided. Each species is described and originally illustred, all distributional and available bionomic data are presented and distributional records are mapped.

KEY WORDS Coleoptera; Staphylinidae; Xantholinini; Afrotropical Region; revision.

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INTRODUCTION

Africa is the largest of the three great southward projections from the largest landmass of the Earth. Separated from Europe by the Mediterranean sea, it is joined to Asia at its northeast extremity by the Isthmus of Suez.

From the most northerly point, Ras ben Sakka in Tunisia (37°21' N), to the most southerly point, Cape Agulhas in South Africa (34°51'15" S), is a distance of approximately 8.000 km; from Cape Verde, 17°33'22" W, the westernmost point, to Ras Hafun in Somalia, 51°27'52" E, the most easterly projection, is a distance of approximately 7.400 km.

Africa (Fig. 1) can be divided into three parts: the northern area, covers the Sahara, the largest desert on eaarth. At the centre of this area there are two mountain ranges: Hoggar and Tibesti, and to the north the Atlas Mountains. This portion is part of the Palaearctic Region.

The central area, south of the Sahara includes the area near the Gulf of Guinea and reaches the Congo Basin and the Eastern Highlands. The Eastern Highlands include the highest peaks on the continent: Kilimanjaro (5895 m), Elgon (4321 m), Kenya (5200 m).

The southern area, includes the Southern Plateau, the Kalahari desert, the Drakensberg Mountains (rising to 3500 m) and the Plain of Mozambique.

Therefore I divide the Afrotropical Region in four geographical parts:

North-East Africa: Chad, Sudan, Eritrea, Ethiopia.

Central Africa: Cameroon, Central African Republic, Equatorial Guinea, Gabon, Republic of Congo, Democratic Republic of Congo (hereinafter called simply Congo), Uganda, Kenya, Tanzania, Rwanda, Burundi, Jibuti and Somalia.

Southern Africa: Angola, Zambia, Malawi, Zimbabwe.

South Africa: Namibia, Botswana, Swaziland, Lesotho, South Africa.

In Africa there are four natural environments owing to the four types of climate.

Where the climate is equatorial (near the equator, which cuts through the middle of Africa) is always very hot, with a high rainfall. Here the equatorial forest is very dense.

The Savanna zone has only two seasons: rainy and dry. This environment is grassland with sparse tree cover; the rainy season produces a lush growth of grass, but in the dry season the land becomes arid.

In the permanently arid zones, near the Tropics of Cancer and Capricorn it never rains. Here the environment is desert, with sand and stones.

Africa is a land of high plains and low plateaux. Mountain ranges are confined to the north-western

edge of the continent (Atlas) and the extreme south (Drakensberg).

The edges of the however, rise in the East and includes towering mountains rising to over 5000 m, such as Mts. Kilimanjaro and Kenya, the crystalline Ruwenzori range (5119 m), forming the headwaters of the Congo, Nile, Niger and Zambezi basins. This region also has the continents largest lakes strung our in a north-south axis (lakes Victoria, Nyasa and Tanganyika).

The middle of the continent has a typical equatorial climate, with abundant and regular rainfall and high average temperatures. At highest altitudes in this region weather patterns become more irregular; daily and annual extremes of temperature become progressively more pronounced to the north and south in increasingly arid areas, reaching their greatest fluctuations in deserts. In the northern coastal areas and in the southern tip of the continent the climate is Mediterranean.

Around the equator of the abundance of rainfall favours the formation of a lush rainforest, and the gradual drying up of the climate corresponds to the transitions from forest to savanna, steppe and desert. Beyond the deserts, the northern coastal areas and the extreme south have vegetations that resemble Mediterranean maquis shrubland.

In a recent study (Le Gall et al., 2010) the authors suggest a reconstruction of the origin of the African insects to which I refer those who want to known more about.

The history remind us that for a while nearly the whole of Africa was the possession of various European nations (see map of colonial boundaries, Fig. 1666) thus Tanzania, Burundi and Rwanda constituted German East Africa, Kenya was a British colony, the Democratic Republic of Congo was Belgian Congo, and the Central African Republic a French colony called Oubangui-Chari. Major collections were made in these territories during the colonial era by naturalists and researchers for the museums in London, Berlin and Tervuren, and to a lesser extent the museums in Paris, Lund, Brussels, Genova and others.

The family Staphylinidae is the largest families of the order Coleoptera with more than 58,300 species and nearly 3500 genera grouped into 33 subfamilies (Grebennikov & Newton, 2009, Solodovnikov et al., 2013).

The tribe Xantholinini is represented by many genera and large number of species in all zoogeographical regions. No revision on the generic level using modern taxonomic procedure exists for the Africa south of Sahara. It makes very difficult to start a revision of genura from this region, because of confusion in descriptions, as similar species were originally described by authors in different genera.

Very few staphylinid specialists participated in these expeditions, so the collections of Xantholininae must be regarded as random and fortuitous. A notable exception were the many collections made by Narcisse Leleup (cf. Leleup, 1956, 1965) of the Musée royal de l'Afrique centrale in Tervuren (MRAC), who used methods such as sifting humus and berlesates, that also produce many Staphylinidae. The specimens collected by this naturalist form the essential core of the material studied for this revision.

I think it useful to report some concise observations about habitats examined especially during the MRAC expeditions: humus of forests of low, medium and high altitudes, bamboo, *Hagenia* and subalpine ericetums forests of Ituri, Kivu, Maniema, Katanga in Congo, and in Rwanda, Burundi; humus of old ante-Pleistocene forested area of vast mountain range Itombwe in Congo; humus of forestry galleries on the vast plateau of Kundelungu and around Elisabetville; *Cryptomys* burrows; humus in shreds of different mountain ranges of rain or mesothermal forests, especially of Mount Uluguru in Tanganyika and in residues mesothermal forests and mountain forests, alpine and subalpine ericetums on Mount Elgon, between 1900 and 4000 meters above sea level; humus in *Hagenia* forests with bamboo *Arundinaria* to 2800–3000 meters in Kenya; *Tachyoryctes* nests between 2000 and 2500 m; forestry galleries of Abercorn and rain forest of Chiringa on Mont Selinga in Zambia (for some habitat see Figs. 1799–1807).

The most numerous and interesting species, (especially in the genera *Notolinopsis*, *Metocinus*, *Byziniella*) wingless, depigmented and subanophthalmes are orophyiles and clearly show the particular biogeographic richness of tropical and subtropical Africa.

GENERAL OBSERVATIONS

Authors of the first half of twentieth century

described many species from Africa, with the advantage of exploring an unknown and virgin world and therefore with an almost absolute certainty of describing species new to science. However, dozens of these species were ascribed to the genera *Leptacinus* and *Xantholinus*. I do not think, as others have suggested, that authors like Bernhauer and Cameron had qualms about describing new genera. I note instead a certain superficiality in their treatments, as though their sole purpose was to describe as many new species as possible. The species attributed to *Leptacinus* almost all belong to *Metocinus*, *Chaetocinus* (formerly a subgenus of *Leptacinus*) and *Byziniella* gen. n., and the species attributed to *Xantholinus* almost all belong to *Nudobius*. While I see some justification in the case of *Leptacinus*, I find it difficult to understand how these and other famous authors could confuse two such well known genera as *Xantholinus* and *Nudobius*.

Moreover those who studied the tribe in the second half of the twentieth century, for example Levasseur (in litt.), have made the same mistakes, confusing *Nudobius*, *Metocinus* and *Chaetocinus* with one another. Yet it is sufficient, prima facie, to check whether or not the anterior tarsi are dilated, and to examine the shape of the second and third antennomeres.

This study has shown what I found in my study of oriental species (Bordoni, 2002), namely that many species should be attributed to other genera or even to new genera. This, after all, is partly the purpose of revisions.

I must remark on another famous staphylinidologist whose detailed descriptions filled many pages with words but very few figures. The absurdity of this approach is shown by Scheerpeeltz's inability to distinguish males from females; he was in the habit of affixing sex labels to specimens that proved to be almost always wrong; he probably did not attached any systematic importance to the sex of specimens, a view that is completely incompatible with modern methods of study. Examples of this revealed in the present study include *Leptacinus sinuatocollis* Scheerpeltz, 1974 (*Amharina hariolus*), *Nudobius rudebecki* Scheerpeltz, 1974 (*Capesia rudebecki*), and *Xantholinus parallelus* / *subtilepunctatus* Scheerpeltz (*in litteris*) (*Notolinopsis finisterrae*); I noted in earlier studies that these mistakes involved not only small species but even specimens 22 mm long, as for instance *Dibothroglyptus sutteri* Scheerpeltz, 1957 (Bordoni, 2002). This method of working produced numerous synonymies, especially in groups of minute species that are very similar to one another when the aedeagi are not examined.

Some early treatments of the aedeagi gave figures, but these often proved to be ludicrous. Tottenham (1956), for example, gave figures of the aedeagi of some *Metocinus*, *Byziniella* gen. n. and *Chaetocinus* (all but one described as *Leptacinus*), but only of the distal portion and naturally without the inner sac. One of these is figured without parameres and another with only one paramere (at least he wrote "probably second paramere broken off" (sic)). In fact I found parameres within the genital segments of the species studied by that author.

The acquisition of knowledge involves continuous improvements in the techniques and study of the material, and I expect that in the future other specialists will mistakes I may have made.

This work concerns only species from the African continent; those from Madagascar and neighbouring islands (Malagasy Region) will be dealt with in a separate, forthcoming work.

In the text "Rep. Congo" is the Republic of Congo (former French colony); "Congo" is the Democratic Republic of Congo (formerly Belgian Congo).

The names of old or incorrect localities written on the labels are in brackets; the correct names are placed alongside.

Usually a red disc is added to undissected male specimens to facilitate future recognition.

The descriptions of the species, in particular measurements, punctation, colouration, figures of the shape of tergite and sternite of the male genital segment and structures of the inner sac of the aedeagus are given as a rough guide, because individuals naturally vary to a certain extent.

For example, given numerous specimens of a species from more than one locality, I can verify that the length of the fore-body (the abdomen is extensible) varies from x to y. When only a single specimen is available I can only give the measurements of that specimen. Even when a series of specimens from a single locality are available, descriptions and measurements are still given as a rough guide, because individual differences may be due to a variety of reasons, such as the amount of food ingested by the larvae, humidity, altitude and

so on. For this reason I feel it is quite pointless to give lists of detailed measurements of various parts of the body. They make sense only as average dimensions among very many specimens.

I have designated lectotypes and sometimes paralectotypes when the original author did not designate the type or did not specify that the species was described on the basis of a single specimen.

Under the heading "EXAMINED MATERIAL" of each species specimens already mentioned under "TYPE MATERIAL" are not cited.

The bibliography of genera distributed in several zoogeographical regions includes only the most recent and significant citations.

Body sizes in the descriptions genera are given only as a rough guide and apply solely to the Afrotropical species. All the figures are schematic and indicative to suggest the interpretation of the species, bacause each taxa has ist degree of variability.

In past years I have received gifts of African specimens, cited in the text, from H. Coiffait, H. Franz and W. Rossi.

TERMINOLOGY AND DIAGNOSTIC CHARACTERS OF XANTHOLININI

The terminology used is that in current use; nevertheless, in order to avoid any misunderstanding, I have chosen to give a few details and point out the main characters on which I based the descriptions of species.

Length of body: measurements are given purely as a rough guide, because obviously individuals of a same species are not all exactly the same size; for this reason I do not consider it useful, from a purely practical point of view, to give detailed measurements of individual body parts. In the descriptions the total body length is measured from the anterior margin of the head to the posterior margin of the genital segment; because the abdomen may be extended or contracted I give in parentheses the length of the fore-body, measured from the anterior margin of the head to the posterior margin of the elytra, a measurement which I presume is more constant. The diameter of the eyes is measured as seen when the specimen is observed in dorsal view, and this length is compared with that of the antennomeres. The length of head is measured from the anterior to posterior margins; the length of pronotum is likewise measured from the anterior to posterior margins; the length of elytra from a line extending from the anterior margin of the humeral angle to the posterior margin of the elytron.

Diagnostic and systematic characters

These observations are partly drawn from the revision of the Xantholinini of the Oriental Region (Bordoni, 2002), and supplemented by data relating to the Palaearctic, Nearctic, Australasian and of course the Afrotropical region. These data illustrate, albeit roughly, the incredible richness of genera and variety of form, structure and characters of the Xantholinini which, in my opinion, represent one of the most significant examples of biodiversity as shown by the Staphylinidae.

Since I also make references to the non-Afrotropical faunas, I think it useful to provide the following list (presented in alphabetical order) of the genera that occur in other zoogeographical regions:

PALAEARCTIC REGION
(INCLUDING THE HIMALAYA AND TAIWAN)

Achemia Bordoni, 2003
Achmonia Bordoni, 2004
Adhavara Bordoni, 2002
Allolinus Coiffait, 1966
Atopolinus Coiffait, 1982
Domea Bordoni, 2002
Edulia Bordoni, 2007
Emathidis Bordoni, 2007
Erymus Bordoni, 2002
Gauropterus Thomson, 1860
Gyrohypnus Leach, 1819
Himmala Bordoni, 2002
Hypnogyra Casey, 1906
Indolinus Bordoni, 2002
Indomorphus Bordoni, 2002
Leptacinus Erichson, 1839
Liotesba Scheerpeltz, 1965
Mahavana Bordoni, 2002
Medhiama Bordoni, 2002
Megalinus Mulsant & Rey, 1877
Metolinus Cameron, 1920
Metosina Bordoni, 2002
Milichilinus Reitter, 1908
Mitomorphus Kraatz, 1859

Neohypnus Coiffait et Saiz, 1964
Nepalinus Coiffait, 1975
Nudobius Thomson, 1860
Oculolabrus Steel, 1946
Phacophallus Coiffait, 1956
Sagarmatha Bordoni, 2002
Sinichella Bordoni, 2013
Someira Bordoni, 2002
Spaniolinus Bernhauer, 1916
Stenistoderus Jacquelin du Val, 1856
Sumatera Bordoni, 2002
Sylea Bordoni, 2001
Talliella Bordoni, 2002
Thyreocephalus Guérin Méneville, 1844
Tralichia Bordoni, 2002
Ulisseus Bordoni, 2002
Vulda Jacquelin du Val, 1853
Xantholinus Dejean, 1821
Xanthophius Motschulsky, 1859
Yunna Bordoni, 2002
Yunnella Bordoni, 2002
Zeteotomus Jacquelin du Val, 1857

ORIENTAL REGION

Achmonia Bordoni, 2004
Adhavara Bordoni, 2002
Andamania Bordoni, 2002
Andelis Bordoni, 2002
Atopolinus Coiffait, 1982
Cylindrinus Bordoni, 2002
Denon Bordoni, 2002
Domea Bordoni, 2002
Emathidis Bordoni, 2007
Erymus Bordoni, 2002
Faxilla Bordoni, 2002
Gauropterus Thomson, 1860
Gyrohypnus Leach, 1819
Hypnogyra Casey, 1906
Indolinus Bordoni, 2002
Indomorphus Bordoni, 2002
Leptacinellus Bordoni, 2002
Liotesba Scheerpeltz, 1965
Maharadja Bordoni, 2002
Mahavana Bordoni, 2002
Manilla Bordoni, 1990
Medhiama Bordoni, 2002
Megalinus Mulsant et Rey, 1877
Metolinus Cameron, 1920
Metosina Bordoni, 2002
Mitomorphus Kraatz, 1859
Neoxantholinus Cameron, 1944
Nepalinus Coiffait, 1975
Nilla Bordoni, 2002
Nudobius Thomson, 1860
Oculolabrus Steel, 1946
Pachycorynus Motschulsky, 1858
Pahanghella Bordoni, 2002
Paratesba Cameron, 1932
Phacophallus Coiffait, 1956
Someira Bordoni, 2002
Spaniolinus Bernhauer, 1916
Sumatera Bordoni, 2002
Symilla Bordoni, 2002
Taliella Bordoni, 2002
Tamilla Bordoni, 2002
Tetraulacus Bordoni, 2002
Thyreocephalus Guérin Méneville, 1844
Ulisseus Bordoni, 2002
Xanthophius Motschulsky, 1859
Yunnella Bordoni, 2002
Zeteotomus Jacquelin du Val, 1857

NEARCTIC REGION

Crinolinus Smetana, 1982
Gauropterus Thomson, 1860 (introduced)
Gyrohypnus Leach, 1819
Habrolinus Casey, 1906
Hesperolinus Casey, 1906
Hypnogyra Casey, 1906
Lepitacnus Smetana, 1982
Leptacinus Erichson, 1839 (introduced)
Linohesperus Smetana, 1982
Lissohypnus Casey, 1906
Lithocharodes Sharp, 1876
Microlinus Casey, 1906
Neohypnus Coiffait et Saiz, 1964
Neoxantholinus Cameron, 1944
Nudobius Thomson, 1860
Oxybleptes Smetana, 1982
Phacophallus Coiffait, 1956 (introduced)
Stenistoderus Jacquelin du Val, 1856
Stictolinus Casey, 1906
Thyreocephalus Guérin Méneville, 1844
Timagenes Smetana, 1982
Xantholinus Dejean, 1821 (introduced)
Xestolinus Casey, 1906
Zenon Smetana, 1982

Australasian Region

Achmonia Bordoni, 2004
Adamanthea Bordoni, 2013
Ahrimania Bordoni, 2013
Andelis Bordoni, 2002
Archaites Bordoni, 2005
Australinus Bordoni, 2005
Bathyllia Bordoni, 2010
Bruxneria Bordoni, 2012
Dibotroglyptus Scheerpeltz, 1957
Dinoxantholinus Heller, 1910
Eachamia Bordoni, 2005
Enervia Bordoni, 2005
Erymus Bordoni, 2002
Grevillia Bordoni, 2005
Guineella Bordoni, 2014
Guineodinella Bordoni, 2013
Gyrohypnus Leach, 1819 (introduced)
Holocorynus Sharp, 1908
Leptacinus Erichson, 1839 (introduced)
Leptomicrus Fauvel, 1878
Leurocorynys Sharp, 1908
Linosomus Kraatz, 1857
Manilla Bordoni, 1990
Metolinus Cameron, 1920
Mitomorphus Kraatz, 1859
Neohypnus Coiffait et Saiz, 1964
Neoxantholinus Cameron, 1944
Otagonia Bordoni, 2005
Pachycorynus Motschulsky, 1858
Paracorynus Cameron, 1944
Phacophallus Coiffait, 1956 (introduced)
Pseudocorynus Cameron, 1944
Pseudoxantholinus Cameron, 1945
Queenslandina Bordoni, 2005
Spaniolinus Bernhauer, 1916
Sulawesina Bordoni, 2002
Tetraulacus Bordoni, 2002
Thyreocephalus Guérin Méneville, 1844
Waitatia Bordoni, 2005
Walesia Bordoni, 2005
Whangareiella Bordoni, 2005
Xanthocorynus Sharp, 1908
Xanthophius Motschulsky, 1859
Zeteotomus Jacquelin du Val, 1857

Afrotropical Region

Achmonia Bordoni, 2004
Afrus Janak et Bordoni, 2015
Agaporina n. gen.
Agoreina n. gen.
Aleutia n. gen.
Alexyrea n. gen.
Amharina n. gen.
Balchis n. gen.
Belinga n. gen.
Byziniella n. gen.
Capesia n. gen.
Chaetocinus Clark et al., 1972
Elapheia n. gen.
Elitheya n. gen.
Endymathis n. gen.
Gauropterus Thomson, 1860
Gyrohypnus Leach, 1819
Homorocerus Boheman, 1848
Linosomus Kraatz, 1857
Metocinus Cameron, 1950
Microafra n. gen.
Neoxantholinus Cameron, 1944
Notolinopsis Casey, 1906
Nudobius Thomson, 1860
Phacophallus Coiffait, 1956
Stenistoderus Jacquelin du Val, 1856
Thyreocephalus Guérin Méneville, 1844
Xanthophius Motschulsky, 1859
Zeteotomus Jacquelin du Val, 1857

I have sought to describe the most significant and consistent features, as well as point out that within a single species there may be a very great range of differences in the secondary sexual characters, such as the shape of the posterior margin of the 6th visible abdominal sternite or of the sternite of the genital segment, especially in very speciose genera such as *Nudobius*, *Metocinus*, *Notolinopsis*, *Byziniella*, so that we are not solely dependent on less stable characters such as body size, the curvature of the temples, lesser or greater posterior dilatation of the elytra, etc. These differences are probably related to the necessity of acute competition and consequent specialisation, especially in feeding habits, in environments poor in resources, for example in montane areas. This probably also accounts on the one hand for the great number of species, especially within some groups and in some regions, compared with the number of available specimens, and on the other hand for the convergent evolution of particular exoskeletal characters (of

mouthparts in various unrelated genera, more or less developed microptery with a consequent reduction of elytral length and humeral angles in montane species, similar conformation of the genital segment in different groups), probably accounted for by similar feeding, ecological and reproductive behaviour in the same biotope or in neighbouring ones, especially in ones only separated for example by different but approximate altitudes, at which species may inhabit considerably different climatic as well as botanical and geological environments.

Microsculpture and punctation: the microsculpture consists of more or less dense and more or less deep microstriation arranged in usually transverse meshes; in some, mainly subcortical genera with flat, depressed bodies (*Tetraulacus*, *Neoxantholinus*, *Elitheya*) such meshes are frankly longitudinal, with transverse meshes only on the sides of head; in *Metolinus* they are normally somewhat arcuate, on the head extending from the sides towards the disc, on the pronotum from the anterior margins towards the centre. A similar arrangement of the meshes is also seen on the pronotum of *Pachycorynus*. In some species the microstriation is composed of more or less elongate, rarely isodiametric meshes, in some cases very clear and evident, in others less regular and less well defined (for instance in some *Notolinopsis*). Some genera include species with smooth shiny surface of the head devoid of microsculpture, as in many *Spaniolinus*, *Manilla*, *Atopolinus* or *Chaetocinus*, or with traces of transverse microstriation confined to the sides of head. Usually the pronotum shows the same type of microsculpture as the head. The elytra do not have microsculpture properly speaking, nevertheless they sometimes appear rugose because they are usually less strongly sclerified and their surface is not perfectly even between the series of punctures or show some granulation. Finally the abdomen is rather uniform in all groups; the microstriation is usually transverse, more rarely polygonal; sometimes the bases of segments bear a horizontal sulcus in which the microstriation is always polygonal.

The microsculpture is a diagnostic character that is useful at both the generic and specific levels.

The punctation is one of the most apparent and constant characters within the staphylinids studied, and is part of the range of variability of individual species. There is a primary setiferous punctation composed of larger punctures always confined to a particular area, and bearing long pale setae, and a secondary punctation composed of smaller punctures, although sometimes scarcely smaller, on the surface of the head, usually on the clypeus, on the temples and behind the eyes, in some cases also on the disc of head, near the anterior angles of the pronotum, sometimes on the sides of the latter, and finally on the abdominal segments, less regularly arranged in numbers and size and bearing short pubescence. The first type of punctation is an excellent diagnostic character at the generic level. For instance *Symilla* and *Manilla* have four punctures between the eyes, and the pronotum of *Thyreocephalus* is impunctate but bears a large puncture near the anterior angles. In addition to this type of punctation there exists in some cases an extremely fine micropunctuation that is only visible at high magnification, for instance in *Domea*.

In some groups the punctures are not evenly sub-circular, but sub-ovoid and umbilicate (*Spaniolinus*), oblong (*Zeteotomus*) or particularly elongate and deep, so that they end up by forming striae such as those on the head of *Aleuthia* and in some *Pachycorynus*. Often the punctation has conspicuous features such as those that have resulted in the heads of *Paratesba* to be gouged by deep pits bordered by veritable carina and crests. The punctation is obviously of great taxonomic importance.

The bodies of staphylinids are covered by more or less dense and conspicuous pubescence arising from the primary or secondary punctation according to the density of punctures. The primary punctures, as described above, bear particularly long setae in certain areas such as between and behind the eyes, the temples, the posterior margins of the head, along the margins and anterior angles of the pronotum, along the dorsal and lateral series and horizontal and lateral margins of the abdominal tergites. In some groups these setae, always accompanied by shorter and less apparent pubescence, are particularly conspicuous, as for instance in some *Thyreocephalus*. There are cases in which the dense pubescence is particularly conspicuous, as for instance in *Andelis* or *Microafra*. Sometimes the pubescence is erect or the contrary recumbent, usually directed towards the centre of the body. The pubescence and setae may in some cases also provide a discrete diagnostic character.

Some characters of particular interest are found on the head, the pronotum and the abdomen, in particular on the 6th visible abdominal segment, and finally in the genital organ and its inner sac. These characters are described below.

HEAD. The head bears very significant characters of diagnostic importance both at the generic and specific levels, The antennae are inserted on the anterior margin of the frons, and their insertion points are always visible in dorsal view, except in *Zeteotomus*, in which the epistoma is produced, partially concealing the insertion of the antennae and the labrum. The ratio of the distance separating the insertion points of the antennae and the distance between these and the inner margin of the eye remains constant within a same genus.

Concerning some genera characteristic of the afrotropical region, I add schematic figures of antennae (Figs. 47–52).

The frontal sulci begin behind the insertion points of the antennae; the sulci may be short and shallow, as for instance in many *Nepalinus*, or deep, as in many *Thyreocephalus*; they may also be scarcely distinguishable because they are represented by a series of punctures, as in some *Spaniolinus*, or they may be entirely absent as in *Metolinus*, *Symilla*, *Balchis* and *Agaporina*. In some cases the frontal sulci are indistinguishable because of the deep and dense sculpture, as in *Paratesba*. The ocular sulci begin on the inner margins of the eyes; they are usually convergent and more or less directed towards the disc of the head. They also vary in length and may end by meeting at the centre of the head as in some *Neoxantholinus*; they may be clearly visible and deep (*Gyrohypnus*, *Phacophallus*), or superficial and unobvious (*Nudobius*, *Elapheia*, *Notolinopsis*, *Byziniella* and *Chaetocinus*). Usually the frontal sulci end in a large puncture, as in Metolinus. In *Oculolabrus* the frontal and ocular sulci are practically indistinguishable. In *Tetraulacus* the frontal sulci are very long and converge to form a single mid-longitudinal sulcus that extends along much of the surface of the head. The greater of lesser presence of frontal and/or ocular sulci is a distinguishing character of many genera, for example Balchis, *Agaporina*, *Elapheia*, *Byziniella* and *Chaetocinus*.

The surface of the head, whether smooth or with transverse or polygonal microstriation, always bears some large setiferous punctures disposed in a particular order in the various groups. In *Nepalinus* for instance there are always two punctures on the disc, whereas in *Thyreocephalus* there is always a puncture near the front of the inner margin of the eye and a pair of punctures at the end of each of the ocular sulci. Two parallel longitudinal series of punctures between the eyes are present for example in many *Atopolinus*. The temples and the folded surface of the temples in this genus may be analogous to the rest of the dorsal surface or show some modifications, sometimes very evident ones. In the first case the microsculpture and punctation is the same as on the rest of the surface of the head; in the second case the area may bear very deep, dense, sub-circular punctures, usually finer that the dorsal punctation, but rather deeper as in many *Thyreocephalus*; or it may bear a sort of carina that may end at the posterior angle of the head in a tooth-shaped projection that is little visible in dorsal view. A similar structure but clearly visible in dorsal view is characteristic of the head of *Oculolabrus*, *Gyrohypnus* and *Ulisseus*. In some cases the folded surface of the temples bears deep depressions like the dorsal surface in *Paratesba*. In other cases (*Gauropterus* for example) there is a sort of sulcus formed by a line of deep elongate punctures. In many *Gyrohypnus* there is a parallel carina and sulcus.

The ventral surface of the head has gular sutures that may be fused or joined over a greater or lesser distance (*Nepalinus*, *Mitomorphus* and *Metolinus* for example), or separated for their entire length by a punctuate or impunctate space (*Paratesba* or *Sagarmatha*).

In nearly all genera the head is sub-ovoid and elongate, but there are some others that have heads of characteristic shapes, making them recognisable at first sight, combined with other basic characters. The head of *Oculolabrus* and *Ulisseus* for example is subquadrate, whereas the sides of that of *Symilla* are so feebly rounded that there are no discernible posterior angles. In a few groups the head appears compressed and massive (*Spaniolinus*), of greatly flattened (*Elitheya*, *Aleutia*) and often strongly dilated and rounded posteriorly (*Pachycorynus*); in this last case there is almost always a longitudinal stria formed of elongate confluent punctures extending from the posterior margin of each eye to the base of head. In other cases of these the head is sub-cylindrical

(*Zeteotomus*) and in yet others very convex (*Amharina*, *Belinga*).

The labrum, which is normally bi-lobed with a more or less deep median emargination (*Byziniella*, *Chaetocinus*) or denticulate (*Thyreocephalus*) is in some groups (*Paratesba*, *Oculolabrus*) deeply modified. In large sized species this in many cases provides useful characters for the identification of species. This is a good diagnostic feature both at the generic and specific levels.

Naturally the maxillary and labial palpi, the ligula and to a lesser degree the antennae and mandibles are of great importance. The antennae are geniculate, with a long, sometimes very long scape, more rarely proportionately short in relation to the average (*Zeteotomus*, *Paratesba*), with the 2nd segment longer, shorter or the same length as the 3rd, with the 4th sub-spherical or sub-quadrate, and the following segments usually more or less evidently transverse and almost always increasingly large. These are strongly transverse in *Zeteotomus* and stoutly clavate in *Homorocerus*. In some groups (*Metolinus*) the antennae are sub-equal in the various species with at most differences in the last segment; in other groups there may be small differences in the antennae. The dimensions of antennal segments, if they cannot be measured macroscopically, is not in my opinion a very consistent character. The shape and size of the last antennal segment are exceptional in some *Mahavana* and in combination with other morphological characters contribute to defining the genus. The 2nd segment is particularly long in *Endymathis*. In *Neoxantholinus* and *Cylindrinus* the 5th segments are particularly large.

The Xantholinini normally have very distinct eyes and there are genera (*Thyreocephalus*, *Oculolabrus*, *Metolinus*) which include species with proportionately very large and sometimes very prominent eyes, in some cases exceptionally large and prominent (*Chaetocinus*), but there are others in which the eyes are very small and very flat and greatly displaced towards the front, as in the montane species of *Nepalinus*, *Metocinus* and *Notolinopsis*. So there are macropthalmous and microphthalmous species and sub-anophthalmous species (many montane *Metocinus* and *Notolinopsis*, a few montane *Byziniella*). Finally we must mention the mandibles. These are robust and furnished with a molar formed of one or more teeth. Also important is the shape and size of the mandibular prostheca which is minute and difficult to interpret. The mandibles bear a sulcus if varying length on their outer edge, but is absent in some genera. In the males of *Alexyrea* the mandibles have a very peculiar structure; they are voluminous, convex and bear a large, almost vertical tooth on the dorsal side, which must be related to the beetles' habits which are at present unknown. These too are useful diagnostic characters at the generic level. The neck is usually broad but there are cases in which it is particularly slender and narrow, as in *Neoxantholinus*, *Whangareiella*, *Elitheya* and in some *Byziniella*.

Measurements of the head given in the text are made thus: the length from the anterior to the posterior borders; the breadth from the margin of one temple to the other at their widest point, excluding the eyes.

THORAX. The dorsal part of the thorax, or pronotum, bears some important characters. Like the head, its surface may be smooth or microstriate, and like the head its punctation is useful for diagnosis. In some groups either side of the pronotum bears to separate series of punctures, one dorsal and the other lateral; these are usually slightly oblique and composed of a small number of punctures. In contrast to certain cases (*Symilla* and *Indolinus*) in which the number of clear, evenly spaced punctures appears to be constant throughout all the species of a genus, (*Erymus*), the number of punctures differs from one species to another, and within certain limits even between individuals of a same species; for this reason I have used, for instance, the expressions "dorsal series of 5, 6 punctures" or "dorsal series of 8, 9 punctures". Sometimes the lateral margin of the pronotum bears a last series of punctures. This type of punctation is found in various genera, for instance *Mitomorphus* and *Someira*. Other groups have the pronotum almost entirely covered in punctures, as a rule leaving an impunctate mid-longitudinal band, as for instance in *Medhiama* and *Enervia*. Yet others bear a single large puncture near the anterior angles (*Thyreocephalus* or *Liotesba*) or two large punctures (*Oculolabrus*, *Eachamia*). The pronotum of some Xantholinini has large confluent punctures in a dorsal series and other dense punctation on the posterior 1/3rd and near the anterior angle (*Paratesba*). In other groups there is a lateral series of deep punc-

tures so closely spaced that they form a sulcus, as in *Gauropterus*. In nearly all species the lateral, anterior and posterior margins bear a few punctures. Some of the punctures give rise to long setae, especially those situated half way between the anterior angles and base of the neck, the lateral ones situated half way along the length of the pronotum, and those near the posterior angles.

The ventral side of the thorax bears a structure that is characteristic of the Xantholinini: the antesternal plate, an additional sclerite situated over the anterior margin of the prosternum between the postero-median gular sclerites, since in other staphylinids, and in particular in the Staphylininae, there are three pairs of gular sclerites, the posterior pair of which are the most apparent. This is sclerified and in some groups is entire, sometimes with a more or less evident trace of a suture, in others divided into two parts by a more or less marked but always clearly visible split. The antesternal plate is divided or entire in all species of a given genus and as such is a good diagnostic character. This structure does not occur in any other staphylinids, if one excludes the Othiini in which it appears narrow and rudimentary (in the Diochini it sometimes consists of a simple thickening of the membrane connecting the prosternum to the neck, and is not a true extra sclerite). The prosternum is sometimes elongate, sometimes short, sometimes with an umbonate centre, sometimes flattened, and ends distally in a slender salient keel, varies in general structure; I term this the intercoxal process.

The pronotal hypomera have two epipleural lines, one upper and the other lower, which are clearly visible in lateral view; whether these lines remain separate or meet provides a fundamental diagnostic character. There are genera with a very depressed pronotum devoid of an upper epipleural line (*Pachycorynus*, *Tetraulacus*, *Pseudocorynus*, *Elitheya*, *Microafra*) and genera with a clearly visible upper line. In some genera this line extends over a short distance posteriorly and meets the lower line (*Neoxantholinus*, *Zeteotomus*), or extends over the posterior end and does not meet the lower line (*Australinus*), or extends for a short distance at the anterior and posterior ends and does not meet the lower line (*Archaites*, *Amharina*); others have an upper line of varying length that meets the lower line (for example *Nudobius*, *Gauropterus*, *Thyreocephalus*, *Dibothroglyptus*, *Walesia*), and in yet others the upper line extends the entire length of the pronotum and does not meet the lower line (*Achmonia*, *Atopolinus*, *Nepalinus*, *Manilla*, *Mitomorphus*, *Xantholinus*, *Xanthophius*, *Indolinus*, *Alexyrea*, *Belinga*, *Aleutia* and most of the other known genera).

The thickness (depth) of the thorax is sub-similar in all genera, but is particularly slender in *Pachycorynus*, *Tetraulacus*, *Elitheya* and *Aleutia* which live under bark and in *Domea*, the only two species of which are known to date probably live in the same environment. Also rather flattened compared with their normally more convex congeners are some species of *Thyreocephalus* which probably have the same corticolous habits.

The measurements given in the text are made from the anterior to the posterior margins of the pronotum. The term "sinuate sides" means that the sides are somewhat concave at about mid-length, and not rounded or rectilinear. The term "oblique anterior margins" means that the anterior margins are not perpendicular to the longitudinal axis but slope backwards from the sides of the neck at a visibly oblique angle, sometimes in a weakly rounded line from the neck to the lateral margin, in which case the anterior angles of the pronotum are feeble and obsolescent.

ELYTRA. In the Xantholinini the elytra usually overlap at the suture, and the sutural margins are more or less rounded rather than rectilinear. The elytra are of different size in relation to the whole body; they may be long and narrow (*Cylindrinus*, *Oculolabrus* and some *Zeteotomus*, *Metolinus* and *Metocinus* for example), or very short (in montane species of *Nepalinus*, *Metocinus* and *Notolinopsis*), often dilated behind, sometimes conspicuously convex (*Indolinus*, *Edulia*, *Belinga*, and some *Manilla*). The humeral angles may be particularly well marked, sharp or else blunt, or inconspicuous or obsolescent as described above concerning the anterior angles of the pronotum. The surface of the elytra normally bears various kinds of punctation, the punctures usually smaller and more superficial than those of the head and pronotum, this punctation sometimes fine and dense (as in *Megalinus*), sometimes sparse (as in *Atopolinus* and *Phacophallus*), or even reduced to three series, one juxta-sutural, one dorsal and one

lateral (as in parts of *Thyreocephalus*, in *Symilla* and in *Talliella*); finally in other cases the elytra are almost completely smooth and bear only a few series of micropunctures (as in some *Zeteotomus* and *Neoxantholinus*). As on the head and pronotum, some punctures on the elytra are furnished with particularly long setae, the general scheme being one near the humeral angles, a few others along the lateral margins, and along the juxtasutural series.

Measurements of the elytra given in the text are made as follows: the length along an imaginary line passing between the proximal margin of the humeri to one drawn across the distal margins of the elytra, the breadth from the left to right lateral margins about half way along the length of the elytra.

LEGS. The legs of species of Xantholinini can be divided into two types: those that are long and slender, sometimes translucent, with rather long and narrow tarsi, with fairly sparse pubescence and fine setae, and those that are short, robust, furnished with spines and rather long rigid setae. The first group includes most of the species that live in plant detrita, in fungi and in decaying wood, and that may be generally been defined as humicolous; the second group includes on the one hand subcorticolous species with flattened bodies, and on the other hand large sized species that live in decaying plant matter and fruits, in dung. The different conformations of the legs have naturally developed in response to different functions relating to different ways of life. In the overwhelming majority of cases the mesotibia and above all the metatibia bear an apical comb of short setae, the ctenidium, that extend along the inner lateral margin of the metatibia. The inner face of the metatibia in such cases bear a few other setae. There are however genera in which there are two ctenidia, one above the other (*Stenistoderus*, *Gyrohypnus*, *Dibothroglyptus*, *Eachamia*, some *Lithocharodes*), or more than two (*Spaniolinus*). This character can be used as a diagnostic feature at the generic level. In nearly all Xantholinini the protarsi are simple, but in other genera such as *Stenistoderus*, *Metolinus*, *Paratesba*, *Spaniolinus*, *Bruxneria*, *Archaites*, *Grevillia*, *Waitatia*, *Otagonia* and *Pseudoxantholinus*, they are dilated, sometimes conspicuously (*Linosomus*, *Notolinopsis*, *Capesia*, *Metocinus*, *Endymathis*) and furnished with thick pubescence; in others the segments are visibly thick-set (for example in *Elitheya*, *Whangareiella*, *Paracorynus* and *Enervia*).

ABDOMINAL SEGMENTS. Because not all authors use the same criterion, I must point out that what I call the 6th segment is the 6th visible segment, and that consequently the next one is the genital segment that contains the copulatory organ, hereinafter called the aedeagus. Each abdominal segment is composed of a dorsal sclerite, the tergite, and a ventral sclerite, the sternite, and of two dorsal laterotergites on the 1st to the 5th tergites, whereas the 6th segment is devoid of them.

In many genera the 6th abdominal segment (termed by some authors the "pygidium") bear highly significant secondary characters on the posterior margin if the sternite, such as a more or less prominent median lobe-shaped projection or, on the contrary median emarginations of various shapes, whereas the 5th visible tergite almost always has a pale slightly membranous posterior margin.

In some *Atopolinus* the tergite is conspicuously modified and furnished with two lateral expansions, one on each side, symmetrical or more often asymmetrical, which ventrally often overlap one another and which in turn are partly covered by the posterior margin of the 6th visible sternite; the latter may be laterally emarginated, or with the posterior margin produced into a large median lobe. Sometimes the right pleura is prolonged in dorsal view by a very long and robust spine.

In *Nepalinus* the tergite has the posterior margin produced into a more or less marked acute median projection.

In *Indomorphus* the posterior margin of the tergite is sometimes dentellate. In *Phacophallus* the centre of the surface of the sternite has two opposite symmetrical areas of short yellow setae and the posterior margin has a salient quadrangular median projection. In *Hypnogyra* the entire posterior margin of the tergite is furnished with a very dense comb of short stout blunt setae with. In many genera the posterior margin of the 6th is simply and only slightly rounded.

The tergite is modified in various species of *Lithocharodes* and *Zenon*.

GENITAL SEGMENT. The genital segment (7th visible segment, or urite IX), together with the ae-

deagus and its inner sac, is of particular importance at the morphological and diagnostic level (Fig. 2).

The segment is different in males and females and conspicuously modified in both sexes, and does not have pleura extended into styles as for instance in the Othiini, although there are groups in which the pleura are moderately extended. The segment is composed of what for the sake of convenience I herineafter call a tergite, a sternite and of two highly developed pleura connected to their sides; the whole structures is retracted inside the preceding segment. It should be pointed out however that the whole structures is composed in both the male and the female of the tergite of urite IX, of the sternite of utie IX and the tergite of urite X. The sternite of urite X is wanting in both sexes.

In females the genital aperture is displaced towards the ventral proximal margin of the genital segment, near the membrane that joins urite IX to urite VIII (that is between the genital segment and the 6th visible urite), whereas the anus is situated normally, at the distal end of the segment. The pleura are fused into a dorsal capsule devoid of a suture, which corresponds to the tergite of urite IX; their fusion into a single piece is a fairly rare character which I consider to be apomorphic.

The female tergite (which corresponds to the tergite of urite X) is reduced to a semicircular sclerite which fits together with the distal portion of the sternite and is joined to the proximal margin of that capsule. The sternite (which corresponds to the sternite of urite IX) is composed of a single sclerite, the apex of which mirrors that of the corresponding tergite but is generally rather longer and, in the majority of cases, has two lateral sclerites of varying sizes and shapes which are constant in the different genera, sometimes fused into a single piece that may show a trace of a suture. In some groups these are very large, connected to the internal side of the ventral margins of the pleura fused in a capsule, often overlapping each other and the ventral margin of the sternite. In other groups the lateral sclerites are small and do not overlap the sternite which is usually very large and long, as in *Nepalinus*. In *Talliella* they are fused into a single sclerite. *Xantholinus* includes species with separate sclerites and others with fused sclerites. In some genera (*Metosina*, *Pachycorynus*, *Metolinus*) they are absent, or replaced by a fine horizontal membrane (in *Sumatera*). In any case this conformation is quite particular, and the extra sclerites are perhaps equivalent to the rest of the sclerites in which in other groups the styles are inserted. This too is an apomorphic character. In this work, for the first time as far as the Xantholinini are concerned, the female genital segments of all the genera treated are studied and illustrated.

In the Xantholinini there is no spermatheca, but instead a saccular genital chamber that serves to store sperm; it takes the form of a membranous structure which may be narrow, shaped like a tube, or else highly developed, and corresponds to the bursa copulatrix of the distal part of the oviduct. In some groups the walls of the bursa copulatrix are furnished in parts with small brown scale-like sclerifications (*Phacophallus*), or evident rugosities (*Megalinus*), or positive large and partly translucent "plaques" (*Atopolinus*).

The occurrence of sclerified parts does not necessarily correspond to males with a partially armed inner sac, as suggested by Smetana (1982), because these also occur in groups with only partially or scarcely armed inner sacs (*Indolinus*, *Mitomorphus*). These structures, which can be used to attribute a specimen to a particular genus, are not, as far as I was able to ascertain, so differentiated as to allow the specimen to be attributed to one species rather than another. For this reason isolated females unfortunately often remain unidentifiable, unless one is dealing with ones from a well known and characterised area.

In males the genital segment of non-Palaearctic species is composed of two pleura, of a tergite and a sternite that are rarely shaped as for example in *Xantholinus*; the modification of these parts, above all in the Oriental and Australian regions, are in fact complex and often surprising and of conspicuously greater length than in those already known among the Xantholinini of other geographic areas, as for instance in the Nearctic genus *Zenon* or the trans-Beringian *Neohypnus*. Such modifications, which are sometimes truly remarkable, appear to have evolved randomly, as they do not seem to have developed in response to environmental pressures or to have any real function.

The segment is often asymmetrical, with one pleuron larger than the other, and with a reduced tergite as some *Atopolinus*, and sometimes with depressions or tooth-shaped structures in dorsal view, as in *Indomorphus*. *Someira* have thickened

and grooved subtriangular pleura. The apico-lateral edges of the pleura are emarginate in *Medhiama*. In *Manilla* the pleura sometimes bear evident distal spines, as though on two lateral lobes that extend the sternite. In *Sulawesia* the pleura are prolonged posteriorly into two very long and slender lobes that inside the abdomen support a particularly large and long cylindrical aedeagus.

In *Neoxantholinus* the tergite is composed of two parts joined by a membrane; in *Mitomorphus* it appears narrow and very elongate.

The Xantholinini of the Afrotropical Region on the other hand have genital segments composed of regular sclerites. There is only one fairly constant modification of the sternite (cf. for example *Aleutia*) that often assumes an elongate, very slender shape in the proximal part, similar to those seen for example in *Phacophallus*. In the single monospecific genus *Belinga* the sternite is so strongly modified that it is immediately recognisable even without extracting it. This sternite recalls the shape of that seen in *Megalinus*. This uniformity in structure may possibly be explained by a more ancient origin of the African Xantholinini compared, for example with the oriental ones, or possibly by an evolutionary phase.

The sternite of the genital segment is reduced to a minute sclerite in contact laterally with the pleura in *Spaniolinus* and *Phacophallus*; sub-circular and furnished with large symmetrical spines on the posterior margin in *Indolinus*; with the posterior margin extended in a lateral lobe furnished with numerous long setae in *Nepalinus*. The sternite is modified to differing extents in *Zenon*, *Neohypnus*, *Pseudocorynus* and *Walesia*. In *Mahavana* and *Cylindrinus* it consists of an un-defined, largely membranous sclerite devoid of pubescence or with only sparse pubescence.

In many genera (for example *Someira*, *Nepalinus*, *Atopolinus*, *Symilla* and *Sumatera*) it bears a sort of distal pocket on the inner sides, composed of a thick membranous wall welded to the lateral margins of the piece and with a folded posterior margin. I will not dwell on the possible function of such a structure.

A modification that is more interesting in my view occurs however in a few species distributed in various genera such as *Indolinus* and *Indomorphus*, and for example in a few *Xantholinus*. It has been assumed that the pleura of the genital segment of Xantholinini are clearly separated from one another, as for example in the Nearctic ones, in which the tergite of urite IX is divided dorsally along the median axis into two parts that are folded ventrally and connected by a thick membrane into a dorsal tergite (tergite of urite X) and a ventral sternite (sternite of urite IX). It appears however that in some genera the pleura are to various degrees fused dorsally.

In some *Xantholinus*, in *Indolinus*, in the easternmost species of *Nepalinus* and in the Australian genera *Bruxneria* and *Grevillia* for example, these are completely fused into a single sclerite which has a distal emargination in which the tergite is situated, the latter being naturally fairly strongly modified or reduced to a tansverse sclerite. The fact that such a major modification occurs in different genera that, in some cases include both species with normally conformed pleura and others in various stages of fusion poses quite a few problems of interpretation. I believe that this completely anomalous character which associates some males to the females is not an isolated case confined to staphylinids.

The occurrence of pleura united into a single more or less complete sclerite is regarded as an apomorphic state. Apart from that, it may also be that the inability of the basal bulb to be extruded from the genital segment makes dorsally mobile pleura giving greater liberty of movement to the organ during copulation unnecessary, especially as this is closely associated with powerful musculature, above all with the sternite of the genital segment and therefore ventrally. That is why copulation is achieved, probably in all species of Xantholininae, by the raising of the sternite and lateral extrusion of the apex and at most the lateral lobes of the aedeagus from the abdomen, and above all of the inner sac, which evaginates like a glove.

AEDEAGUS. The aedeagus of Xantholinini, which at first sight does not differ greatly from those of other, only distantly related groups, is in fact profoundly modified compared with those of other staphylinids (Figs. 3, 4). The aedeagus lies in the abdomen with its dorsal side facing the tergite, and so does not undergo an abrupt inversion as it does for instance in the Othiini and Platyprosopini; the basal bulb is hypertrophied, sometimes greatly so, and the apical portion is on the contrary partially or totally atrophied and lacks a median lobe (in a

very few genera such as *Leptacinellus* and *Metosina* and in a few *Thyreocephalus* there is an extension of the distal portion shaped like a median lobe). The distal part, on which the distal pore and the phallobase are situated, in some genera bears "lateral lobes" (which henceforth I call the "parameres"); these are sometimes scarcely indicated (*Xantholinus*), sometimes small and symmetrical (*Metolinus*, *Byziniella*, *Microafra*), small and asymmetrical (*Hypnogyra*), squat and parallel (*Elapheia*), or long and slender (*Notolinopsis*, *Endymathis*), long, asymmetrical and stout (*Pseudoxantholinus*), or of modest size, either almost as long as the basal bulb (*Aleutia*), symmetrical or asymmetrical, clearly visible, narrow and falciform, but in any case always devoid of apical setae (*Thyreocephalus*, *Paratesba*, *Liotesba*, *Megalinus*, *Oculolabrus*, *Metocinus*, etc). Apical or sub-apical setae are however sometimes present, for instance in *Gyrohypnus*. The parameres of *Linohesperus* and *Chaetocinus* are furnished with a conspicuous series of long setae on their inner margins, as in *Gyrohypnus*. In a few genera (*Pachycorynus* and *Spaniolinus*) these are particularly long and narrow, membranous and translucent. In *Elitheya* the right paramere is twisted in dorsal view. In *Australinus* they are strongly asymmetrical; in *Otagonia* they have a very conspicuous posterior apophysis; in *Pseudocorynus* they bear a few very long spines on their inner margins. In two cases (*Phacophallus* and *Adhavara*) parameres are completely absent.

An unusual case is *Xanthophius*, which has a basal bulb fairly similar to that of *Phacophallus*, with an enormous distal pore, but with two symmetrical structures furnished with placoid sensilla and which I am therefore inclined to call parameres. These are proportionately very large, lie on the sides of the inner sac, and are situated completely outside the basal bulb, which both appear to be incapable of evagination.

Equally characteristic and unusual is the structure of the basal bulb, which is totally membranous and fragile, in *Metocinus* and in some *Agaporina*. This consists of two or three parts inserted one within the other like the sections of a telescope; behind the distal part there is a more consistent structure which differs slightly from species to species, on which the parameres are inserted; these lie in a left lateral position in dorsal view. The copulatory armature, on the other hand, is fairly consistently composed of large and complex sclerified structures.

The aedeagi of *Neohypnus* are very diverse in general structure within the genus.

Some genera have more or less conspicuous apophyses (which I name "median apophyses") between the parameres, which should not be confused with the median lobe, often displaced to the right when seen in dorsal view. These are clearly visible in *Capesia*, *Balchis*, *Agoreina*, *Enervia*, *Queenslandina*, *Walesia* and *Paracorynus*; they are particularly complex in some South African species of *Notolinopsis*, and very long in *Linosomus*.

While the parameres connected to the phallobase in a more or less traditional structure constitutes an ancestral state, other cases must be seen as an apomorphic condition.

Sometimes there are particular structures not connected to the phallobase and which I will discuss elsewhere. These may be proportionately small, narrow and asymmetrical, as for instance in *Nepalinus*, or large and complex and often asymmetrical (*Mitomorphus*, *Indolinus*, *Sulawesina)*; in other genera they are very large, diverse, and of remarkable morphological complexity (*Atopolinus*, *Indomorphus*).

The basal bulb, which is usually sub-ovoid, more or less narrowed, or sub-circular, is exceptional in *Agoreina*, in which it like a more or less bulging capsule consisting of a semitransparent membrane bearing on its dorsal side a circular or ovoid thickening that is clearly visible owing to the presence of a surrounding membrane connecting it to the rest of the bulb, which I call the "evagination plate" because I believe that its function is to evaginate the inner sac during copulation by means of a specialised musculature connected to the ventral surface of the basal bulb. This musculature consists of mostly transverse and longitudinal muscles. Evagination is presumably achieved by a localised increase in pressure of the hemolymph. In some groups these plates are less conspicuous and in others they are replaced by a more or less broad transverse fascia or by more symmetrical membranes that I suppose have the same function.

The basal bulb is not extruded from the abdomen during copulation, the extruded part being the inner sac which turns inside-out like a glove. In fact the membrane that normally separates the genital

atrium from the abdominal cavity is fused to the aedeagus near the distal pore, just before the area on which the parameres are or would be inserted; this maintains the basal bulb within the abdominal cavity and the distal area of the latter (including the parameres, if present) and outside it. Normally this membrane, which in many cases is quite resistant, attaches the aedeagus closely to the sternite of the genital segment. This is one of the reasons that extracting very small and fragile aedeagi from the genital segment is very difficult. The bulb, of various sizes, very robust in large species, and the sperm duct enter through the sub-circular or sub-ovoid proximal pore, usually with thickened margins, situated on the ventral surface.

The fact that the aedeagus is unattached in the abdomen, and is not enveloped even partially in the membrane that occludes the abdomen in proximal position, as is on the contrary the case in nearly all other staphylinids and in Coleoptera in general, as the rather weak membrane is fused to the walls of the genital segment and near the distal pore of the basal bulb, implies that there is no real genital atrium, or that it is very reduced and that the membrane too is greatly reduced. In such conditions the aedeagus cannot ever be extruded from the abdomen. This is another main character of great significance. Any other staphylinid has an aedeagus at least partially enveloped in a membrane that remains attached during evagination and copulation by means of a solid musculature connected to the phallobase that fulfils the double function, together with changes in pressure of the hemolymph, of extraction and retraction. The organ in such cases is almost completely extruded from the abdomen, since the genital atrium is broad and the membrane is large.

In some cases the basal bulb is particularly broad (for example in *Atopolinus*), supposedly to enable the extrusion of a voluminous inner sac furnished with large spines. In other cases the atrium is conspicuously dilated, almost as much as the total width of the bulb, but in the absence of a large inner sac full of stout sclerified structures (*Phacophallus*, *Xanthophius*).

In some genera (*Pachycorynus*, *Spaniolinus*, *Sylea*) the aedeagus consists of a very long, narrow, tubular and translucent basal bulb that is hard to distinguish among the fatty matter that often fills the abdomen, and difficult to extract (see the section on methods used); this is also due to the organ's very feeble consistency and the presence of parameres that are sometimes very long and narrow but also practically membranous. In these cases too the basal bulbs are never extruded from the abdomen, although they are not hypertrophied and not of a size that would prevent extrusion through the genital aperture. The basal bulbs in *Whangareiella* and *Pseudocorynus* are equally semitransparent and tenuous, although in these genera they are shorter and broader.

In *Metolinus* the lenticular and often compressed basal bulb in dorsal view bears a particular feature, this being a sort of thickened membrane of a light brown colour superimposed on the distal part, partly mirroring its sub-rectangular shape, and often with an acute apex; this is fused to the bulb at its proximal margin, roughly at the height of the insertion of the parameres. I call this membrane, which no-one has hitherto mentioned, the distal plate; I believe that it may be a sort of vestige of the dorsal plate, which exists in many staphylinids, for example in *Lathrobium*. An analogous but more slender structure also occurs in other genera such as *Leptacinus* and *Andelis*. In other, externally similar genera, for example *Byziniella* and *Chaetocinus*, this structure is completely absent.

Sometimes the basal bulb is proportionately so voluminous as to appear to require a support inside the abdomen; this is the case in *Sulawesina*, in which the organ is furnished with large and complex parameres but an inner sac devoid of sclerified structures, is supported by two very long slender but robust protuberances that extend ventrally inside the abdominal cavity from the pleura of the genital segment.

In some African genera the basal bulb is so fine and transparent that it is practically invisible, so it seems that the inner sac is not protected by a membrane. This is the case in *Belinga* and in some *Notolinopsis* (cf. for example *N. crateris*).

Another peculiar character is the above mentioned presence in many genera of structures of a highly anomalous shape and strangely situated, so to say, in place of the parameres, and that I have not seen in any other groups of staphylinids. Parameres are external structures attached to the phallobase, largely protruding from the cavity of the body, furnished with more or less visible setae; this type at least partly includes Xantholinini such as *Gyrohyp-*

nus and *Thyreocephalus*, but not necessarily others such as *Atopolinus* or *Indomorphus*. In these groups these structures are not attached directly to the walls of the distal pore, from which they are on the contrary at a distance, whereas they are closely so to the genital segment and in particular to the sternite, so that they are not mobile and are not truly extruded from the genital segment; nor do they have the shape of parameres, because they are complex, asymmetrical, often voluminous and largely membranous. I have given these structures the name "pseudoparameres". This is another distinctive feature of these staphylinids. All the characters listed regarding the aedeagus are apomorphic.

In many genera that have pseudoparameres the sternite of the genital segment has on its inner side a reinforcement in the form of a sort of bottomless bag, and that seems to have fairly superior consistency to that of the membranes that connects, for instance, true parameres to the sternite. This internal pocket is connected to the pseudoparameres by means of membranes and musculature that probably serve as support during the process of evagination of the inner sac during copulation. I do not discount the possibility that this sometimes accommodates the pseudoparameres, at least in part. This structure, which is revealed here for the first time, and is represented in some figures given in other studies as a hatched line in which the proximal margin is seen in transmitted light as a dark line, is present especially in species with a broad asymmetrical sternite bearing clusters of apico-lateral setae and an aedeagus with conspicuous complex, asymmetrical and partially membranous peudoparameres (*Someira*, *Nepalinus*, *Himmala*, *Atopolinus*, *Sumatera*, *Faxilla*, *Symilla*). It should however be pointed out that I make exceptions that I will study elsewhere, for instance for *Pahangella* (parameres minute and symmetrical) and *Nilla* (parameres large and symmetrical).

In *Belinga* the broad flattened parameres, visible insofar as they are darker, appear to be attached to the inner sac by means of various transparent membranes since the basal bulb is practically unidentifiable.

The inner sac (or endophallus) may be of many different shapes, sometimes so ample as to fill nearly the whole bulb, sometimes sub-cylindrical or sub-ovoid, or be ribbon- or tube-shaped, at times also very long, often coiled or arranged in an approximate spiral (in some *Byziniella*, and in *Chaetocinus* and *Endymathis*). In some cases its walls are practically invisible, so small and transparent are they (for instance in *Elitheya*); in other cases they are diaphanous and semitransparent (as in *Grevillia*, *Spaniolinus* and *Pachycorynus*, *Aleutia*, and some *Metocinus*); in others the walls are weakly sclerotised in the shape of fine scales (as in *Alexyrea*, *Australinus*, *Queenslandina* and *Otagonia*, in many *Thyreocephalus*, in *Sulawesina* and *Indolinus*), or are covered by a copulatory armature consisting of scales of various sizes and of large and small spines (as for example in *Indomorphus*, *Mitomorphus*, *Hypnogyra*, *Stenistoderus*, *Metocinus* and *Chaetocinus*), or else with large and very large spines (*Atopolinus* and some *Metocinus*).

All these structures are usually more or less dark brown, almost never frankly blackish brown or absolutely black, sometimes on the contrary yellowish brown, especially at their bases. Usually, in species furnished with large spines, the inner sac ends proximally in an ample swollen space covered in scales or spinules, often arranged symmetrically, and almost always with a few folds which are always absent in active specimens. The inner sac is therefore entirely composed of a membranous cuticle reinforced by not particularly sclerotised spinules between which lies the inner sac armed with large spines. Externally the sperm duct has a strong sheath of circular muscles and the inside densely furnished with spinules oriented towards the mouth, or outlet, of the duct. This ends in the gonopore, inside the inner sac. After evagination the mouth of the duct lies at the apex of the inner sac.

A particular case is that of *Xanthophius* in which, as I have already mentioned, the basal bulb has a very large distal pore, an inner sac covered in scales and clusters of small spines, coiled on itself in a spiral and contained, outside the bulb, by two complex structures that support its sides and that in any case are not attached by membranes either to the sternite of the genital segment or to the margins of the distal pore. In practice this is a sort of partly membranous and partly sclerotised extension, the sclerotised portion of which is probably derived from parameres, since it bears numerous placoid sensilla, but might also be interpreted as a modification of the odd or even reinforcements, especially as it is not distinguish-

able from the characteristic thickening of the phallobase. To complete, I must point out that *Xanthophius* are not beetles that mate only once, and that the inner sac remains everted after copulation.

The aedeagus in the Australian genus *Archaites* is of a unique shape, consisting of a sort of elongate thin lamella on which the saddle-like structure sits, bearing a membranous central area and a few proportionately short apophyses resembling parameres, sometimes furnished with apical setae.

In all species the proximal pore is situated on the ventral side, usually near the distal pore, where the parameres are attached to the organ on the proximal part of the phallobase. These pores are usually fairly large, sub-ovoid or sub-circular. The pore is only situated about mid-way along the length of the basal bulb in a few groups.

The genital segment and aedeagus are obviously of crucial importance for the identification of species that are sometimes otherwise very similar (this applies for all *Metocinus*, a genus that contains a truly exceptional range of species).

At the end of this section on the structure of the aedeagus of the Xantholinini, I provide some tables (Figs. 5–46) that show the incredible diversity of this organ, from the simplest one, without parameres, to the more complex. I do not of course include the structures of aedeagi of species treated in these pages that the reader will see later.

To conclude this part I think it useful to recap some observations and present some hypotheses on the morphology and taxonomic and evolutionary significance of the structures of the copulatory organs of both sexes in Xantholinini. The study conducted provided the following evidence:

A - the male aedeagus, which is understood to include the tegmen and its covering, does not penetrate the female genital tract during copulation, since it cannot be extruded from the abdomen, as neither do, or only partially so, the parameres; penetration and consequently insemination are achieved by means of eversion of the inner sac, as has been shown to occur in other beetles.

B - the female copulatory organ is membranous and does not seem to contain sclerotised structures which, if they were of different shapes, would impede penetration.

C - from the combination of observations A and B one may suppose that there is no morphological co-adaptation between the copulatory structures of the two sexes, a co-adaptation which on the contrary is a necessary condition at the physiological level for the reproductive success of individuals. It should also be borne in mind that the membranous inner sac devoid of sclerified parts (apart from the usual scales and spines) cannot have a mechanical function in copulation.

D - development of the morphological characters of the copulatory structures is not conditioned by the environment, with which they have no relation.

E - since the characters of the male copulatory structures have not evolved as a result of reciprocal morphological co-adaptation between the sexes, and are not conditioned by environmental pressures, their evolution must be fortuitous and their nature selectively neutral.

The characters of the copulatory structure are direct expressions, albeit fortuitously determined in the morphology, of the SSMRS (species specific mate recognition system) which must necessarily be shared by both sexes and on which reproductive security depends. The following major consequences emerge from their peculiarity, their selective neutrality and the observations recorded above:

a0 - the characters of the copulatory structures (aedeagus and genital segment) assume a crucial taxonomic significance, and are therefore decisive for the purpose of recognition of different species, which often have very similar external morphologies, but differ greatly in their genital characters (this applies to all *Metolinus* and *Metocinus*, which are often quite similar to one another but contain a truly exceptional range of different species);

b0 - the intra-specific morphological divergence of the male copulatory structures, at population and individual levels, cannot be decisive in taxonomy, since the fact that the aedeagus does not penetrate the female genital tract implies the substantial irrelevance of the shape of the aedeagus in achieving successful insemination; this means that

when defining a species it is necessary to include an account of the morphological variability when this is contained within non-significant limits;

c0 - the fact that the evolution of morphological characters of the male copulatory structures are governed by individual case may explain the great variety of forms that these structures take in different species: freed from the constraints of morphological and anatomical co-adaptation between the sexes, these have developed a completely autonomous secondary complexity within single species, an individual complexity that seems to be quite superfluous as a copulatory function;

d0 - the selective neutrality of characters of the male copulatory structures, that is, their independence of any phenomenon of adaptation, should confirm the rule when reconstructing phylogeny.

TAXONOMY OF THE XANTHOLININI

The task of an entomologist is of course to contribute to the knowledge of the group on which he is working. Nobody, fortunately for all naturalists who have worked since Linnaeus and Fabricius, has expounded "revealed truth"; rather, they have provided interpretations based on presumably increasingly perfected research methods, but which as such are subject to change, and I believe that all of us can and should contribute his or her own bit of experience without waiting until all of creation has been classified. Any successive advance is simply a later step forward, even when it clashes with previously held views. When the time comes the interpretation given here may also have be modified, and our knowledge of these staphylinids will thereby be more advanced.

Research therefore now has many instruments at its disposal, such as morphology, systematics, ecology, cladistic studies and so forth. I take the view that all of us should be free to use the instruments that they prefer, and that this is better for the achievement of one's aims, but I also think that no single one of these instruments can objectively be considered the best, or be substituted for the others.

In this paper, for the first time, a great number of genera and species are examined, but the data they provide are, in my view, still too fragmentary, considering the number of species (although considerable) in relation to the vastness of the area covered and the many as yet unexplored parts of the continent, to carry out for instance a cladistic or biogeographical survey, which I prefer to shelve for the time being in the case of the former, and put forward a few hypotheses in the case of the latter. This research has however provided a great amount of very interesting informations, allowing at least a taxonomic investigation. The processing of this information takes up the final part of this article.

The history of Xantholinine systematics is rather complicated. These beetles, like all other Staphylinidae, have long been studied and considered taxonomically solely on the basis of external characters, and also subdivided at the generic level on the basis of these characters, while characters relating to the aedeagus and its inner sac remained unknown, as did frequently those of the genital segment, all of which are as it happens of crucial importance for the identification of species and also for the taxonomic and systematic subdivisions of genera.

It was only after the work of Sharp & Muir (1912) which revealed the differences in the aedeagus between species of the same genus that some authors began to examine and to "also" take this feature into account. A fairly clear picture of the interpretations proposed from various angles can be gathered from the section that Smetana (1982) devoted to the historical part of his work. At first they were included, together with the Othiini, in the subfamily Staphylininae according to Ganglebauer's (1895) concept, with the addition of Diochini and Platyprosopini, interpretations that were recently restated by Newton & Thayer (1992) and by Lawrence & Newton (1995).

Later these four tribes were considered to belong to a separate subfamily Xantholininae (Lohse, 1964; Coiffait, 1971; Bordoni, 1982). Smetana (1982), although expressing doubts about the validity of this solution, kept the interpretation.

In 1964 Moore isolated Xantholinini and Othiini in a separate subfamily Xantholininae, mainly on the basis of the presence of the antesternal plate, and moved the other genera previously included in Xantholininae to Diochinae and Platyprosopinae.

According to traditional taxonomy (cf. e.g. Naomi, 1985) the following evidence is recognized to infer phylogenetic relationships between the Xantholininae, Staphylinidae and Paederinae.

Similarities are found between the subfamily Staphylininae (antenna inserted on clypeal region just behind the mandible, labrum bearing with very long hairs, metendosternite with posterolateral extension and tibiae setaceous) and the subfamily Paederinae (area around the mesothoracic spiracles moderately sclerotized and protibia with ventrolateral ctenidia). The Xantholininae differ from these on the other hand by the presence of an antesternal plate.

The subfamily Xantholininae was until now therefore composed of 4 tribes (Xantholinini, Othiini, Diochini, Platyprosopini) the adults of which share the following characters: insertion points of the antennae close together, prosternum with an anterior border, and presence of an antesternal plate. Because of these characters they were considered to be monophyletic.

The first character is in my view only of relative value, because the distance between the antennae is notoriously variable. In some groups the antennae are very close, rather closer to one another than to the inner margins of the eyes, and in others widely separated. The second character, seen as closely correlated to the third, is on the one hand common to other staphylinids that do not have an antesternal plate, as for example some *Philonthus* in the Staphylinini and some *Lathrobium* in the Paederini, and on the other hand it is not true that it is present in all four tribes, since there is no margin in the Platyprosopini. The only character that could be common to the four above mentioned tribes is therefore the antesternal plate, but this does not correspond to reality, because it is present in the Xantholinini, less apparent in the Othiini and completely absent in the Platyprosopini, whereas in the sole primitive form of the Diochini it is, as Smetana (1982) writes, "*a vague sclerotisation of the baso-median portion of the membrane that connects the prosternum to the neck*".

The presence of the antesternal plate has, in my opinion, been much overvalued from the morphological and phylogenetic point of view, understandably given that it is so conspicuous, especially in the Xantholinini. I do not know what function it has, but think that it could be explained by the likelihood that the membrane that connects the head to the prosternum has the potential for sclerification in all staphylinids, a potential that has been fulfilled, for unknown reasons, in an obvious way in the Xantholinini, and in part in the Othiini, or here and there in a more or less substantial thickening of the membrane in other groups. I think that this specific case can be regarded as an instance of convergence.

At present (Solodovnikov & Newton, 2005) Xantholinini, together with Diochini, Platyproposini, Arrowinini, Staphylinini, Othiini and Maorothiini, belong to Staphylininae s.l. Also recent molecular researchs (cfr Chatzimanolis et al., 2010), in strong contrast with morphology, place the tribes Othiini and Xantholinini nested within Staphylinini.

I believe on the other hand that other characters relating to the genera included in Xantholinini should be highlighted. I have examined species from different continents and all have the same uniform characters. I therefore think it reasonable meanwhile to put forward a series of observations that may lead to a better understanding of these staphylinids.

The genera concerned share a set of particular characters, some of which are unique among the Staphylinidae, which can be summarised as follows:

- antennae geniculate, with very long scapes, inserted on the proximal margin of the clypeus;
- epistoma clearly visible even when it is flat and not strongly produced;
- elytra overlapping at the suture, often weakly sclerotised, with rounded inner margins;
- prosternum with anterior margin concave and always preceded by a pair of very large and very evident completely sclerotised extra sclerites separated by a split, or else contiguous with an evident median suture, or united into a single piece;
- female genital pore displaced towards the ventral proximal margin of the genital segment, near the membrane that unites the 6th visible segment to the genital segment (i.e. urites VIII and IX);
- female genital segment modified, devoid of styles, with pleura united dorsally to form a single sclerite, always with a sternite (sternite of urite IX);
- membrane that separates the genital atrium of the abdominal cavity joined to the aedeagus near the distal pore, around the basal bulb, making it impossible for the organ to be extruded from the abdomen during copulation, even when it is long and furnished with conspicuous parameres;
- aedeagus at rest with its dorsal side turned towards the tergite;

- basal bulb of aedeagus proportionately hypertrophied, with total atrophy of the median lobe (in very rare cases there is a dorsal portion shaped like a median lobe);

In addition there are the following secondary characters, almost all of them apomorphic, relating to the genital segment and the sexual organs:

- male genital segment conspicuously modified, devoid of styles, with more or less major modifications of the pleura, tergite and sternite;
- parameres, when present, of an unusual structure, sessile; in the majority of cases they are profoundly modified, asymmetrical, sometimes pubescent, partially membranous, closely connected by a membrane to the sternite and therefore unable to extrude from the abdomen, in others they are particularly elongate, and only their apical portion is extruded;
- presence of an inner sac furnished (except in a few cases) with evident or very evident sclerifications in the form of scales, spinules or even larger structures;
- spermatheca absent; bursa copulatrix present, often with more or less strongly sclerified parts.

In addition to the characters described above there are others that are useful for recognition, are sometimes not common to all genera, but like the previously listed characters help to easily distinguish members of the Xantholinini, as is understood from other staphylinids and that supports the hypothesis that this group provides a special example of exceptional adaptational radiation. These characters are the following:

- head almost always furnished with a pair of fontal and ocular sulci, or with one or the other;
- lateral margins of pronotum (epipleura) of normal thickness, with the superior epipleural line present in most cases, variously shaped and meeting or not meeting the inferior line;
- male genital segment in some species furnished with pleura partially or completely fused over a short distance, with a consequent change of proportions, and sometimes a drastic reduction of the tergite;
- female genital segment with extra pieces of the sternite present in most cases, devoid of styles, sometimes fused into a single sclerite without trace of a suture, sometimes consisting of a simple transverse membrane;
- frequent presence, instead of parameres, of anomalous structures (pseudoparameres) which are extremely complex, weakly sclerified, usually devoid of pubescence, clearly separate from the organ and connected by tenuous membranes to the basal bulb, which is devoid of a phallobase, and to the sternite of the genital segment;
- presence in many genera, especially in those furnished with the aforementioned pseudoparameres, of a pocket-shaped sclerite at the distal internal side of the sternite, to which they are attached by membranes and fasciae of muscles.

BIONOMICS

Xantholininae are predatory staphylinids that live mainly in most environments at the surface of the soil. They can therefore be found under stones (for instance *Gyrophypnus*, *Xantholinus*, *Nudobius*, *Thyreocephalus*, *Homorocerus* and *Notolinopsis*), in plant detrita, in leaf litter, in moss, in decomposing matter, in decaying fruit (*Alexyrea*, *Metocinus*, *Xanthophius*, *Balchis*, *Capesia*, *Thyreocephalus*, and maybe *Paratesba*). Some species live in dung (*Oculolabrus*, *Thyreocephalus*, *Homorocerus*, *Alexyrea*, *Linosomus*, *Phacophallus*, *Gyrohypnus* and *Chaetocinus*); other seem, at least partly synanthropic and are often common around human settlements, in decomposing matter, organic refuse, manure and animal carcases (*Xanthophius*, *Phacophallus*, *Talliella*).

Many species are associated to the wood of dying or dead plants and to a subcorticolous environmet. Many in fact live in rotting wood (*Metolinus*, *Spaniolinus*, *Nudobius*, *Thyreocephalus*, *Notolinopsis*, *Byziniella*) or under the bark or in rot holes of trees, probably at various stages of decay of the trunks (*Tetraulacus*, *Neoxantholinus*, *Pachycorynus*, *Zeteotomus*, *Agoreina*, *Cylindrinus*, *Nudobius*, *Domea*, *Aleutia*, *Metocinus*, some *Thyreocephalus*); under the bark of *Cussoria* (*Nudobius*, *Linosomus*), and of *Euphorbia*, *Cussoria*, *Acacia*, *Millettia* and *Ctonoxylon* (*Nudobius*).

A great number of species naturally live on the surface of the ground in forests. Many are associated with the humus, leaf litter and detrita in montane woodland. Such woodland in the Himalayas for instance, consisting largely of *Quercus*, *Abies*

and *Rhododendron*, is home to many *Nepalinus*, *Someira* and some of the *Atopolinus*; other *Atopolinus* live in open monsoon forest; the *Castanopsis* and *Lithocarpus* rainforests of SE Asia and Indonesia harbour *Andelis*, *Erymus* and *Sumatera*; those of southern India harbour *Faxilla* and *Symilla*. *Manilla* live in moist, moss-rich gullies in forests, especially in the Philippines.

In Africa montane bamboo and *Hagenia abyssinica* woods and high altitude moorland are the home of species of a few genera that are characteristic of the area (*Notolinopsis*, *Metocinus*, *Byziniella* and *Chaetocinus*); others live in humus and debris of giant *Senecio* in the alpine meadows (*Nudobius*), and in moss in *Podocarpus* and *Philippia* woods (*Linosomus*, *Byziniella*), in sclerophyll woods (*Endymathis*), and in the fungi of *Eucaliptus* (*Notolinopsis*, *Capesia*).

Belinga and *Indolinus* seem to inhabit above all litter by watercourses; forest floor litter also harbours *Mitomorphus*, *Tamilla* and *Lepta*.

Many species in some genera appear to be associated with animal burrows and nests in Africa (*Alexyrea* with the rodents *Tachyoryctes*; *Notolinopsis* with giant mole rats (*Cryptomis*); *Byziniella* with *Myrmicaria* and doryline ants; *Chaetocinus* in the middens of Dorylini and with the naked mole rat (*Heterocephalus*); a few species of *Linohesperus* have been taken in the nests of wood-rats (*Neotoma*) and *Stictolinus* in the nests of other mammals.

I am unable to give the habitat of many genera (for example *Himmala*, *Agaporina*, *Elapheia*) but it may be supposed that they live in plant litter in woodland.

As for the Palaearctic or Nearctic genera not treated here (e.g. *Hypnogyra*, *Gauropterus*, *Leptacinus*, *Lithocharodes*, *Neohypnus*) I refer readers to works that deal with them (for instance Coiffait, 1972; Bordoni, 1982; Smetana 1982), but on the whole the species of these groups live in various kinds of ground debris, in fallen leaves, moss, in moist detrita and in decaying matter of the most varied kinds, and under stones. In the sole case of *Hypnogyra*, it may be recalled that the most widespread European species has also been found in the nests of *Lasius* and *Vespa*. Among the East Asian genera only *Medhiama*, as far as is known, might have similar habits, since the most widespread species has been collected in the vicinity of ants' nests.

The study of this material allows a first observation confirmed by a well known fact. SE Asia and mountainous areas of Africa have plant covers that are sometimes rich and diverse, often specialised but however, especially as far as rainforest is concerned, subsist on soil poor in humus and plant litter owing to the rapid process of transformation of detrita. This is the commonest environment and the one in which some of the largest collections I have been able to study were made, and that probably gave rise to the evolution, including among the Staphylinidae, of forms restricted to different microhabitats to enable their survival in competitive conditions.

The most notable examples in this regard are perhaps the oriental genus *Metolinus* and the African genus *Metocinus*. The former is undoubtedly the most widely represented genus in SE Asia, including in terms of numbers; the species live under bark and in decaying wood, and apart from a few very sporadic cases, a remarkable proliferation of species in the territory and perhaps a high rate of endimicity. A good number of *Metocinus*, apterous, orophiles and steno-ecological, live in the soil and in humus of montane bamboo (*Arundinaria alpina*) and *Hagenia* woods, and show a similar proliferation of species even in relation to the quantity of material collected.

The frequency of occurrence of these species (associated with dead wood and humus) and their abundance even in a single locality may be the result of extreme competition and consequent specialisation, above all in feeding habits, in often resource-poor environments. In general this situation might explain on the one hand the high number of species in relation to the number of individuals, particularly in some groups and in some regions, and on the other hand the convergence of major morphological characters even between different genera, probably caused by analogous feeding, ecological and reproductive habits in a same or in neighbouring biotopes.

It is therefore probable that this is determined by a process of speciation in a competitive environment. The increased diversification of species would therefore be the result of adaptive radiation. Meanwhile it is confirmed that unrelated taxa evolve fortuitously until they resemble one another

exteriorly because they live in analogous habitats with the same characteristics (cf. the cases of *Nilla-Nepalinus* and *Manilla-Mitomorphus*).

In certain habitats in the region studied biotopes on the contrary may be physically close to one another but separated by different altitudes that have notably different climatic and vegetational environments. In this case species of a same genus may also show particularly conspicuous distinguishing characters, as occurs for example among the above-mentioned *Metocinus*, in which the medium altitude species have normal eyes and long functional elytra, whereas high altitude species are anophthalmous and apterous.

Finally I think it may be of some use to underline the apparent extreme scarcity, probably due to insufficient research, of some species and groups of species that are often only known by single isolated specimens and whose bionomics are naturally unknown. This is the case in *Liotesba*, *Yunnella*, *Adhavara*, and *Metosina*.

RECOMMENDATIONS FOR STUDYING THE AEDEAGI OF XANTHOLININAE

Since I have noticed that sometimes extractions are performed incorrectly, resulting in damage to the aedeagus and its parameres or pseudoparemeres, I thought it useful to draw up this part certainly useless for specialists.

In xantholinines the aedeagus is never extruded from the genital segment, therefore it is not possible to insert a pin into the genital orifice to hook the aedeagus, which in other staphylinids is usually more or less strongly sclerified, to extract it from the genital segment by applying a little pressure and twisting.

In the Xantholinini the aedeagus consists of a hypertrophied, membranous, often fragile and easily damaged basal bulb to which are attached the shorter parameres; in some cases the parameres are replaced by asymmetrical membranous structures (pseudoparameres) attached to the sternite of the genital segment by more or less tough membranes. For this reason extraction must be carried out with extreme care in order to avoid these structures becoming detached from the basal bulb and remaining inside the genital segment.

If the specimen is not relaxed it is necessary to detach the abdomen from the fore-body by levering it up off the card with a pin and then move it to the right or left to detach it. If the abdomen is stuck to mount one can wet it with a drop of warn distilled water on a fine paint brush and wait for it to detach itself, or, in difficult cases boil the specimen on its card in distilled water until the specimen floats free and then glue it again on a different mounting card.

When the abdomen has been detached from the fore-body it can be boiled briefly. The time needed depends on the condition of the specimen it size: a few seconds for recently collected material up to several minutes for old material. The methods by which the specimen was killed and preserved affects the success of the operation. Material kept for a long time in alcohol is more difficult to relax.

The part to be studied is therefore placed under the microscope, dorsal side upward, and held firmly in place with the index finger of the left hand (assuming that the person performing the operations is right-handed; otherwise all the gestures can be reversed), and the male genital segment is detached from the other segments. To do this it is usually sufficient to insert the point of the pin in the connective membrane and exert a slight twist; in more difficult cases the membrane can be severed on the ventral side.

Putting the abdomen aside, the aedeagus is extracted from the genital segment. This operation is the most complex and delicate part of the dissection and it is only with a little practice that the risk of damage can be avoided. The segment is placed ventral side up with the apex pointing to the right, held firmly in place by inserting the tip of a pin between the aedeagus and the tergite, and pressing it slightly downwards; using another pin to detach the left margin of the sternite from the pleura, if need be cutting along the entire length of the sternite. Usually its proximal part is rather firmly attached to the upper margin of the segment, requiring the application of a certain force to detach it. At this point one should “open up” the segment as much as possible to reveal the aedeagus. The latter is not infrequently covered in fatty matter that impedes a clear view, and may be attached to the segment by sometimes tough membranes. Therefore one should take care to operate delicately,

using slow repeated manipulations to extract the aedeagus from the segment. At this point one needs the help of the other pin. The aim is to separate the aedeagus from the segment, if need be leaving it attached to the sternite alone, from which it can be separated at a later stage, even when the piece has been embedded in Euparal. The extracted aedeagus can be roughly cleansed of various impurities before being boiled in a 10% KOH solution in distilled water. The length of time it needs to be boiled depends on the same criteria mentioned above for the boiling of the abdomen. Usually one or two minutes is sufficient. This procedure allows the fatty matter to be dissolved and leave the membrane enclosing the basal bulb as transparent as possible. It should then be boiled in distilled water for about the same time in order to rid it of potassium residues, then bathed in 75° alcohol for a few minutes and finally imbedded in Euparal on a transparent mount.

The aedeagus can now be studied, rotated to different angles and drawn roughly, possible also in lateral view. When this study has been properly carried out the aedeagus should be left with the dorsal side upwards, contrary to what some other entomologists do, taking care to add a drop of Euparal that evening, after the mount has had time to solidify, allowing a clear view of the structures that cover the inner sac, usually consisting of scales, spinules and spines, sometimes of large size. At this stage the aedeagus can also be drawn, but a perfect view of the internal structures is only possible when the Euparal is well solidified.

Personally I often prefer a drawing that can provide a clear interpretation of the copulatory armature which not infrequently shows very close-set or overlapping spines, where a photograph would show a confusing mass of more or less dark brown shapes.

The mount bearing the aedeagus should thus be attached to the same pin as the specimen. It is recommended, to avoid the risk of friction between the mounts and damage, that the one bearing the aedeagus should be longer than the one bearing the specimen, and than the data labels; this also allows the aedeagus to bee viewed without having to move the mount bearing the specimen above it and the data labels beneath it aside.

An alternative, equally effective solution is to imbed the aedeagus and the genital segment in DMHF, which is soluble in water, without having to bathe them first in alcohol. This product solidifies more quickly that Euparal, but it is sufficient to add a drop of water to slow the process. This substance has the advantage, owing to its excellent transparency, of making it possible to mount the pieces directly on an insect mounting card. Of course this makes it impossible to photograph them in transparency.

MATERIAL AND METHODS

I studied all the types and syntypes and the unidentified material preserved in the listed institutios and private collections. I examined the types of all the described species of Africa, except some for which the original specimens could not found, as pointed out in the text. For all the types I prepared the genital segment and the aedeagus. So I did not consider it necessary to repeat for each species that I carried out this operation. All the redescriptions and descriptions of new genera and new species, and all the illustrations and maps are original.

For the study I used a Wild M5A binocular microscope. The photographs were taken with an Optika B-293 tri-ocular microscope and Optikam B3 digital camera.

In the color plates the figures are followed by the total size indicated by tl.

ACRONYMS. cA: coll. Assing, Hannover (Germany); cB: coll. Bordoni, Firenze (Italy); cH: coll. Y. Hayashi, Kawanishi (Japan); cJ: coll. Janak, Rtyně nad Bilinou (Cekia); cK: coll. Kremitovsky, Brno (Cekia); cR: coll. de Rougemont, Oxford (UK); cS: coll. Schülke, Berlin (Germany); cST: coll. T. Struyve (Muizen) (Belgium); DEI: Deutsches Entomologisches Institut, Müncheberg (dr. L. Zerche) (Germany); FMNH: Field Museum of Natutal History, Chicago (Dr. A. Newton, Dr. J. Boone) (USA); IRSNB: Institut royal des Sciences naturelles, Bruxelles (Y. Gérard) (Belgium); MCSNG: Museo civico di Storia Naturale, Genova (Dr. R. Poggi) (Italy); MHNP: Muséum national d'Histoire Naturelle, Paris (Dr. T. Deuve, A. Taghavian) (France); MM: Manchester Museum, Manchester (Dr. D. Logunov) (UK); MNB: Museum für Naturkunde, Berlin (Dr. M. Uhlig) (Germany); MNHW: Mu-

seum of Natural History, University of Wroclaw (dr. P. Jaloszynski) (Poland); MTM: Magyar Termèszettodomànyi Mùzeum, Budapest (Dr. G. Szél) (Hungary); MRAC: Musée royal de l'Afrique Centrale, Tervuren (Dr. M. de Meyer, Dr. D. Van den Spiegel) (Belgium); MZF: Museo Zoologico "La Specola", Firenze (Dr. L. Bartolozzi) (Italy); NHMB: Natural History Museum, Basel (Dr. M. Borer) (Switzerland); NHML: Natural History Museum, London (Dr. M. Barclay, Dr. R. Booth) (UK); NME: Naturkundemuseum, Erfurt (Dr. M. Hartmann) (Germany); NMPC: National Museum, Prague (J. Jelinek) (Cekia); NMW: Naturhistorisches Museum, Wien (Dr. H. Schillhammer) (Austria); SANC: South African National Collection, Pretoria (Dr. R. Stals) (RSA); SMNH: Swedish Museum of Natural History, Stockholm (Dr. B. Viklund) (Sweden); SMNS: Staatliches Museum für Naturkunde, Stuttgart (Dr. W. Schawaller) (Germany); TMSA: Transvaal Museum, Pretoria (R. Müller) (RSA); USNM: National Museum of Natural History, Washington (G. Hevel) (USA); ZMH: Zoological Museum, Helsinki (H. Silfverberg) (Finland); ZML: Zoological Museum, Lund (R. Danielsson) (Sweden); ZMUC: Zoological Museum, Copenhagen (Dr. A. Solodovnikov) (Denmark); ZSM: Zoologische Staatssamlung, München (Dr. M. Baehr) (Germany).

INSTRUCTIONS. The VARIABILITY of the specimens normally is cited, but in the Xantholinini it is essentially related to the size of the body and after all considered negligible, more evident in the large species. Usually the females are slightly more robust than males. BIONOMICS: the bionomic data without references are taken from the labels of the cited specimens.

ABBREVIATIONS. cf. = compares; etc. = etcetera; ex.= specimen; exx.= specimens; fig.= figure; figs= figures; m= meter; mm= millimiters; n. sp. = new species; comb. n.= new combination; syn. n.= new synonym; n. gen. = new genus. In the figures m = membranous portion.

HISTORICAL OUTLINE OF AFROTROPICAL XANTHOLININI

The first Xantholininae from Africa were described separately from 1835 [*Eulissus ater* Laporte, 1835 (now *Thyreocephalus*)] until the end of the century: *Gyrohypnus tenuicornis* Nordmann, 1837 (now *Linosomus*), *Eulissus amabilis* Boheman, 1848 (now *Achmonia*), *Homorocerus ruficornis* Boheman, 1848 (first described endemic genus of Africa), *Eulissus pilosus* Roth, 1851 (now *Thyreocephalus*), *Xantholinus fallax* Sachse, 1852 (now *Notolinopsis*), the genus *Linosomus* Kraatz, 1857, sensu auct. (now *Notolinopsis*), *Xantholinus hottentottus* Sachse, 1852 (now nom. oblitum, cf. *Linosomus socius*), *Eulissus ferox* Harold, 1881 (now *Thyreocepahlus*), *Xantholinus capensis* Boheman, 1858 (now syn. of *Notolinopsis fallax*), *Xantholinus nasutus* Harold, 1879 (now *Gauropterus*), *Xantholinus coeruleipennis* Quedenfeld, 1881 (now T*hyreocephalus*), *Xantholinus socius* Fauvel, 1877 (now *Linosomus*), *Xantholinus remotus* Eppelsheim, 1895 (now *Gyrohypnus*), *Xantholinus interocularis* Eppelsheim, 1895 (now *Thyreocephalus*).

Apart a few South African taxa, these are large species, easily spotted in the field, and probably picked up fortuitously in the course of general collecting.

A few other species were also described at the beginning of the twentieth century, including *Pachycorynus pallidipennis* Fauvel, 1903a (now *Elitheya*), *Xantholinus marginellus* Fauvel, 1905 (now. *Aleutia*), *Leptacinus encephalus* Fauvel, 1907 (now *Agaporina*). In 1906 Casey published a contribution with the description of the third genus (*Notolinus*, now *Linosomus*) of South Africa, including at that time the species *capensis* (now syn. of *fallax*), *languidus*, and *latitarsis* (now all *Notolinopsis*), *diligens* (now a synonym of *capensis*), *incultus* (now syn. of *socius* and both *Notolinopsis*), and *fumipennis*, *grossulus*, and *parvus* (now syn. of *socius* and all three belonging to *Linosomus)*. A little later *Xantholinus mocquersyi* Fauvel, 1903 (now *Thyreocephalus*), *Xantholinus alluaudi* Fauvel, 1907 (now *Thyreocephalus*), *Xantholinus nairobensis* Fauvel, 1907 (now *Thyreocephalus*), *Leptolinus usugarae* Bernhauer, 1908 (now *Stenistoderus*), *Xantholinus pictipennis* v. *quadrimaculatus* Eichelbaum, 1910 (now *Nudobius*) were described.

In the last century some of the best specialists in Staphylinidae of the period dealt with the Xantholininae, without devoting specific studies to them (apart from Coiffait with a contribution in 1968 on the Xantholininae of Gabon). In this way the

following entomologists described more new species:

between 1912 and 1942 Bernhauer described 62 species (one to three species in each of 18 papers), and in particular in four contributions: 1931 (5 species), 1937 (5 species), 1937a (7 species) and 1939 (11 species; Mission scientifique de l'Omo).

Between 1929 and 1959 Cameron described 28 species (one to three species in each of 9 papers), and in particular in 1950 [7 species and the genus *Metocinus*; Exploration du Parc National Albert, mission G. F. de Witte (1933–1935)] and 1951a (8 species).

Coiffait described 22 species from Gabon in 1968 (Mission Biologique P. P. Grassé, 1963).

In 1939 Tottenham described 4 species and another in 1953: then 18 species in 1956 (mission P. Basilewsky 1953 in Ruanda-Urundi).

Scheerpeltz between 1956 and 1974 described 19 species (one to two in 2 papers) and in particular in 1956 (7 species; mission K.E. Schedl in Congo), and 1974 (10 species from South Africa).

A few other species were described respectively by Eichelbaum, Chapman and Jeannel & Paulian (see References).

So in total the species described before the present revision was 187. Some of these have been placed in synonymy in these pages, and a great many assigned to different genera, often new.

At the end of my revision in December 2015, the number of genera known from Africa amounts to 29 (14 of which are new to science) and the number of species to 425 (273 of which are new to science).

LIST OF ENTOMOLOGICAL EXPEDITIONS IN AFRICA

I list only the expeditions during Xantholinini were collected:

1911–1912. Mission C. Alluaud and R. Jeannel in Kenya
1921, 1925. Mission H. Schouteden in Congo
1922, 1926, 1932. Missions L. Burgeon in Congo
1926–1927. Journeys of H. Scott and J. Omer in Ethiopia
1928. Mission M. A. Collart in Congo
1930. Mission P. Gérard in Congo
1932–1933. Mission Scientifique Suisse in Angola
1933. Mission scientifique de l'Omo, Ethiopia (R. Jeannel and C. Arambourg)
1933–1935. Exploration du Parc National Albert (Mission G. F. de Witte)
1939. Mission P. Lepesme, R. Paulian, A. Villiers in Cameroon
1945. Mission de l'Institut Français d'Afrique Noire au Cameroun et en Côte d'Ivoire
1948.1949. Journeys of G. Salt to Kilimanjaro, Mt Kenya and Ruwenzori
1950. Mission A. Villiers in Togo and Dahomey
1950–1951. Swedish Expedition in South Africa
1951. Mission Museum G. Frey in Guinea
1951–1963. Missions N. Leleup (MRAC) in Congo
1951–1952. Mission H. De Saeger in National Garamba National Park, Congo
1952. Mission K.E. Schedl in Congo
1953. Mission P. Basilewsky (MRAC) in Ruanda-Urundi-Congo
1954–1955. Missions G. de Barros Machado in Angola.
1955–1956. Expedition Museum G. Frey in Nigeria-Kamerun
1956–1959. Mission IFAN au Parc National du Nikolo-Koba, Senegal
1957. Mission P. Strinati in Gabon
1957. Mission Zoologique IRSAC en Afrique orientale (P. Basilewsky and N. Leleup)
1958. Mission J. Mateu dans l'Ennedi
1960–1962. Mission N. Leleup (MRAC) in South Africa
1963. Mission P. P. Grassé au Gabon (MNHNP)
1963–1964. Expedition Zoological Museum Helsinki in Sudan (and other regions)
1963–1964. Mission R.P.M.J. Celis (MRAC) in Congo
1966. Mission ENS-IFAN 1966 in Sierra Leone
1966. Mission Zoological Museum München in Ghana (S. Endrödy-Younga)
1967. Mission N. Leleup (MRAC) in Tanganyika
1971. Mission MRAC in Tanzania (L. Berger, N. Leleup, J. Debecker)
1977. Mission G. Coulon (MRAC) in Kenya
1977. Mission Zoological Museum Lund in Gambia (Cederholm, Danielsson, Larsson, Norling and Samuelsson)
1983. Mission W. Rossi in Sierra Leone
1992–1993. Mission M. Uhlig in Namibia-South Africa (MNB)
1996. Expedition D. Biström in Tanzania

SYSTEMATICS

KEY TO THE GENERA

1. Upper epipleural line of pronotum missing.....2
-. Upper epipleural line of pronotum present, al least in part.....3

2. Body very flat, 5–6 mm long; head with lateral grooves, longitudinal and very dense microstriation and sparse punctures; robust mandibles; large coxae; aedeagus with contorted right paramere (Figs. 63, 66).....1. *Elitheya*
-. Body not flat, very small, 1.8–2.5 mm long; head without lateral grooves, with a short median groove between the frontal grooves; surface of head with rugose, very dense punctation; coxae of normal shape; wings with a posterior fringe of long setae; aedeagus very small, subovoidal, with short, symmetrical parameres (Figs. 84, 88); female genital segment (Fig. 85).....2. *Microafra*

3. Upper epipleural line of pronotum present only in the posterior part and meeting the inferior line.....4
-. Upper epipleural line of the pronotum present only in the posterior part and not meeting the inferior line; anterior tarsi dilated; meso- and metatibia with 3 ctenidia; surface of head dull and finely rugose due to very dense confluent punctures forming narrow longitudinal ridges; body winged, 4–8.5 mm long; aedeagus subovoid, more or less narrow, with parameres of variable shape and size (Figs. 97, 135); female genital segment (Fig. 142).....3. *Stenistoderus*
-. Upper epipleural line of pronotum present in the postero-median part and not meeting the inferior line; head with a lateral groove; lateral surface of head with a groove; pronotum with dorsal and lateral series of punctures; large coxae; body 7.5 mm long, winged, slightly flat; aedeagus of characteristic shape, with long, arched parameres (Fig. 152); female genital segment (Fig. 154).....4. *Agoreina*
-. Upper epipleural line of the pronotum present only in the short posterior and anterior parts and not meeting the inferior line; anterior tarsi dilated (Fig. 161); median and posterior tarsi with very long tarsomeres (Fig. 162); maxillary and labial palpi with last segment very long (Figs. 157, 158); body 4–5.7 mm long, winged; aedeagus sub-ovoid, with distal portion narrow and short, robust parameres (Figs. 169, 180); female unknown.....5. *Amharina*
-. Upper epipleural line of pronotum present along most or all the length of pronotum.....5

4. Body flat, small-sized (4.5–6.5 mm); frontal grooves absent; epistoma between the antennae flat and not protruding; antennomeres broad but not transverse and not cup-shaped; aedeagus drop shaped, with small parameres (Figs. 184, 193); female genital segment (Bordoni, 2002: Fig. 57).....6. *Neoxantholinus*
-. Body cylindrical, larger (5–7.5 mm); frontal grooves present; epistoma high, narrow and protruding; antennomeres very transverse, cup-shaped; aedeagus small, similar to that of *Neoxantholinus* (Figs. 202, 205); female genital segment (Bordoni, 2002: fig. 58).....
.....7. *Zeteotomus*

5. Upper epipleural line of pronotum meeting the inferior line.....6
-. Upper epipleural line of the pronotum not meeting the inferior line.....9

6. Upper epipleural line of pronotum meeting the inferior line at a little more than half of the length of the latter.....7
-.Upper epipleural line of the pronotum meeting the inferior line at the height of the end of the latter; antennae claviform, with very transverse antennomeres, becoming increasingly larger (Fig. 220); maxillary and labial palpi very short, rounded (Figs. 216, 217); all tarsi dilated and short; pronotum with only a single large puncture near the anterior angles; body large (14–16 mm); aedeagus ovoid, elongate, with asymmetrical, short and narrow parameres (Fig. 225); female genital segment (Fig. 222).....8. *Homorocerus*

7. Pronotum with dorsal and lateral series of punctures; mandibles with lateral groove; ocular grooves absent; body of variable size (6–15 mm); including micropterous and fully winged species; tergite and sternite of male genital segment of characteristic shape (Figs. 232, 233, 288); aedeagus ovoid with short broad parameres

(Figs. 234, 295); female genital segment (Bordoni, 2002: Fig. 61).....9. *Nudobius*
-. Pronotum without series of punctures but with a lateral, more or les arched groove with punctures; mandibles without lateral groove; body of variable sizes (6–16 mm) but normally large; winged species; aedeagus ovoid, more or less broad, with symmetrical parameres (Fig. 355); female genital segment (Bordoni, 2002: Figs. 63, 64).....10. *Gauropterus*
-. Pronotum with only one large puncture near the anterior angles.....8

8. Metatibia with apical ctenidium only; head with large fossa behind the eyes; tempora with evident and long protrusion laterally bounded by subelliptical groove; mandibles without lateral groove; labrum protruding, with few evident protrusion (Fig. 394); body small (6.5–10 mm); aedeagus and female genital segment similar to that of *Thyreocephalus* (Fig. 391).....11. *Afrus*
-. Metatibia with apical and subapical ctenidium; head without large fossa behind the eyes; tempora variable but never laterally bounded by subelliptical groove; mandibles without lateral groove; labrum short, with numerous protrusions (Figs. 499, 577); body medium-sized to very large (9-35 mm); aedeagus of variable dimensions, sub-ovoid, more or less broad, with short or long parameres (Figs. 481, 525); female genital segment (Bordoni, 2002: Fig. 67).....12. *Thyreocephalus*

9. Metatibiae with apical and pre-apical ctenidium; body of variable size (5.4–10.5 mm), fully winged; tergite of the male genital segment partially membranous and sometimes short; aedeagus sub-ovoid, with normally short parameres of particular shape, sometimes with pubescence (Figs. 630, 637); female genital segment (Bordoni, 2002: Fig. 89)....3. *Gyrohypnus*
-. Metatibiae only with an apical ctenidium.....10

10. Left mandible in the male of very particular shape, very large, broad, with an erect tooth (Figs. 659, 665); head with a conspicuous, postero-lateral fossa in the male, and a medio-posterior protrusion which partially covers the neck; narrow neck; body of small size (4–6 mm); aedeagus small, ovoid, narrow, with short, narrow parameres (Fig. 668); female genital segment (Fig. 661).....14. *Alexyrea*
-. Mandibles of normal shape.....11

11. Body very convex, small (5.5–6.2 mm); maxillary palpi with short, sub-equal segments (Fig. 684); labrum with very deep median emargination (Fig. 686); male genital segment of characteristic shape (Fig. 693); aedeagus totally membranous, with sub-membranous, large parameres and inner sac with numerous brown areas often overlapping (Fig. 695); female genital segment (Fig. 692).....15. *Belinga*
-. Body very flat, of medium size (8.5–10 mm); mandibles robust; head with lateral groove; pronotum with dorsal series of 3 anterior and 2 posterior punctures; aedeagus ovoid, elongate, with long and large parameres (Fig. 714); female genital segment (Fig. 708).....16. *Aleutia*
-. Body of normal shape.....12

12. Anterior tarsi very dilated.....13
-. Anterior tarsi not dilated.....15

13. Last segment of maxillary palpi conspicuously shorter than the preceding segment.....14
-. Last segment of maxillary palpi only just shorter than the preceding segment (Fig. 724); last segment of labial palpi longer than the preceding (Fig. 725); pronotum with dorsal and lateral series of punctures between other punctures; aedeagus sub-spherical, with long and very narrow parameres; a long lobule between the parameres; inner sac everted in the examined males (Fig. 732); female genital segment (Fig. 728).....17. *Capesia*

14. Last segment of maxillary palpi about as wide at base as the apex of the preceding segment (Fig. 739); frontal grooves present, sometimes very superficial; pronotum with more or less numerous punctures apart a median strip, between which it is possible to distinguish dorsal and lateral series of punctures; body of medium size (5–13 mm), normally brown more or less dark (winged species), or yellowish (micropterous species); aedeagus sub-spherical, with asymmetrical, robust parameres; a lobule, sometimes very large, between the parameres;

inner sac tube-shaped, long and narrow, covered with scales (Figs. 767, 805); female genital segment (Fig. 745).....18. *Notolinopsis*

-. Last segment of maxillary palpi narrower at the base than the apex of the preceding segment (Fig. 862); frontal grooves present; pronotum with dorsal and lateral series of punctures; body of medium size (6.5–9 mm), normally brown more or less dark (winged species), or yellowish (micropterous species); aedeagus long and very narrow, with very long parameres, more or less dilated in the middle; a long, large lobule between the parameres; inner sac filiform, apparently without scales (Fig. 870); female genital segment (Fig. 867).....19. *Linosomus*

-. Last segment of maxillary palpi very narrow, more or less aciculate (Fig. 896); frontal grooves missing; pronotum with dorsal and lateral series of punctures; body of small size (3.5–7 mm); brown, more or less dark, sometimes with large, protruberent eyes (winged species), or yellowish with very small eyes (apterous species); aedeagus membranous, transparent, composed of 2 or 3 telescoped parts, with a distal sclerotised portion and mainly asymmetrical, short and robust parameres; inner sac of various shape, mainly tube-shaped, covered with minute spines and scales, sometimes so disposed as to form a single mass (Figs. 953, 971, 988); female genital segment (Fig. 902).....20. *Metocinus*

-. Last segment of maxillary and labial palpi very slender and short (Figs. 1180–1181); second antennomere very long, sometime almost as long as the first (Fig. 1183); frontal grooves missing; antesternal plate entire; body very small (2.4–4 mm); fully winged species; aedeagus sub-ovoid, with narrow parameres; inner sac normally long and narrow, tape-shaped, covered with scales (Fig. 1189); female genital segment (Fig. 1186).....21. *Endymathis*

15. Body large sized (12-20 mm); general features similar to *Thyreocephalus*; pronotum with only one puncture near the anterior angles; labrum narrow, with only two evident median protrusions (Fig. 1225), very superficial frontal and ocular grooves, aedeagus as in *Thyreocephalus* (Fig. 1208); female genital segment as in *Thyreocephalus*.....22. *Achmonia*

-. Body of smaller size; pronotum with dorsal and lateral series of punctures.....16

16. Frontal and ocular grooves present.....17

-. Frontal or/and ocular grooves missing.....18

17. Frontal and ocular grooves deep and evident; ventral surface of head separated from the lateral surface by a carina and a groove; elytra semi-transparent; body of small size (4.5–6 mm); aedeagus sub-spherical, without parameres; inner sac ribbon-shaped, covered with spines and scales (Figs. 1272, 1291); female genital segment (Bordoni, 2002: Fig. 82).....23. *Phacophallus*

-. Frontal and ocular grooves superficial, not very evident; ventral surface whithout carina and groove; elytra normally sclerotized; body of small size (3–4.5 mm); aedegus with parameres of characteristic shape, between which is the inner sac, always everted (Figs. 1313, 1319); female genital segment (Fig. 1307).....24. *Xanthophius*

18. Frontal and ocular grooves missing; body similar in general aspect to *Notolinopsis*.....19

-. Ocular grooves missing.....20

19. Maxillary palpi with the base of last segment almost as wide as the apex of the preceding segment, aciculate; 3rd segment longer than 2nd (Fig. 1322); last segment of labial palpi longer than the 2nd, very narrow (Fig. 1323); 3rd antennomere slightly shorter than 2nd; fully winged and microptorous species (the latter reddish brown and not yellowish); tarsi shorter; body small (4–6.5 mm); aedeagus sub-spherical, with large and long parameres and a large median lobule; inner sac apparently not visible (Fig. 1331); female genital segment (Fig. 1328).....25. *Balchis*

-. Maxillary palpi with the base of last segment much narrower than the preceding segment, 3rd segment much longer than 2nd (Fig. 1343); last segment of labial palpi shorter than the 2nd (Fig. 1344); 3rd antennomere conspicuously shorter than 2nd; fully winged species; tarsi longer; body small (4.5–6.5 mm); aedeagus similar to that of *Metocinus* (Figs. 1354, 1357), very long and narrow; inner sac filiform, without evident

scales; female genital segment (Fig. 1348).....26. *Agaporina*

20. Body flat, small (4.3–5 mm); maxillary palpi with 1st-3rd segments globular, the 4th aciculate, much narrower than the preceding segment (Fig. 1363); mandibles with very small tooth and short prostheca (Fig. 1366); scutellum large; aedeagus usually sub-spherical, sometimes oblong, with very short and large parameres; inner sac tape-shaped, long and narrow, usually rolled up on itself (Figs. 1371, 1386) or sub-rectilinear (Fig. 1380); female genital segment (Fig. 1368).....27 *Elapheia*
-. Body normally convex.....21

21. Labrum short, with a broad shallow median emargination (Fig. 1395); 2nd-3rd antennomeres shorter and more or less globular; tergite of the male genital segment of normal shape; body of small sizes (3.8–6.5 mm), fully winged and apterous species; aedeagus sub-ovoid, with narrow, more or less long parameres; inner sac of various shape, with spines and scales (Figs. 1417, 1454, 1491); female genital segment (Fig. 1399).....28. *Byziniella*
-. Labrum protruberent, with narrow and deep median emargination (Fig. 1522); 2nd-3rd antennomeres longer, more or less elongate; tergite of the male genital segment with concave posterior margin; body of small to medium dize (4–9 mm), fully winged and apterous species; aedeagus sub-ovoid, with short, robust parameres, laterally adjacent for a long stretch to the distal portion of the aedeagus, provided with numerous setae on the internal margin; inner sac of various shapes, with spines and scales (Figs. 1526, 1571, 1630); female genital segment (Fig. 1523).....29. *Chaetocinus*

1. Genus ***Elitheya*** n. gen. (Figs. 53–73)

TYPE SPECIES. *Pachycorynus pallidipennis* Fauvel, 1903

DESCRIPTION. Similar to *Pachycorynus* in the following characters (Fig. 53): body very flat; shape of labrum, maxillary palpi, gular sutures and antennae; narrow neck; upper epipleural line of pronotum absent; short tarsi. Differs from *Pachycorynus* by the following characters: head not dilated, sub-rectangular, lateral groove always present, not formed by confluent punctures; labial palpi with second segment not longer than first (Fig. 56); antesternal plate with suture; sternum very broad; mesosternum of particular shape (Fig. 59); pronotum with dorsal and lateral series of punctures; shape of aedeagus; asymmetrical parameres with at least one contorted (Figs. 63, 66); female genital segment (Fig. 60).

ETYMOLOGY. Fanciful name, feminine gender.

DISTRIBUTION. West and Central Africa (Fig. 74).

BIONOMICS. The species of this genus are probably sub-corticolous.

REMARKS. The genus *Pachycorynus*, typical of the Oriental and part of the Australian regions, does not occur in Africa. The species of this genus are very similar to one another, the following key therefore refers essentially to the aedeagus.

KEY TO THE SPECIES

1. Body larger, about 6 mm long.....2
-. Body smaller, less than 6 mm.....3

2. Body reddish brown with yellowish elytra; aedeagus as in figure 63. Ivory Coast, Gabon, Cameroon, Congo, Rwanda, Kenya.....1. *E. pallidipennis*
-. Body light brown with darker head and lighter elytra: aedeagus as in Fig. 66. Sierra Leone.....2. *E. leonina* n. sp.

3. Body 5.5 mm long; light brown with yellowish posterior half of elytra; aedeagus as in figure 69. Nigeria, Gabon, Cameroon.....3. *E. nigeriana* n. sp.
-. Body 5.4 mm long; dark brown with blackish head; aedeagus as in figure 72. Congo.....4. *E. congoana* n. sp.

1. ***Elitheya pallidipennis*** (Fauvel, 1903) comb. n. (Figs. 1668, 1741)

Pachycorynus pallidipennis - Fauvel, 1903a: 166;

Bernhauer & Schubert, 1914: 296; Coiffait, 1968: 149, 150 (as *Pachycorinus*); Herman, 2001a: 3734

TYPE MATERIAL. The Institut royal des Sciences naturelles de Belgique preserves 4 specimens, all "*Ex typis*" (red print); the first [devoid of aedeagus: male genital segment glued to the left of the label, the aedeagus was probably glued to the right; specimen studied by Coiffait (1968, Fig. 38)] labelled "*Libreville/ Gabon*", "pallidipennis *Fvl.*"; the second labelled "*Bussira / Congo belge / écorce de ....*" [illegible], "*Biafra (Cap. st./ Jean) 8 Gabon*", the third and fourth labelled "*Loango / Gabon*". I choose the first as lectotype of the species. This specimen bears the label "*Lectotypus* Pachycorynus pallidipennis *Fvl., Bordoni des. 2011*"; I choose the other three as paralectotypes. These bear the label "*Paralectotypus* Pachycorynus pallidipennis *Fvl., Bordoni des. 2011*"; all with the determination "Elitheya pallidipennis *(Fvl.), Bordoni det. 2011*".

EXAMINED MATERIAL. Ivory Coast, Bingerville, J. Decelle, X.1961, 2 males, 4 females (MRAC), 4 males, 1 female (cB).

Gabon, Libreville, Mocquerys, 2 exx. (MNW); Penisola di Pointe Denis, Pointe Wingonbè, S. Taiti & L. Bartolozzi, 17.XII.1995, 1 ex. (MZF); SO, Lolodorf, L. Conradt, 1895, 1 female (MNB).

Congo, Sumbi, A. Collart, 12.VI.1925, 1 male (IRSNB); Congo, Kikionga, A. Collart, 25.III.1925, 1 female (IRSNB); Mayumbe, A. Collart, III.1925, 1 female (IRSNB); Likimi, Mundjinga, A. Collart, 2.X.1927, 1 female (IRSNB); Yangambi, J. Decelle XI.1951, 1 female (MRAC).

Rwanda, Nyakabuye, H. Mühle, 25.I.1984, 1 female (MNB); Uluku (Buhunde), A. Collart, 24.IX.1929, 1 ex. (devoid of genital segment) (IRSNB).

Kenya, Mt Elgon, T. Palm (no date), 2450 m, 1 female (ZML); Kakamega for., E Udo's Bandas, 00°21'38.2"N, 34°51'24.9"E, V. Grebennikov, 10.XI.2001, 1 female (FMNH); Kenya, Kakamega, Kisieni, 1330 m, T.E. Leiler, 27–28.I.1979, 1 male (cB), 1 female (cJ).

CITED MATERIAL (not examined). Gabon, Makokou (Coiffait, 1968).

DESCRIPTION. Length of body: 6.1 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Fully winged. Head with longitudinal micro-striation, pronotum with transverse micro-striation. Reddish brown with yellowish elytra. Head sub-rectangular, elongate, with sub-rectilinear and sub-parallel sides and well rounded posterior angles. Eyes small and a little protruberent. Surface of head with a groove from the eyes to the posterior angles, three punctures instead of the ocular grooves, two median punctures, one behind the other, in an oblique line to the insertion of the antennae; some punctures near the posterior margin. Pronotum as long as head, dilated anteriorly and there narrower than head, very narrow behind, with largely rounded anterior angles; dorsal series of 4 spaced punctures and lateral series of 3 spaced punctures. Elytra narrow, sub-rectangular, with sub-rectilinear and sub-parallel sides, longer and a little wider than pronotum, with rounded humeral angles. Surface with wide and superficial punctation, arranged in some series. Tergite and sternite of the male genital segment as in figures 61, 62. Aedeagus 0.96 mm long (Fig. 63), ovoid, very narrow, with asymmetrical parameres, the right of particular shape; inner sac seemingly not visible.

DISTRIBUTION. Ivory Coast, Gabon, Cameroon, Congo, Rwanda, Kenya (Fig. 74).

BIONOMICS. The specimens were collected under the bark of dead trees.

REMARKS. Near Lolodorf (Cameroon), locality several time mentioned in these pages, there is the Atlantic littoral Evergreen Forest.

2. ***Elitheya leonina*** n. sp.

EXAMINED MATERIAL. Holotype male: Sierra Leone, Northern Prov., between Sinikoro and Kondembaia, (behind Loma Mts), W. Rossi, 29.XI.1983 (cB); paratypes, 2 females (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.1 mm; from anterior margin of head to posterior margin of elytra: 2.7 mm. Fully winged. Head with longitudinal micro-striation, pronotum with transverse micro-striation. Light brown with darker head and lighter elytra. Body very flat. Head sub-rectangular, with sub-rectilinear and sub-parallel sides and narrowly rounded posterior angles.

Eyes small and not very protruberent. Surface of head with a fine lateral groove, with two punctures instead to the ocular grooves, two median punctures, one behind the other in an oblique line, two large posterior punctures on the lateral margin; frontal grooves short and convergent. Very narrow neck. Pronotum shorter and narrower than head, a little dilated forward, with very oblique anterior margins; dorsal series of 4 widely spaced punctures and lateral oblique series of 2 median punctures. Elytra long, slightly dilated behind, longer and wider than pronotum, with rounded humeral angles. Surface with superficial, sparse punctation, between which are two lateral series of broad punctures. Tergite and sternite of the male genital segment as in figures 64, 65. Aedeagus (Fig. 66) 1.33 mm long, ovoid, very narrow, with asymmetrical parameres, the right of particular shape; inner sac seemingly not visible.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Sierra Leone.

DISTRIBUTION. This species is at present only known from the type locality in Sierra Leone (Fig. 74).

3. ***Elitheya nigeriana*** n. sp.

EXAMINED MATERIAL. Holotype male: Nigeria, Ife, Medler, III.1969 (FMNH); paratypes: 1 male, 3 females (FMNH), 2 males, 1 female (cB); Gabon, 3 females (NMW); Kamerun, Joh.-Albrechtshöne, L. Conradt, 14.IX–6.X.1898, 4 females (MNB); Camerun, Lake Barombi, Distr. Kimbe, Exp. Mus. G. Frey, 1955–56, Bechyne, 24.XI.1955, 3 females (NMW), 2 females (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.5 mm; from anterior margin of head to posterior margin of elytra: 2.7 mm. Fully winged. Head with longitudinal micro-striation, pronotum with transverse micro-striation. Light brown with yellowish posterior half of elytra. Head sub-rectangular, with sub-rectilinear sides and narrowly rounded posterior angles. Eyes small and a little protruberent. Neck very narrow. Surface of head with a thin lateral groove, three punctures instead of the ocular grooves, and two median punctures in an oblique line. Pronotum as long as head, anteriorly slightly dilated and there narrower than head, with anterior margins rounded from neck to the sides; dorsal series of 4 spaced punctures and lateral oblique series of 2 median punctures. Elytra sub-rectangular, narrow, longer and wider than pronotum, with rounded humeral angles; surface with sparse and superficial punctation, arranged in some series between which are one median and one lateral series. Tergite and sternite of the male genital segment as in figures 67, 68. Aedeagus (Fig. 69) small and narrow, 0.8 mm long, with asymmetrical parameres, the right of particular shape; inner sac seemingly not visible.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Nigeria.

DISTRIBUTION. This species is currently known from Gabon, Nigeria and Cameroon (Fig. 74).

4. ***Elitheya congoana*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Lulua, Sandoa, G. Overlast, IX.1930 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.4 mm; from anterior margin of head to posterior margin of elytra: 3.1 mm. Fully winged. Head and pronotum with more or less transverse micro-striation. Dark brown with blackish head. Head sub-rectangular, with sub-rectilinear and sub-parallel sides and narrowly rounded posterior angles. Eyes medium-sized and not very protruberent. Surface of head with lateral grooves, two punctures instead of ocular grooves, and two median punctures in an oblique line; frontal grooves very convergent. Pronotum as long as and narrower than head, with very oblique anterior margins until the sides; sides not emarginate; dorsal series of 3 widely spaced punctures and lateral series of 2 median, smaller punctures. Elytra large, longer and wider than pronotum, dilated posteriad, with very rounded humeral angles; surface with sparse and superficial punc-

tation, partially arranged in series. Tergite and sternite of the male genital segment as in figures 70, 71. Aedeagus sub-rectangular (Figs. 72, 73), very narrow, 0.92 mm long, with asymmetrical parameres, both of particular shape; inner sac seemingly not visible.

ETYMOLOGY. The specific epithet refers to Congo.

DISTRIBUTION. This species is so far known only from the type locality in Congo (Fig. 74).

REMARKS. Female unknown.

Figure 1. Africa map.

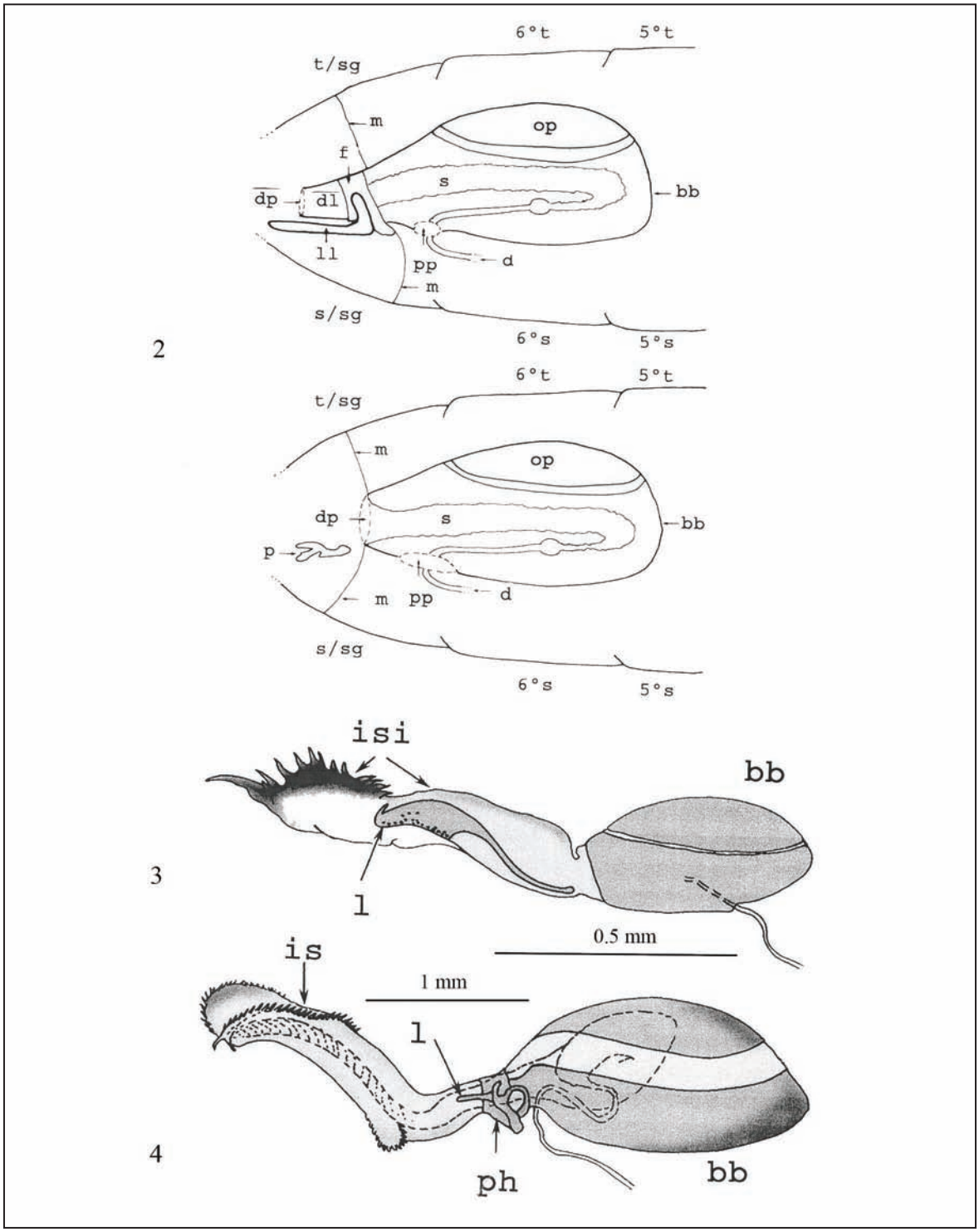
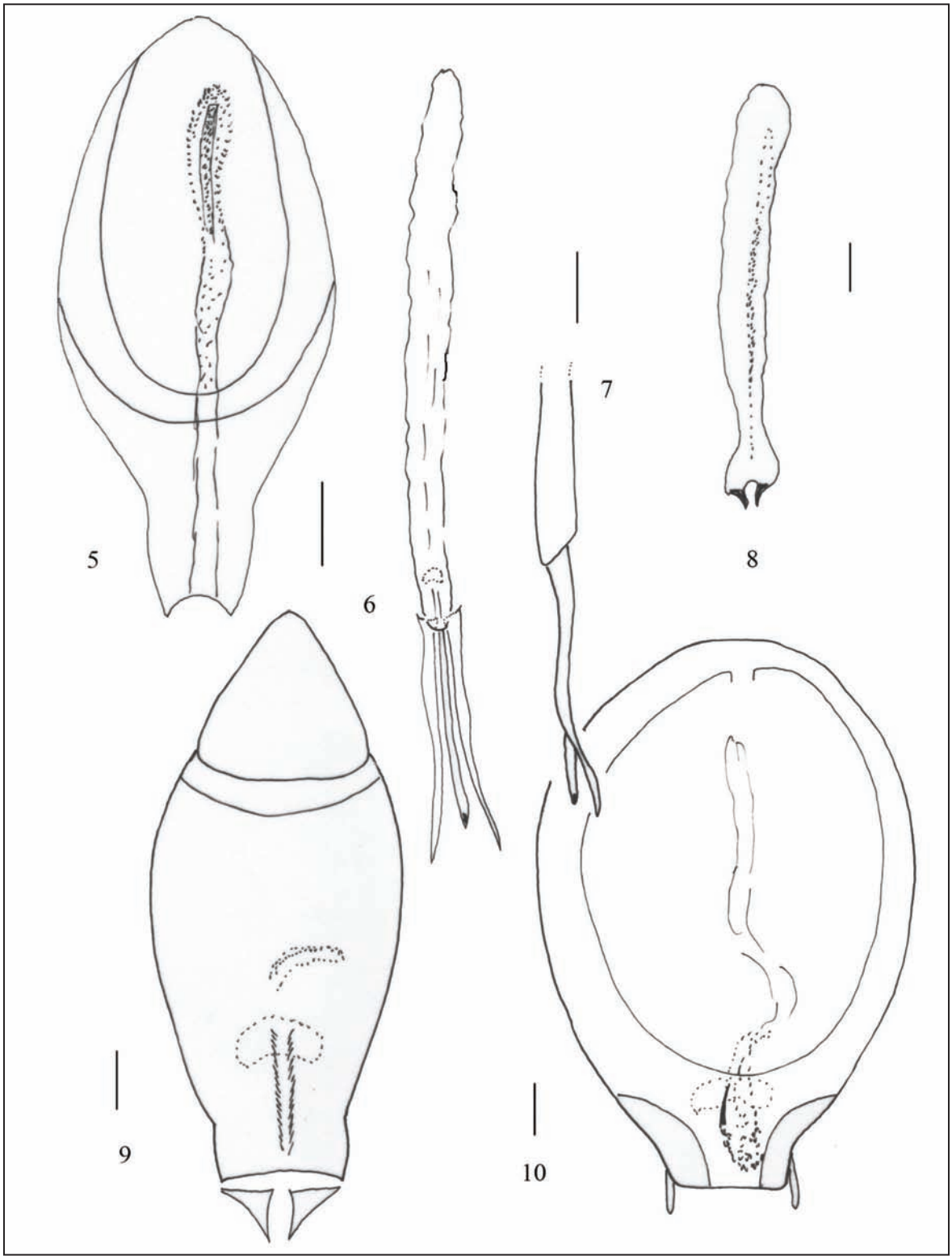
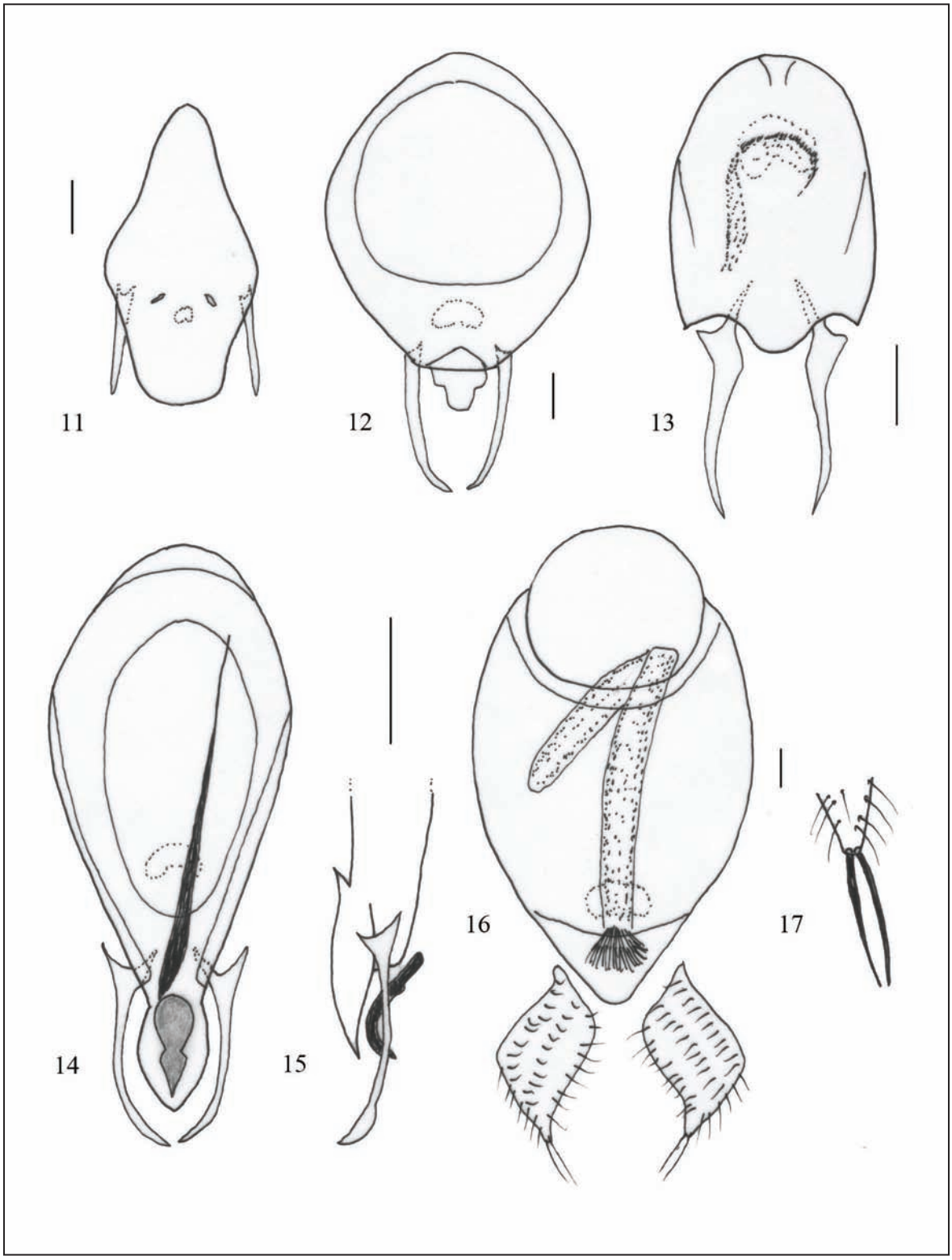


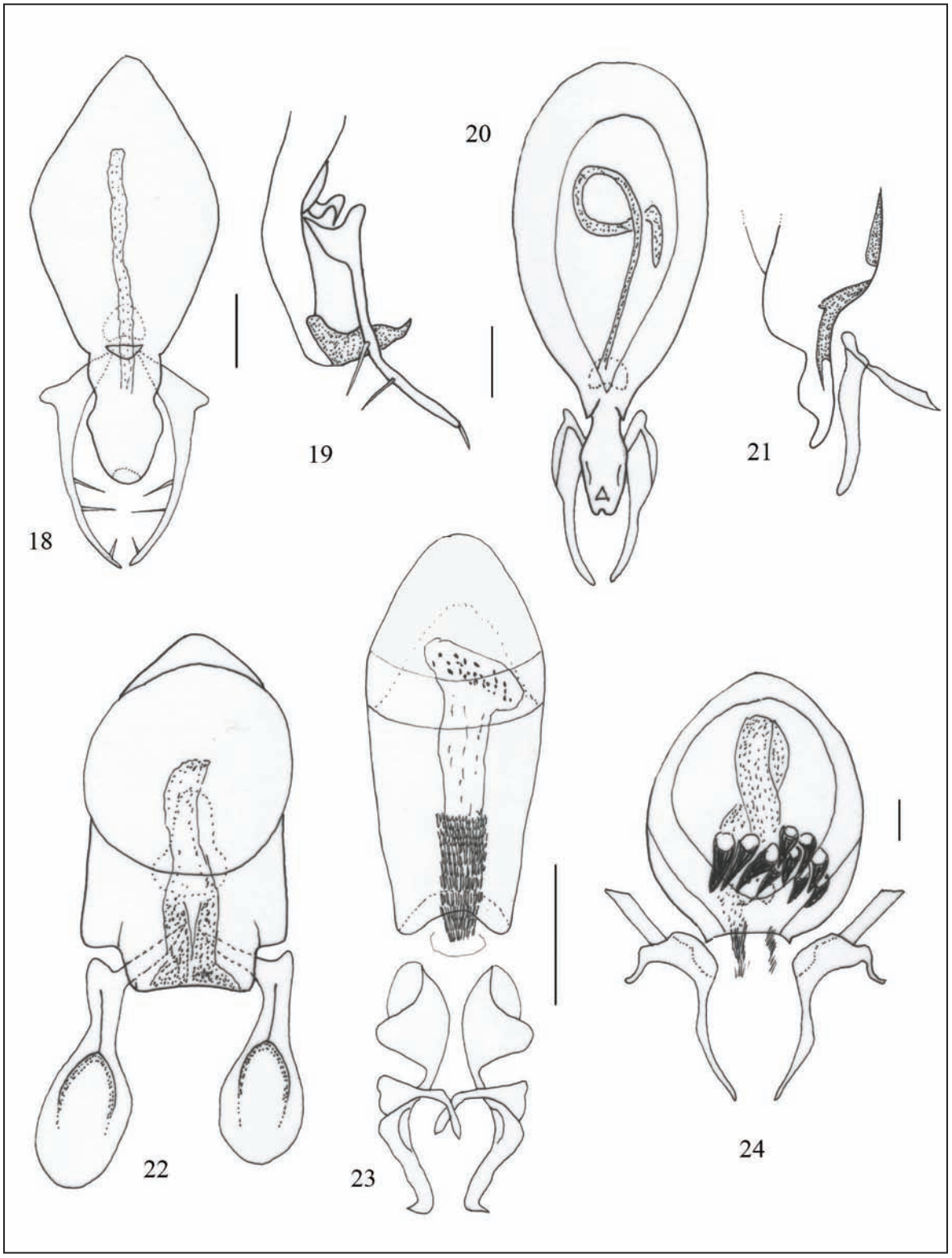
Figure 2. Schematic representation of the aedeagus in the abdomen, lateral view. Above: species with parameres (as *Thyreocephalus* or *Nudobius*). Below: species without parameres (as *Nepalinus* or *Atopolinus)*. 5°, 6° t; 5°, 6° s: 5°, 6° tergite and sternite; t/sg, s/sg: tergite and sternite of the male genital segment; bb: basal bulbus; op: oporculum (with more muscles for invagination); dl: distal lobule; f: phallobase; ll: lateral lobes (parameres); s: inner sac; pp: proximal pore; dp: distal pore; d: ductus ejaculatorius; p: pseudoparamere. Figures 3, 4. Aedeagus of *Xanthophius* and *Leptacinus* (isi: inner sac not invaginable; l: lateral lobe (paramere); is: inner sac evaginable and invaginable; ph: phallobase; bb: basal bulbus).



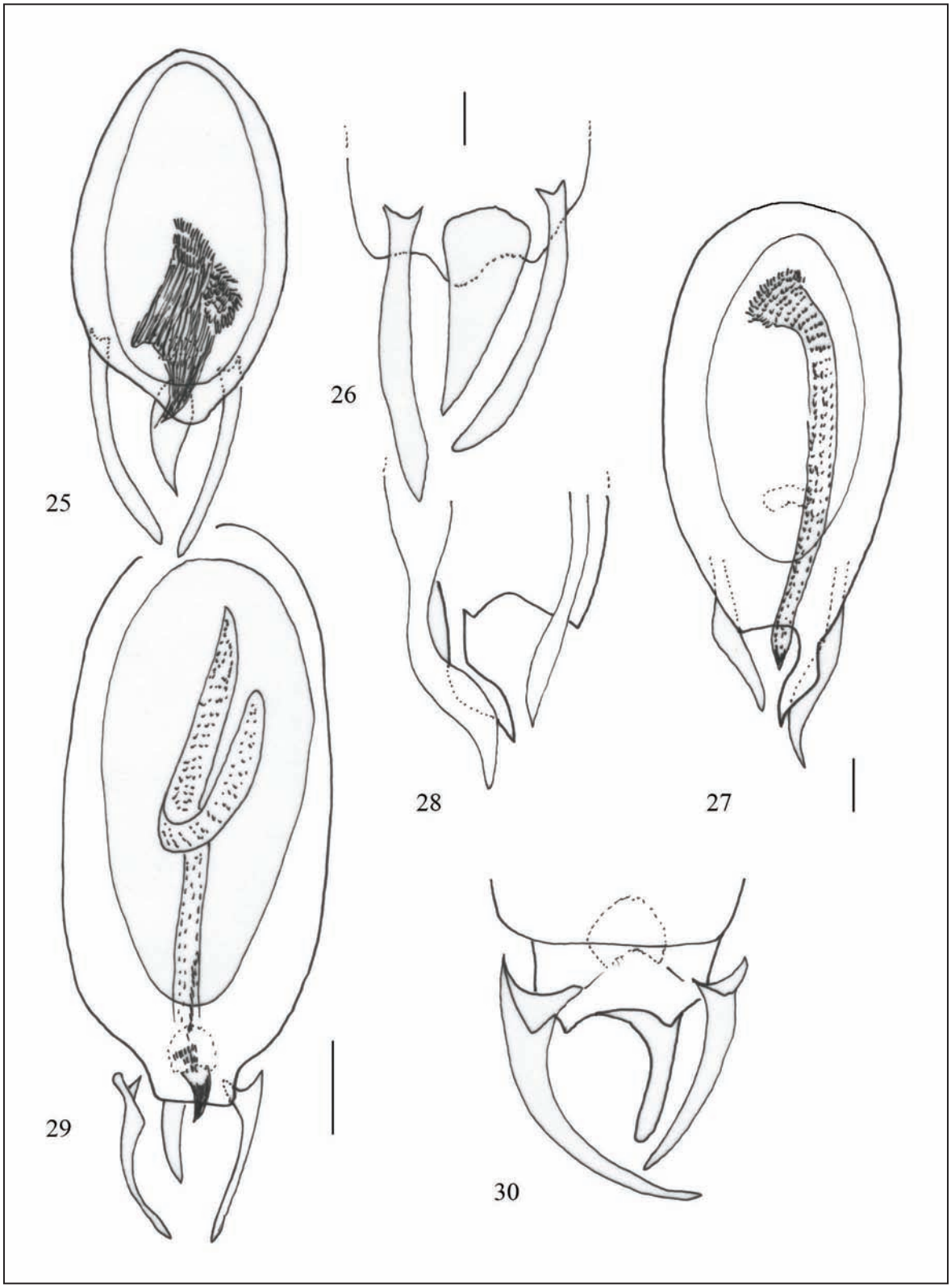
Figures 5–10. Aedeagi in Xantholinini. Fig. 5: *Adhavara ferruginea* from Thailand. Figs. 6, 7: *Pachycorynus bakeri* from Philippines. Fig. 8: *Maharadja pubiventris* from Java. Fig. 9: *Manilla borneana* from Borneo. Fig. 10: *Xantholinus pakistanus* from Pakistan.



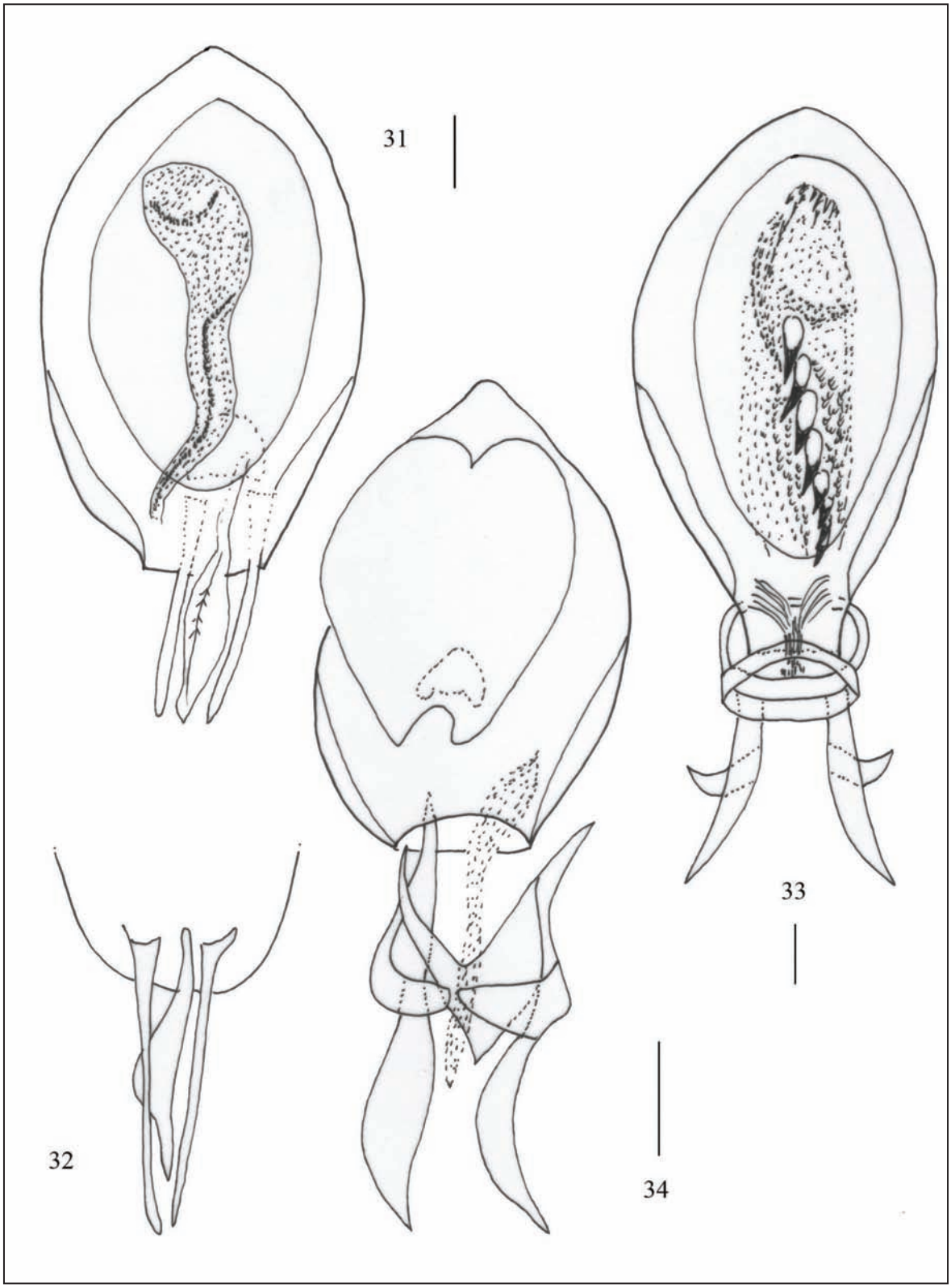
Figures 11–17. Aedeagi in Xantholinini. Fig. 11: *Grevillia blackburni* from Australia. Fig. 12: *Leptacinus quadrisulciceps* from Australia. Fig. 13: *Erymus blasurus* from India. Figs. 14, 15: *Metolinus barutimus* from Malaysia. Figs. 16, 17: *Yunnella spinosa* from China.



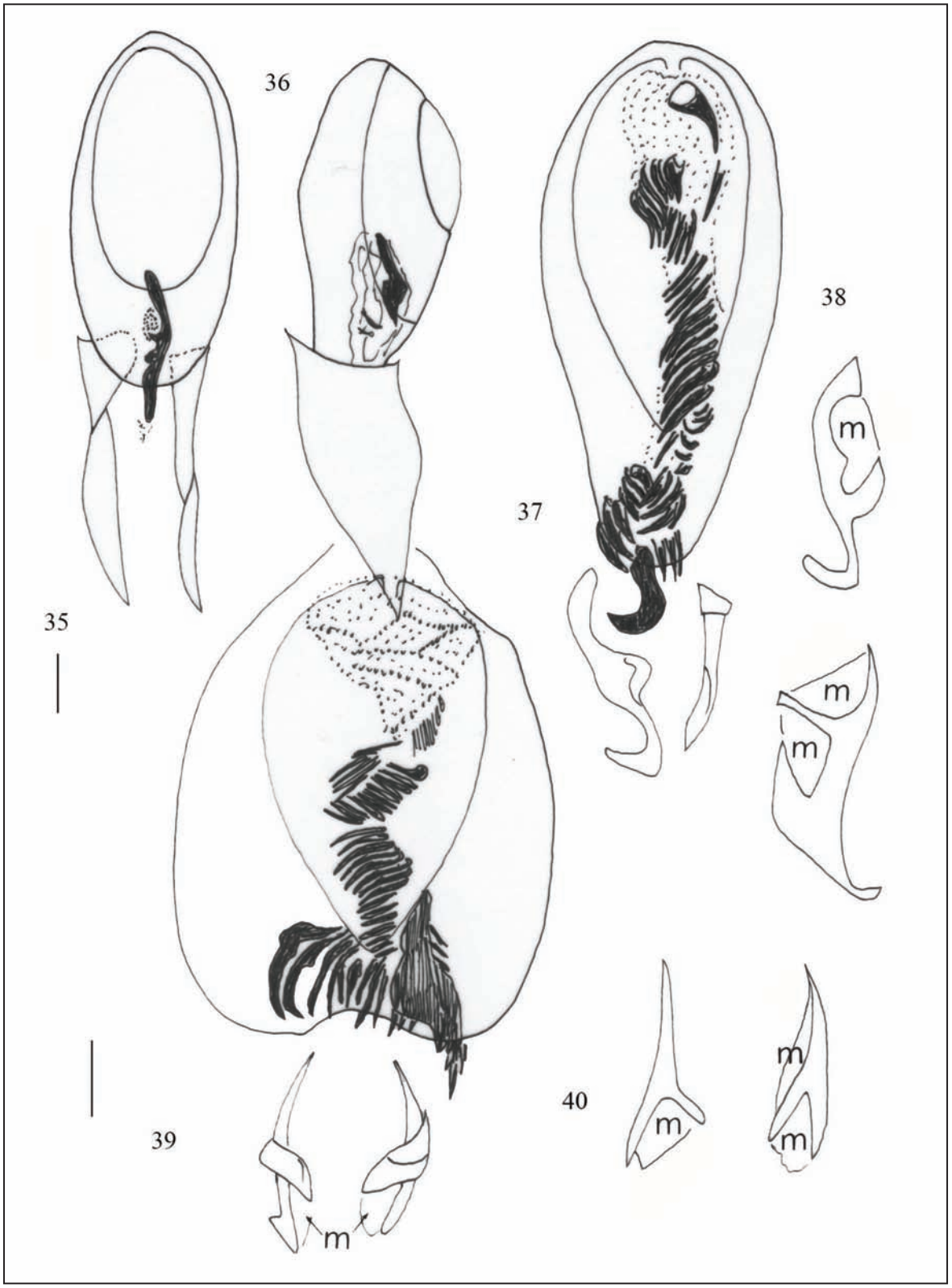
Figures 18–24. Aedeagi in Xantholinini. Figs. 18, 19: *Pseudocorynus nelsonianus* from New Zealand. Figs. 20, 21: *Otagonia labralis* from New Zealand. Fig. 22: *Medhiama puetzi* from China. Fig. 23: *Sulawesina brendelli* from Sulawesi. Fig. 24: *Mahavana acinosa* from China.



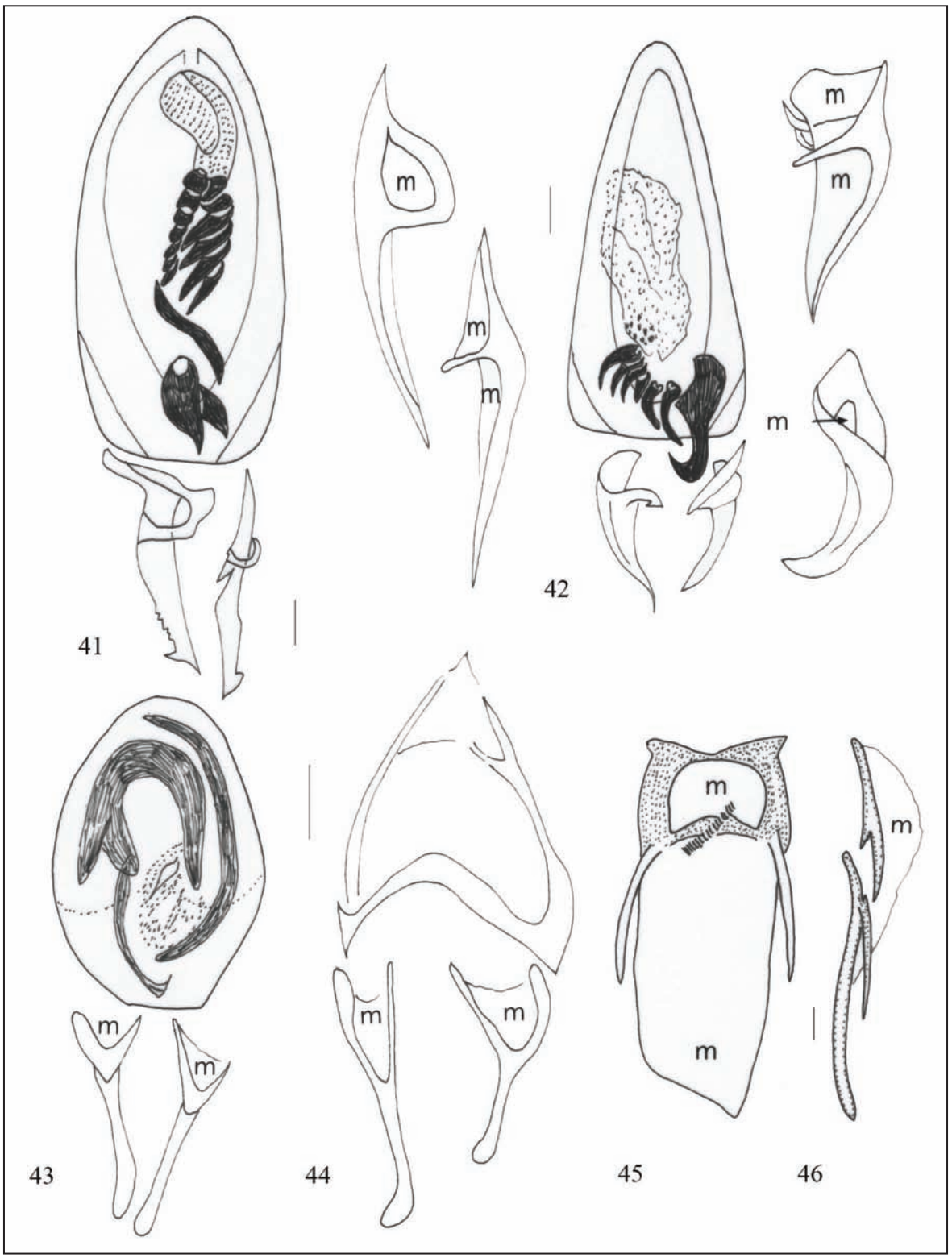
Figures 25–30. Aedeagi in Xantholinini. Figs. 25, 26: *Enervia bisulciceps* from Australia. Figs. 27, 28: *Queenslandina oculata* from Australia. Figs. 29, 30: *Paracorynus arecae* from New Zealand.



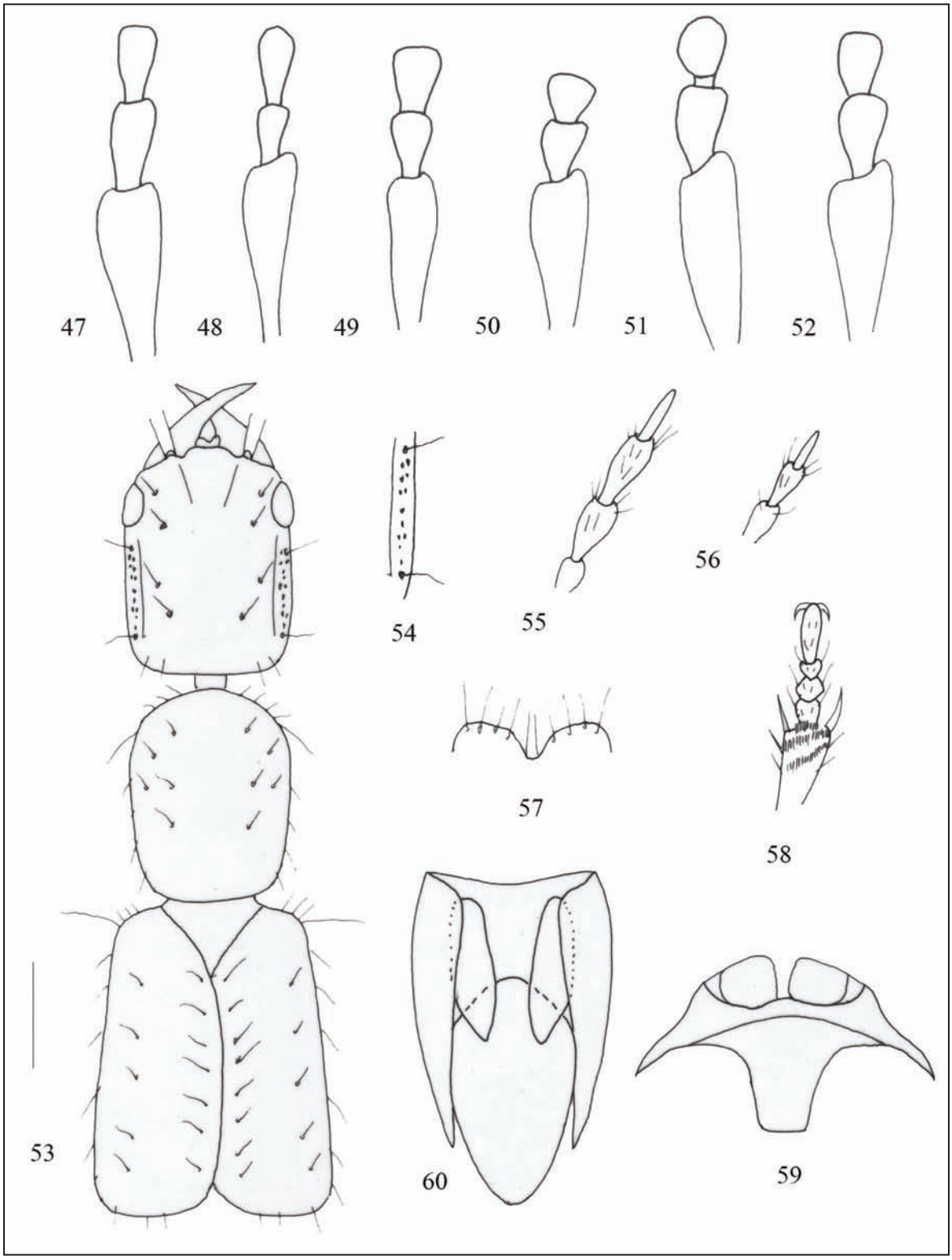
Figures 31–34. Aedeagi in Xantholinini. Figs. 31, 32: *Walesia erythroptera* from Australia. Fig. 33: *Megalinus metallicus* from Taiwan. Fig. 34: *Sumatera borneana* from Borneo.



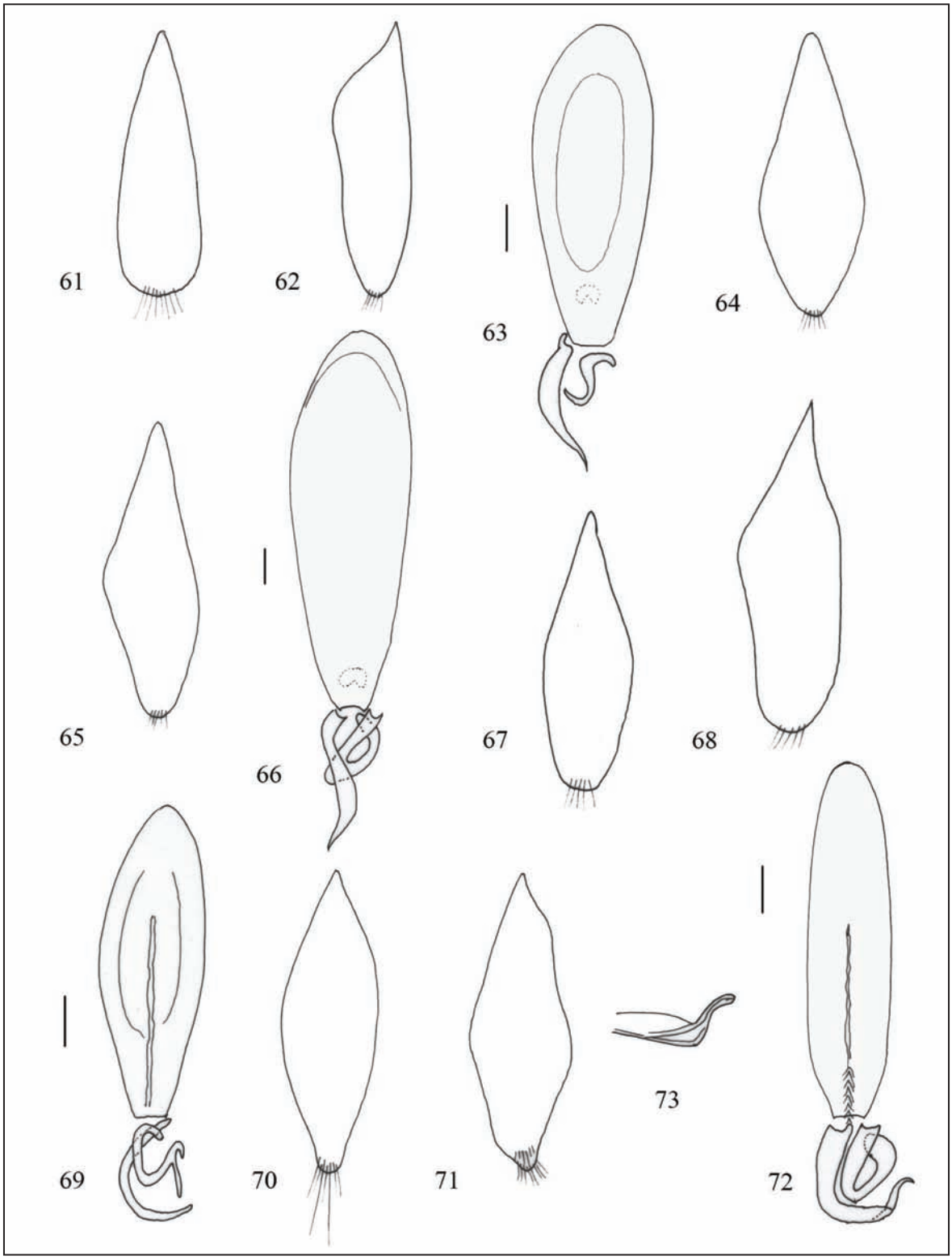
Figures 35–40. Aedeagi in Xantholinini. Figs. 35, 36: *Mitomorphus nilgiricus* from India. Figs. 37, 38: *Nepalinus anagastus* from Nepal. Figs. 39, 40: *Someira martensi* from Nepal.



Figures 41–46. Aedeagi in Xantholinini. Fig. 41: *Atopolinus meghalayaensis* from Meghalaya. Fig. 42: *Atopolinus phetchaburiae* from Thailand. Figs. 43-44: *Edulia purpurescens* from India. Figs. 45, 46: *Archaites tamborinensis* from Australia.



Figures 47–60. First three antennomeres of: *Metocinus* sp. (Fig. 47); *Endymathis* sp. (Fig. 48); *Agaporina* sp. (Fig. 49); *Elapheia* sp. (Fig. 50); *Byziniella* sp. (Fig. 51); *Chaetocinus* sp. (Fig. 52). Figures 53–60. *Elitheya pallidipennis*: fore-body (bar scale: 0.5 mm) (Fig. 53) with particular (Fig. 54), maxillary and labial palpi (Figs. 55, 56), labrum (Fig. 57), anterior tarsus (Fig. 58), mesosternum (Fig. 59), and female genital segment (Fig. 60).



Figures 61–73. Tergite, sternite of the male genital segment and aedeagus of *Elitheya pallidipennis* (Figs. 61–63) and *Elytheya leonina* n. sp. (Figs. 64–66) (bar scale: 0.1 mm). Tergite, sternite of the male genital segment and aedeagus of *Elitheya nigeriana* n. sp. (Figs. 67–69) and *Elytheya congoana* n. sp. (Figs. 70–72), with particular of left paramere in lateral view (Fig. 73) (bar scale: 0.1 mm).

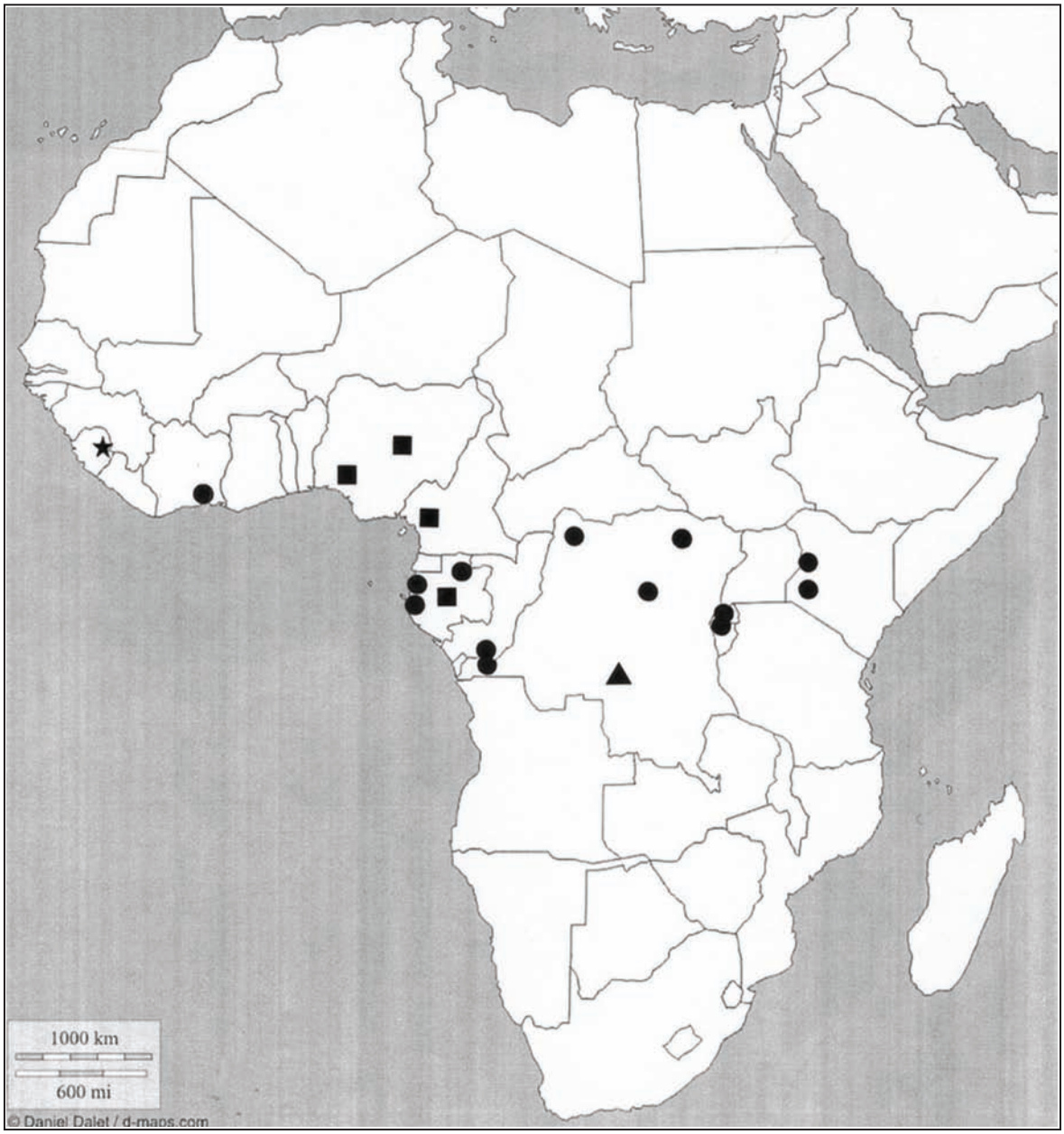


Figure 74. Distribution of the genus *Elitheya*: *E. pallidipennis* (circle), *E. leonina* n. sp. (star), *E. nigeriana* n. sp. (square), *congoana* n. sp. (triangle).

2. Genus ***Microafra*** n. gen. (Figs. 75–89)

TYPE SPECIES: *Leptacinus minutissimus* Cameron, 1959: 113

DESCRIPTION. Characterized by the minute winged body, with head and pronotum sub-rectangular, very wide neck (Fig. 75), and by dense punctation of the head. Body entirely yellowish more or less light. Elytra with posterior long setae. Maxillary palpi short, with 1st, 2nd sub-equal and short segments, 3rd segment dilated, slightly longer than the preceding, the last filiform, clearly narrower and shorter than 3rd (Fig. 76); labial palpi with small short segments, the 2nd a little longer than 1st and the last filiform, narrow, a little shorter than 3rd (Fig. 77); mandibles with lateral groove (Fig. 78); labrum narrow, bilobed (Fig. 79); frontal grooves

obsolete, ocular grooves deep, almost longitudinal; between the ocular grooves is a median, short groove; gular sutures fused; antesternal plate divided; sternum convex; pronotum with dense punctation on either side of a median impunctate band; upper epipleural line missing; elytra with numerous series of dense punctures; anterior tarsi not dilated (Fig. 80); last segment of posterior tarsi as long as the preceding ones together (Fig. 81); metatibiae with a single ctenidium. Male genital segment with fused pleurae and very small tergite fused with pleurae; sternite modified; aedeagus extremely small, ovoid; parameres symmetrical (Figs. 84–88). Female genital segment as in figure 85.

ETYMOLOGY. The generic epithet is from the Greek mikros (small) and the Latin *afrus -a -um* (African). Feminine gender.

DISTRIBUTION. West and Central Africa.

KEY TO THE SPECIES

1. Body about 2 mm long. Aedeagus as in figure 84. Gabon, Angola.....1. *M. minutissima*
-. Body smaller, about 1.8 mm long. Aedeagus as in figure 88. Congo, Zambia....2. *M. congoana* n. sp.

1. ***Microafra minutissima*** (Cameron, 1959) comb. n. (Figs. 1669, 1742)

Leptacinus minutissimus - Cameron, 1959: 113; Herman, 2001a: 3679
Leptacinus (s. str.) *cephalotes* - Coiffait, 1968: 134; Herman, 2001a: 3671, syn. n.

TYPE MATERIAL. The Natural History Museum of London preserves 1 specimen labelled "*Type*" (printed on round label with red edge), "*Museu do Dundo / Dundo / X.1946 / Reg. Ang. 119.85*", "Leptacinus/ minutissimus / *Type Cam.*", "ANG. 19.15", "*Data does not / agree precisely / with that of / Cameron (1959) / P.M.H. VIII.68*". It is a male that I chose as lectotype of the species; it bears the label "*Lectotypus* Leptacinus minutissimus *Cam., Bordoni des. 2006*" and the determination "Microafra minutissima *(Cam.), Bordoni det. 2006*".

The Muséum national d'Histoire naturelle of Paris preserves the female holotype, labelled "*Belinga / 29.3.63 / H. Coiffait*", "*Mission Biologique / au Gabon / P. P. Grassé Directeur*", "*Holotype*" (printed in red label), "Leptacinus (s. str.) / cephalotes *Coiff. / H. Coiffait 1967*". It is a female, identical to *M. minutissima* that is labelled "Microafra minutissima *(Cam.), Bordoni, 2014*".

EXAMINED MATERIAL. Gabon, Belinga, H. Coiffait, 11.II.1963 and 23.V.1963, 2 exx. (cB).

Angola, Alto Cuilo, Cacolo, A. de Barros Machado V.1954, 2 exx. (MRAC), 2 exx. (cB); Alto Cuilo, Na-Iponba, A. de Barros Machado,VI.1954, 1 ex. (MRAC).

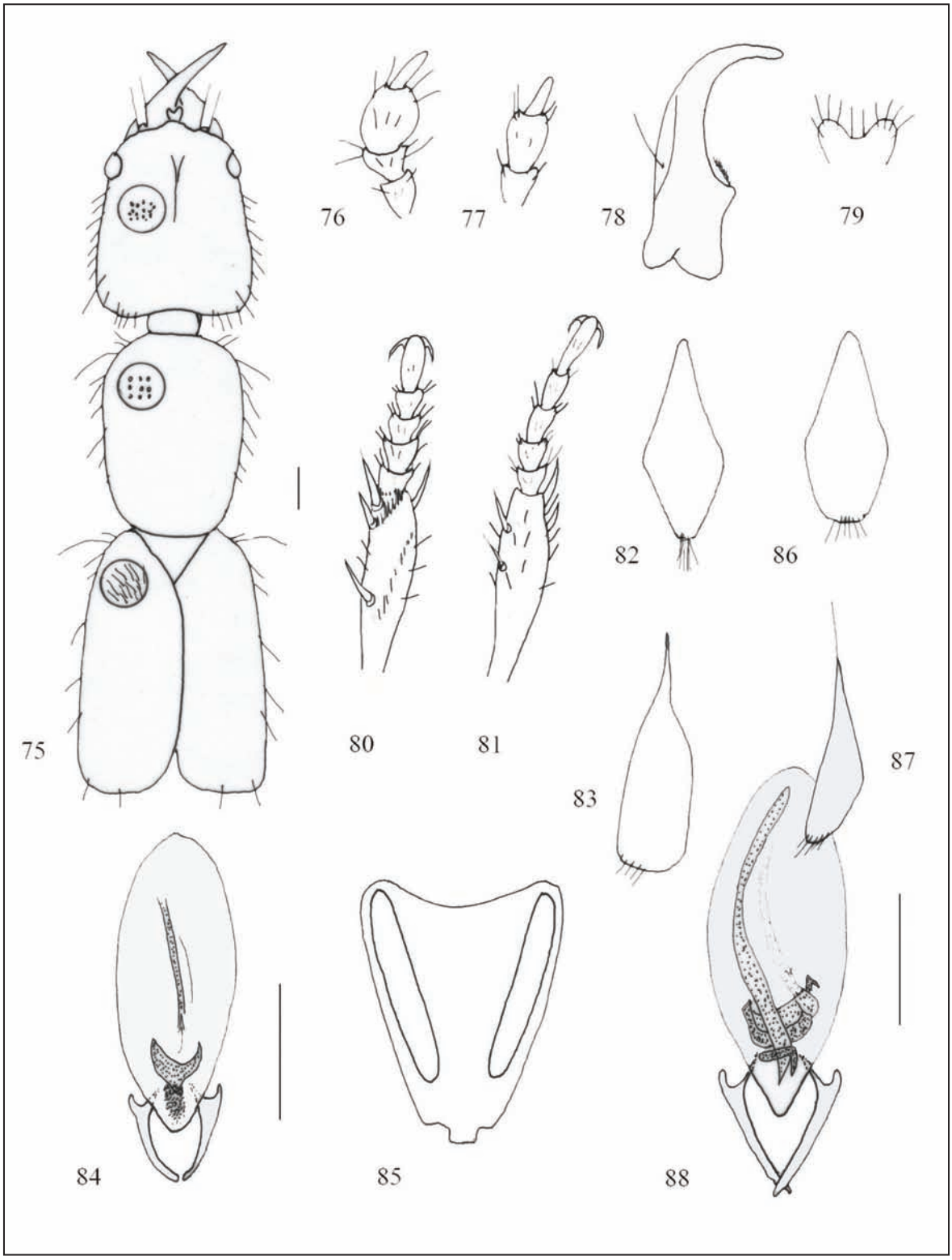
Zambia, (N Rhodesia) Congo-Zambesi Watershed., H.S. Evans, 1928, 1 ex. [with the label "Leptacinus minutissimus *Brnh., Cotypus*" *(in litt.)*] (FMNH).

DESCRIPTION. Length of body: 2–2.2 mm; from anterior margin of head to posterior margin of elytra: 1.1–1.3 mm. Fuly winged. Body very small. Entirely yellowish. Head sub-rectangular, slightly narrowed anteriorly, with slightly rounded sides and narrowly rounded posterior angles. Eyes small, slightly protruberent. Surface shiny, with fine, deep and dense punctation apart from a narrow median strip. Pronotum longer and narrower than head, a little dilated anteriorly, with very largely rounded anterior angles and sinuate sides. Surface with punctuation similar to that of head, apart from a median strip. Elytra sub-rectangular, long, clearly longer and wider than pronotum, with less marked humeral angles. Surface with fine and dense punctation arranged in numerous close series. Abdomen with more or less polygonal micro-reticulation and fine and sparse punctation. Tergite and sternite of the male genital segment as in figures 82, 83. Aedeagus very small (Fig. 84), 0.26–0.33 mm long, sub-ovoid; parameres short and narrow; inner sac with a stylus-shaped structure and brown, minute, distal areas.

DISTRIBUTION. Gabon, SE Congo Angola, NE Zambia (Fig. 89).

BIONOMICS. The specimens were collected with "*aerial plankton net*", in "*terreau*", "*humus*", and "*humus, racines in for. sclérophyl.*","*at light*".

REMARKS. To this species belong also three specimens in coll. Lavasseur (MNHNP) bearing the labels "*Cameroon, Ambam, B. de Miré 3.VIII.1965*", [1 ex. (cB)], "*Holotype*" (printed on red stripe glued on the white label), "Microleptolinus camerunensis *n. gen., n. sp., L. Levasseur det. 1968 in litt.*", and



Figures 75–88. *Microafra minutissima*: fore-body (Fig. 75), maxillary and labial palpi (Figs. 76, 77), mandible (Fig. 78), labrum (Fig. 79), anterior and posteriar tarsi (Figs. 80, 81), tergite, sternite of the male genital segment and aedeagus (Figs. 82–84), female genital segment (Fig. 85). *Microafra congoana* n. sp.: tergite, sternite of the male genital segment and aedeagus (Figs. 86–88) (bar scale: 0.1 mm).

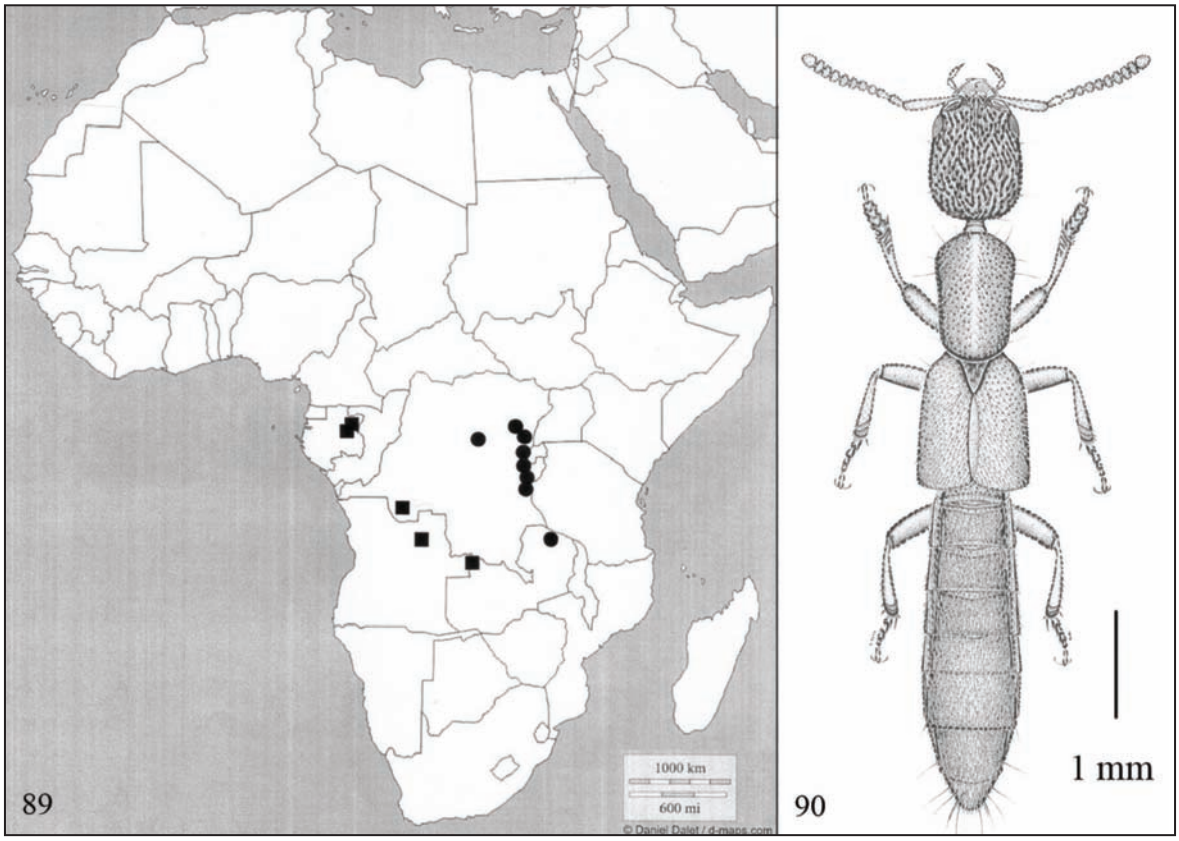


Figure 89. Distribution of the genus *Microafra*: *M. minutissima* (square), *M. congoana* n. sp. (circle).
Figure 90. Habitus of *Stenistoderus* sp. (ex Smetana, 1982).

"*Paratype etc.*". All have the symbol "♂" but the first is devoid of genital segment and aedeagus and the other have an unusable preparation. The third specimen in my collection is a female.

The description of *M. minutissimus* mentions another specimen from Tala Mungongo (Malonge), A.B. March, 31.I.1949 that I can not find.

2. ***Microafra congoana*** n. sp.

Examined material. Holotype male: Congo, Kivu, Terr. Fizi, Bas Itombwe, 800–900 m, N. Leleup IV.1951, 1 male (MRAC); paratypes: same data, Terr. Lubero, Mt Kibatsiro, Visiki, 2080 m, R. P.M.J. Celis, XII.1956, 3 females (MRAC), 1 female (cB); same data, Terr. Lubero, Mt Bugera, 2100 m, R.P.M.J. Celis, XI–XII.1954, 1 female (cB); same data, T. Kabare contr., Kamaniola, 1600 m, N. Leleup, III.1951, 1 female (MRAC); same data, Uvira, 800 m, N. Leleup, V.1951, 1 female (MRAC); Congo, Terr. des cataractes, Kavuya, N. Leleup, XII.1952, 2 exx. (MRAC), 2 exx. (cB); Congo, Rutshuru, J. Ghesequière, IV.1937, 1 ex. (MRAC); Congo, Yangambi, D. and A. Kistner and R. Banfill, 8.VII.1960, 1 male, 3 females (FMNH), 1 male, 1 female (cB); Zambia, Mbala (Abercorn), J. R. Clover, D. and A. Kistner, 19.V.1970, 1 ex. (FMNH).

Description of Holotype. Male. Length of body about 1.8 mm; from anterior margin of head to posterior margin of elytra: 1.1 mm. The external characters are similar to those of *M. minutissima*. Tergite and sternite of the male genital segment as in figures 86, 87. Aedeagus longer than that of *M. minutisssima* (Fig. 88), with different inner sac.

Variability. The paratypes have no substantial morphological differences with the holotype described.

Etymology. The specific epithet refer to Congo.

Distribution. W Congo, NW Zambia (Fig. 89).

3. Genus ***Stenistoderus*** Jacquelin du Val, 1856 (Figs. 90–145)

Stenistoderus - Jacquelin du Val, 1856: 33; Coiffait, 1972: 188; Smetana, 1982: 116; Herman, 2001a: 3751
Leptolinus - Kraatz, 1857: 647; Coiffait, 1956: 51; 1972: 188; Bordoni, 1982: 168

TYPE SPECIES. *Stenistoderus nothus* (Erichson, 1839), designated by Jacquelin du Val, 1856 by monotypy.

DESCRIPTION. Form very elongate, flat and parallel-sided. Head with very dense longitudinally confluent punctation. Ocular and frontal grooves absent. Anterior margin of frons between antennal insertions extended into a short and narrow process limited at each side by a rounded emargination. Eyes small. Labrum short, bilobed. Maxillary palpi with penultimate segment longer than second, apical segment aciculate, much shorter than penultimate and at base much narrower than width of apex of penultimate segment. Labial palpi with first two segments sub-equal in length, last segment shorter and narrower than penultimate segment. Gular sutures fused. Pronotum densely punctate apart a median band. Upper epipleural line gradually disappearing anteriorly and therefore detectable only on posterior half of pronotum. Antesternal plate divided. Anterior tarsi dilated. Meso- and metatibia with apical and two subapical ctenidia. Sternite of the male genital segment modified. Aedeagus with parameres; inner sac covered with scales and spines. Female genital segment (Fig. 142).

DISTRIBUTION. The genus is mostly represented in the western portion of the Palaearctic Region; one species only occurs in North America (Smetana, 1982). In Africa this genus occurs especially in the central regions (Fig. 144).

BIONOMICS. The species live in kinds of debris, leaf litter, near water.

REMARKS. The species are very similar to one another in colouration (brown, more or less reddish or yellowish) and punctation (very dense and often confluent on the head). For this reason the following key relies on the size and shape of the body, and the aedeagus.

KEY TO THE SPECIES

1. Body larger, 7–8 mm long.....2
-. Body smaller, 4–6.5 mm long.....9

2. Body 8 mm long.....3
-. Body 7–7.5 mm long.....4

3. Body darker, reddish brown to blackish; head narrower; eyes smaller; pronotum less dilated forward, with deeper and denser punctation. Male unknown. Rwanda.....1. *S. ruandensis* n. sp.
-. Body paler, yellowish brown; head wider; eyes larger; pronotum dilated forward, with more superficial and sparser punctation. Aedeagus as in figure 93. Congo.....2. *S. africanus* n. sp.

4. Body 7.5 mm long.....5
-. Body 7 mm long.....7

5. Body normally shape.....6
-. Body very narrow, slender; head very long and narrow (Fig. 94); eyes small; pronotum with very oblique anterior margins, sparse punctation and broad median band; elytra narrow and long, with parallel sides and superficial punctation. Aedeagus ovoid and long (Fig. 97). Central African Rep.....3. *S. bozo* n. sp.

6. Body darker, infuscate reddish brown; head shorter and narrower, with denser punctation; pronotum shorter and narrower, with denser punctation; elytra longer, with finer and denser punctation. Aedeagus smaller and narrower (Fig. 100). Uganda.....4. *S. ugandae* n. sp.
-. Body paler, reddish yellow; head longer and broader, with sparser punctation; pronotum longer and broader, with sparser punctation; elytra shorter, with widely-spaced and sparse punctation. Aedeagus larger, wide, ovoidal (Fig. 103). Rep. Congo.....5. *S. sibiti* n. sp.

7. Body normally shaped.....8
-. Body slender and narrow, with very long and subrectangular head (Fig. 104); pronotum with very oblique anterior margins, largely rounded anterior angles, sinuate sides and broad impunctate median band. Aedeagus with characteristic parameres (Fig. 107). Rep. Congo.....
.....6. *S. mirabilis* n. sp.

8. Body darker, infuscate brown; head larger, broad, with denser punctation; pronotum longer and more dilated forward; elytra shorter and wider. Aedeagus very small (Fig. 110). Rep. Congo.....7. *S. punctatissimus* n. sp.
-. Body paler, yellowish orange; head smaller, narrower, with sparser punctation; pronotum shorter and less dilated forward; elytra particularly narrow, sub-rectangular. Aedeagus very large (Fig. 113). Senegal....8. *S. senegalensis* n. sp.

9. Body larger, 6.5 mm long; reddish brown, with brownish black head; head large, narrow forward; pronotum dilated forward, with very oblique anterior margins, and broadly rounded anterior angles, with sparse punctation and wide median band. Aedeagus of characteristic shape and large parameres (Fig. 116). Congo.....9. *S. ikelanus* n. sp.
-. Body smaller.....10

10. Body about 6 mm long.....11
-. Body 4–5.5 mm long.....13

11. Head larger and broader, with confluent punctation in wider meshes; pronotum with fine and sparseer punctation; elytra short and broad, with very fine punctation. Aedeagus with inner sac furnished with large spines (Fig. 119). Congo.....10. *S. palustris* n. sp.
-. Head smaller and narrower.....12

12. Body pale reddish brown with darker elytra and median abdominal segments. Aedeagus ovoid, dilated, with short and robust parameres (Fig. 122). Kenya.....11. *A. fuscipennis*
-. Body pale reddish brown with darker head. Aedeagus narrow, with more robust and longer parameres (Fig. 125). Tanzania.....12. *S. morogorensis* n. sp.
-. Body brown. Aedeagus very small (Fig. 128). Gabon.....13. *S. striolatus*

13. Body about 5–5.5 mm long.....14
-. Body about 4 mm long, very small, entirely yellowish orange; head sub-rectangular (Fig. 129), with protruberent eyes and very evident punctation. Aedeagus large, with inner sac furnished with two long series of spines (Fig. 132). Tanzania.....14. *S. subnitidiceps*

14. Body 5.2 mm long, brown, with lighter abdomen; pronotum with evidently sinuate sides; elytra large. Aedeagus of characteristic shape, with curved parameres (Fig. 135). Congo.....15. *S. congoensis*
-. Body 5–5.6 mm long, entirely yellowish.....15

15. Body smaller, about 5 mm long; head quadrangular, proportionally large, broader than pronotum; eyes flat; pronotum small; elytra subrectangular, long and narrow. Aedeagus small, narrow, with very large parameres (Fig. 138). Cameroon.....16. *S. minutus* n. sp.
-. Body larger, 5.5 mm long; head long and narrow; eyes a little protruberent; pronotum less dilated forward, about as wide as head; elytra longer. Aedeagus large, narrow and long; inner sac with two short series of spines (Figs. 141, 143). Species variable in dimension and colouration. Uganda, Kenya, Congo, Tanzania, Botswana, Namibia, South Africa.....17. *S. usugarae*

1. ***Stenistoderus ruandensis*** n. sp.

EXAMINED MATERIAL. Holotype female: Rwanda, Lac Thema, R. Jocqé, 1985 (MRAC).

DESCRIPTION OF HOLOTYPE. Female. Length of body: 8 mm; from anterior margin of head to posterior margin of elytra: 4 mm. Fully winged. Head black, pronotum reddish dark brown, elytra, abdomen, antennae and legs brown; last two abdominal segments yellowish. Head sub-rectangular, with sub-rectilinear and sub-parallel sides, and narrowly rounded posteror angles. Eyes small, almost flat. Surface of head with very dense and fine punctation, on the lateral portion arranged in a few striae. The median band very narrow, almost invisible. Pronotum longer and anteriorly narrower than head, dilated forward, with broadly rounded anterior angles and sinuate sides. Surface with dense punctation, more widely spaced than that of head. Median band more visible. Elytra slightly shorter and clearly broader than pronotum, with marked humeral angles. Surface with very fine and dense punctation, arranged in numerous series. Abdomen with more or less polygonal, very fine and very dense micro-reticulation, and fine, very dense punctation.

ETYMOLOGY. The specific epithet refers to Rwanda.

DISTRIBUTION. This species is at present only known from the type locality in Rwanda (Fig. 144).

REMARKS. Male unknown. In the external characters this species resembles *S. ikelanus* n. sp. from Congo, but is much larger

2. ***Stenistoderus africanus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Tshuapa (Distr.), Terr. Ikela, vill. Besoke, N. Leleup, IX.1959 (MRAC); paratype: same data, 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 8 mm; from anterior margin of head to posterior margin of elytra: 4 mm. Fully winged. Body infuscate reddish brown, with darker head. Similar to *S. punctatissimus* n. sp. but much larger. Head with denser and regular punctation. Pronotum more dilated anteriorly, more oblique anterior margins, less marked anterior angles. Elytra longer than that of *S. punctatissimus* n. sp., a little dilated posteriad, with more protruding humeral angles and sparse punctation. Tergite and sternite of the male genital segment as in figures 90, 91. Aedeagus 1 mm long (Fig. 92), ovoid, very narrow, with short and small parameres; inner sac long and narrow, covered with fine scales.

VARIABILITY. The paratype male has no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Africa.

DISTRIBUTION. This species is actually known only for the type locality, in Congo (Fig. 144).

REMARKS. Female unknown.

3. ***Stenistoderus bozo*** n. sp.

EXAMINED MATERIAL. Holotype male: Central Africa Republic, Bozo, N. Degallier, 8.XI.1980 (MNB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 7.5 mm; from anterior margin of head to posterior margin of elytra: 4 mm. Fully winged. Similar to *S. mirabilis* n. sp. in the elongated body (Fig. 94), but larger, with lighter colouration, yellowish brown with darker head; head shorter and broader, with more rounded posterior angles. Surface with punctation forming more evident striae. Pronotum longer and wider than *S. mirabilis* n. sp., more dilated, with coarser punctation. Elytra sub-rectangular, longer than in *S. mirabilis* n. sp., with rounded humeral angles. Tergite and sternite of the male genital segment as in figures 95, 96. Aedeagus 1.66 mm long (Fig. 97), ovoid narrow, with short parameres; inner sac long and narrow, covered with scales.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. This species is at present only known from the type locality.

REMARKS. Female unknown.

4. ***Stenistoderus ugandae*** n. sp.

EXAMINED MATERIAL. Holotype male: Uganda C., Mubende env., M. Snizek, 19–22.XI.2001 (cJ); paratypes: same data, 4 exx. (cJ), 5 exx. (cB).

DESCRIPTION. Length of body: 7.5 mm; from anterior margin of head to posterior margin of elytra: 4.5 mm. Fully winged. Similar to *S. usagarae* but much darker, brown with head and median visible abdominal segments almost black. Head shorter, not dilated posteriad, with more narrowly rounded posterior angles. Pronotum proportionally shorter and anteriorly narrower, with less prominent anterior angles. Elytra shorter, with denser punctation. Abdomen with sparser pubescence. Tergite and sternite of the male genital segment as in figures 98, 99. Aedeagus much shorter than that of *S. usagarae* (Fig. 100), 1 mm long, much narrower; parameres more squat; inner sac narrow, covered with more or less small scales and without spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Uganda.

DISTRIBUTION. Uganda (Fig. 144).

5. ***Stenistoderus sibiti*** n. sp.

EXAMINED MATERIAL. Holotype male: Rep. Congo, Brazzaville, Sibiti IRHO, Endrödy-Younga, 28.XI.1963 (MTM); paratypes: same data, Mission A. Descarpentries and A. Villiers, 1963–1964, leg. ?, XI.1963, 2 males (MNHNP), 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 7.6 mm; from anterior margin of head to posterior margin of elytra: 4 mm. Fully winged. Reddish brown. Similar to *S. senegalensis* n. sp., but larger, more robust; head longer and broader than that in *S. senegalensis* n. sp., eyes smaller. Surface

of head with punctation forming striae. Pronotum larger, long and wide, more dilated anteriorly, with coarser punctation. Elytra longer and wider than that in *S. senegalensis* n. sp., sub-rectangular, with more marked humeral angles and larger and denser punctation. Tergite and sternite of the male genital segment as in figures 101, 102. Aedeagus very large (Fig. 103), 1.66 mm long, ovoid, with short parameres; inner sac large, covered with scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. This species is at present only known from the type locality, in Rep. Congo.

6. ***Stenistoderus mirabilis*** n. sp.

EXAMINED MATERIAL. Holotype male: Rep. Congo, Brazzaville, riverside of Congo, 20 km W Brazzaville, Endrödy-Younga, 30.XII.1963 (MTM); paratype: same data, 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 7 mm; from anterior margin of head to posterior margin of elytra: 3.6 mm. Fully winged. Characterized by very long, narrow, sub-rectangular head (Fig. 104), with sub-rectilinear and sub-parallel sides, very narrowly rounded posterior angles. Eyes very small and not protruberent. Surface with very dense, elongated punctation, forming evident striae; interstices with more or less polygonal micro-reticulation. Pronotum long, a little shorter than head, anteriorly dilated where it is as wide as head, with very oblique anterior margins, broadly rounded anterior angles and sinuate sides. Surface with deep, dense punctation, apart a median band. Elytra shorter and broader than pronotum, very long, with scarcely marked humeral angles and fine and very dense punctation arranged in numerous, regular series. Tergite and sternite of the male genital segment as in figures 105, 106. Aedeagus 1.1 mm long (Fig. 107), ovoid, visibly narrowed in the median and distal portion, with characteristically large parameres; inner sac broad and short, covered with fine scales.

VARIABILITY. The paratype female has no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is from the Latin *mirabilis -e* (admirable).

DISTRIBUTION. This species is actually known only for the type locality, in Rep. Congo (Fig. 144).

7. ***Stenistoderus punctatissimus*** n. sp.

EXAMINED MATERIAL. Holotype male: Rep. Congo, Brazzaville, Mt Fouari res. Near Gabon, Endrödy-Younga, 12.XII.1963 (MTM).

DESCRIPTION OF HOLOTYPE. MALE. Length of body: 7 mm; from anterior margin of head to posterior margin of elytra: 3.6 mm. Fully winged. Similar to *S. senegalensis* n. sp., but darker, larger, with larger and longer head than that in *S. senegalensis* n. sp., with deep and very dense punctation, forming irregular striae. Pronotum a little longer than head, anteriorly dilated, where it is as wide as head, with broadly rounded anterior angles and coarser punctation. Elytra sub-rectangular, longer and narrower than that in *S. senegalensis* n. sp., with more marked humeral angles and coarser punctation. Tergite and sternite of the male genital segment as in figures 108, 109. Aedeagus very small (Fig. 110), 0.44 mm long, ovoid narrow, with short and narrow parameres; inner sac not visible.

ETYMOLOGY. The specific epithet refers to the punctation of the head.

DISTRIBUTION. This species is only known from the type locality, in Rep. Congo (Fig. 144).

REMARKS. Female unknown.

8. ***Stenistoderus senegalensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Senegal, 3 km SSW Toubakouta, 10 km S Ziguinchor, Lund Univ. Syst. Dept. Sweden Gambia/Senegal, Febbr.–March, Cederholm, Danielsson, Larsson, Mireström, Norling and Samuelsson 4.III.1977 (ZML); paratypes: same data, 27 exx. (ZML), 14 exx. (cB); Mauritanie, Rosso, U. Amiet, 8.II.1964, 2 males (MNHNP), 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 7 mm; from anterior margin of head to posterior margin of elytra: 3.5 mm. Fully winged. Similar to *S. usagarae*. Yellowish brown with head slightly darker. Head narrower and not dilated posteriad, with coarser and sparser punctation; pronotum smaller and shorter, with less oblique anterior margins. Surface with more superficial, finer and sparser punctation, with median band more evident; elytra proportionally narrower, with finer punc-

tation. Tergite and sternite of the male genital segment as in figures 111, 112. Aedeagus (Figs. 113, 1744) similar to those of *S. fuscipennis* but larger, 1.48 mm long and narrower; parameres larger and wider; inner sac furnished with more spines and scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Senegal.

DISTRIBUTION. Senegal (Fig. 144).

REMARKS. One of the specimens from Mauritania was labelled "*Type,* Leptolinus amieti *n. sp., L. Levasseur det. 1968, in litt.*"

9. ***Stenistoderus ikelanus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Tshuapa (Distr.), Terr. Ikela, vill. Besoke, N. Leleup, IX.1959 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.5 mm; from anterior margin of head to posterior margin of elytra: 4 mm. Fully winged. Head blackish brown; pronotum, elytra and abdomen reddish brown, infuscate; antennae and legs dark brown. Similar to *S. ugandae* n. sp., but shorter and narrower, with darker colouration. Head more narrowed anteriorly, with more rounded sides. Surface with coarser and wrinkled punctation. Pronotum anteriorly wider, with more protruberent and largely rounded anterior angles. Surface with coarser and less deep punctation. Elytra shorter, with very less marked humeral angles and sparser punctation. Tergite and sternite of the male genital segment as in figures 114, 115. Aedeagus 0.95 mm long (Fig. 116), ovoid, with very massive, large and long parameres; inner sac narrow, covered with scales.

ETYMOLOGY. The specific epithet refers to the type locality.

DISTRIBUTION. This species is so far only known from the type locality (Fig. 144).

REMARKS. Female unknown.

10. ***Stenistoderus palustris*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Mwenga, 1250 m, N. Leleup, 21.IV.1958 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Fully winged. Similar to *S. senegalensis* n. sp., but shorter, a little broader; eyes smaller; surface of head with deep and regular punctation not arranged in striae. Pronotum a little narrower and less dilated anteriorly. Elytra shorter, with more evident punctation. Tergite and sternite of the male genital segment as in figures 117, 118. Aedeagus (Fig. 119) 1.33 mm long, ovoid, with short and narrow parameres reaching the distal portion of the aedeagus; inner sac with some large spines and minute scales.

ETYMOLOGY. The specific epithet is from the Latin *palustris -e* (marsh), in reference to the habitat in which the insect was collected.

DISTRIBUTION. This species is only known from the type locality (Fig. 144).

BIONOMICS. The specimen was collected in "*marais boisés avec Pandanus*".

REMARKS. Female unknown.

11. ***Stenistoderus fuscipennis*** (Cameron, 1950) comb. n.

Leptolinus fuscipennis - Cameron, 1950: 398; Herman, 2001a: 3754

TYPE MATERIAL. The Natural History Museum of London preserves 1 specimen labelled "*Type*" (on round label with red edge), "*H. Y. A. Turner / Naivasha, 7 37*", "Leptolinus / fuscipennis / *Type Cam.*". It is a male; I have affixed the determination label "Stenistoderus fuscipennis *(Cam.), Bordoni det. 2007*".

DESCRIPTION. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 3.8 mm. Fully winged. Light reddish brown with darker elytra and median visible abdominal segments. Head elongate and narrow, slightly dilated posteriad, with sub-rectilinear sides. Eyes small and flat. Similar to *S. usagarae* but differing in the reddish colouration, and in the fine and sparse punctation of the pronotum on the sides, leaving a very broad median band. Tergite and sternite of the male genital segment as in figures 120, 121. Aedeagus (Fig. 122), of the same size as that of *S. ugandae* n. sp., 1.1 mm long, but very dilated, sub-ovoid; parameres short and broad; inner sac ribbon-like, covered with evident scales, wider in the distal portion, followed by a group of short, juxtaposed spines. The ventral portion of the basal bulb is

crossed by a sclerified strip ending on the proximal portion of the dorsal surface of aedeagus. This structure is also partially present in *S. ugandae* n. sp. e *S. morogorensis* n. sp.

DISTRIBUTION. This species is only known from the type locality in Kenya.

12. ***Stenistoderus morogorensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Tanzania CE, S SE edge Makata Plains, Morogoro, M. Snizek, 9.III.2002 (cJ).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Fully winged. Similar to *S. usagarae* but smaller and narrower, of darker colouration, reddish brown with head, elytra and median visible abdominal segments brown dark. Head narrower and not dilated posteriad, with sub-rectilinear and sub-parallel sides. Surface with coarser and sparser punctation. Eyes smaller. Pronotum shorter and narrower, with less oblique anterior margins and less dense punctation. Elytra proportionally shorter. Tergite and sternite of the male genital segment as in figures 123, 124. Aedeagus smaller than that (Fig. 125) of *S. usagarae* and larger than that of *S. ugandae* n. sp., 1.33 mm long, very narrow; parameres robust; inner sac ribbon-like, folded on itself, without spines, covered with scales, very dense in the distal portion.

ETYMOLOGY. The specific epithet refers to the type locality.

DISTRIBUTION. This species is at present only known from the type locality in Tanzania (Fig. 144).

REMARKS. Female unknown.

13. ***Stenistoderus striolatus*** (Coiffait, 1968)

Leptolinus striolatus - Coiffait, 1968: 145
Stenistoderus striolatus - Herman, 2001: 3755

TYPE MATERIAL. The Muséum national d'Histoire naturelle in Paris preserves 2 specimens, the first labelled "*Belinga 19.63.163 / H. Coiffait*". "*Holotype*" (on red label), "Leptolinus / striolatus *Coiff. / H. Coiffait 1967*", and the second "*Belinga / 25.8.63 / H. Coiffait*", "*Allotype*" (on red label). The first is a male and the second a female; they are now labelled "Stenistoderus striolatus *(Coiff.), Bordoni det. 2011*".

DESCRIPTION. Length of body 5–6 mm; from anterior margin of head to posterior margin of elytra: 2.8–3 mm. Fully winged. Body brown. Head sub-rectangular, with sub-rectilinear and sub-parallel sides and narrowly rounded posterior angles. Eyes small and not protruberent. Surface of head with longitudinal micro-striation and ovoid, sparse punctures; a groove from the origin of the ocular grooves up to more the half of the length of head. Pronotum longer than and as wide as head, with very oblique anterior margins. Surface similar to that of head, with 4 anterior punctures and 2 others behind the anterior punctures, similar to a dorsal series. Elytra as long as pronotum, dilated posteriad where it is a little wider than pronotum, with obsolete humeral angles. Surface shiny, with three series of punctures, one near the suture, one median and one lateral. Abdomen with transverse micro-striation and fine and very sparse punctation on the sides. Tergite and sternite of the male genital segment as in figures 126, 127. Aedeagus very small (Fig. 128), 0.44 mm long, ovoid, with very short parameres; inner sac with a small distal spine.

DISTRIBUTION. The species is only known from the type locality in Gabon (Fig. 144).

REMARKS. The genital segment of the holotype is partially demaged.

14. ***Stenistoderus subnitidiceps*** (Bernhauer, 1937)

Leptolinus subnitidiceps - Bernhauer, 1937: 608
Stenistoderus subnitidiceps - Herman, 2001a: 3754

TYPE MATERIAL. The Field Museum of Natural History of Chicago preserves 1 specimen labelled "*N. O. Upogoro / XI.12*", "*D. Ostafrika/ Methner*", "subnitidiceps */ Brh. Typ. un.*", "subnitidiceps / *Brnh. Typus / unic.* Leptolinus" (handwritten by Bernhauer). It is a male bearing the label "Stenistoderus subnitidiceps *(Bh.), Bordoni det. 2006*".

DESCRIPTION. Length of body: 4 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Fully winged. Yellowish brown. Similar to *S. usagarae* but much smaller, with lighter colouration, narrower head, anteriorly narrower, convex sides below the eyes (Fig. 129). Surface of head similar to that of *S. usagarae* but with less dense punctation. Pronotum proportionally similar in shape, with same punctation but with less obsolescent anterior angles and sinuate sides. Elytra with

less marked humeral angles and sparser punctation. Tergite and sternite of the male genital segment as in figures 130, 131. Aedeagus medium-sized (Figs. 132, 1745), 1.1 mm long, ovoidal; parameres sinuous; inner sac very characteristic, long and narrow, covered with large spines, more or less arranged in two close series.

DISTRIBUTION. This species is so far known only from the type locality in Tanzania.

15. ***Stenistoderus congoensis*** (Bernhauer, 1929)

Leptolinus congoensis - Bernhauer, 1929: 118; Scheerpeltz, 1933: 1299
Stenistoderus congoensis - Herman, 2001a: 3755

TYPE MATERIAL. The Musée royal de l'Afrique centrale of Tervuren preserves 1 specimen labelled "*TYPE*" (printed on orange label with black edge), "*Musée du Congo / Luebo / 8.IX.1921 / Dr. H. Schouteden*", "Leptolinus/ congoensis */ Brnh. typ.*" (handwritten by Bernhauer). It is a male that I choose as lectotype of the species; I have affixed the label "*Lectotypus* Leptolinus congoensis *Bh., Bordoni des. 2006*" and the identification "Stenistoderus congoensis *Bh., Bordoni des. 2006*".

DESCRIPTION. Length of body: 5.2 mm; from anterior margin of head to posterior margin of elytra: 2.7 mm. Fully winged. Browm with paler abdomen. Head sub-rectangular, with narrowly rounded posterior angles, almost right angled. Eyes small and flat. Surface of head with rugose, deep punctation, anteriorly with traces of polygonal micro-reticulation. Pronotum slender, longer than head, anteriorly dilated where it is a little narrower than head, with very sinuate sides, oblique anterior margins and broadly rounded anterior angles. Surface with finer, more superficial, deeper punctation than that of head, apart from a median band. Elytra large, longer and wider than pronotum, with less marked humeral angles. Surface with fine punctation, arranged in numerous series. Abdomen with sparse punctation. Tergite and sternite of the male genital segment as in figures 133, 134, sternite very narrow and filiform in the proximal portion. Aedeagus of characteristic shape (Fig. 135), small, 0.66 mm long, distally narrow, with posterior margin of the distal portion furnished with three lobes; parameres narrow and arched; inner sac very narrow, tube-like, with sparse, small scales.

DISTRIBUTION. Congo (Fig. 144).

16. ***Stenistoderus minutus*** n. sp.

EXAMINED MATERIAL. Holotype male: Camerun, Garua, R. Riggenbach, 9-10.IV.1909 (MNB); paratype: same data, 1 male (without elytra) (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body about 5 mm; from anterior margin of head to posterior margin of elytra: 2.7 mm. Winged. Body brown light with yellowish elytra. Head very large, not particularly elongated, with scarcely rounded sides and strictly rounded posterior angles. Surface of head, apart a very narrow median strip, with deep punctation. Pronotum small, shorter and very narrower than head, with very oblique anterior margins and slightly rounded sides. Surface with fine and deep punctation, apart a wide median strip. Elytra long, narrow, sub-rectangular, with scarcely marked humeral angles. Surface with very fine and superficial punctation, arranged in some series. Tergite and sternite of the male genital segment as in figures 136, 137. Aedeagus small (Fig. 138), 0.66 mm long, very narrow, with characteristic, long parameres; inner sac very narrow, covered with fine scales.

VARIABILITY. The paratype male has no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the Latin *minutus -s -um* (tiny), in relation to the small body.

DISTRIBUTION. This species is actually known only for the type locality, in Cameroon (Fig. 144).

17. ***Stenistoderus usugarae*** (Bernhauer, 1908)

Leptolinus usugarae - Bernhauer, 1909: 107; Bernhauer & Schubert, 1914: 292
Stenistoderus usugarae - Herman, 2001a: 3756

TYPE MATERIAL. The Field Museum of Natural History of Chicago preserves 1 specimen labelled "*D. Ostafrika/ Methner / Usugara*", "usugarae *Brh. / Typ Kilossa XII.05*", "usugarae */ Bernh. Typus un.*" (handwritten by Bernhauer). It is a female bearing the determination label "*S*tenistoderus usugarae *(Bh.), Bordoni det. 2006*".

EXAMINED MATERIAL. Uganda, Busso Busoga, E. Bayron 1909, 1 ex. (MCSNG).

Kenya, Taveta, 750 m, Alluaud and Jeannel, III.1912, 1 ex. (MNHNP).

Congo, Kivu, Kavimvira, Uvira, G. Marlier, II–III.1955, 1 male (MRAC), 1 male (cB); Kivu, Fizi, Lulimba, N. Leleup, 15.X.1954, 1 male (MRAC), 1 male (cB): Lulua, Sandos, G. F. Overiet, IX.1930, 1 male (MRAC).

Tanzania, Tanga, Methner III.1916, 1 ex. (MNB); Baressalan (?), V.1911, 1 ex. (MNB); Mahombe, Dr. Konigsbauer, IX.1967, 1 ex. (MNB), 1 ex. (cB).

Mocanbique, Boroma, coll. L. Levasseur, 1 ex. (MNHNP).

Namibia, Kavango, Popa Falls, 18.07S, 21.35E, M. Uhlig 26.II–3.III.1992, 3 exx. (MNB), 1 ex. (cB); Kavango, Mahango Game Res., 18.13S, 21.45E, M. Uhlig, 24.VI.1993, 2 exx. (MNB), 1 ex. (cB).

Botswana, Shakawe, Okavango banks, 18.22S, 21.49E, M. Uhlig, 3.III.1994, 1 x. (MNB); Kasane, Chobe Safari Lodge, Chobe banks, 17.48S, 25.08E, M. Uhlig, 12–13.III.1993, 1 ex. (cB); Kasane, M. Snizek 1.V.1994, 1 male (cJ); Maun, Safari Lodge Island, M. Snizek, 2–15.I.1994, 1 female (cB).

South Africa, Natal, Kwazulu, St. Lucia, 28.23S, 32.24E., P. Hlavac, 7–8.II.2004, 18 exx. (cJ), 11 exx. (cB); Transvaal, 15 km NE Klaserie, Guernsey Farm, S. Peck, 18–30.XII.1989, 1 ex. (FMNH).

DESCRIPTION. Length of body: 4.9–6.5 mm; from anterior margin of head to posterior margin of elytra: 2.8–3 mm. Fully winged. Yellowish brown but sometimes with anterior part of elytra and rarely lateral margins of pronotum infuscate. Head sub-rectangular, slightly narrowed anteriorly, sub-rectilinear sided, with broadly rounded posterior angles. Eyes proportionatly large and protruberent. Surface of head with fine, rugose and extremely dense punctation. Pronotum longer and wider than head, with very oblique anterior margins and vanished anterior angles, and almost not sinuate sides. Surface similar to that of head but larger and sparser, apart from a median band. Elytra long, with fine and very dense punctation, arranged in numerous close series. Abdomen shiny, with very fine and dense punctation. Tergite and sternite of the male genital segment as in figures 139, 140. Aedeagus larger than that of *S. subnitidiceps* (Figs. 141, 143, 1743), 1.1–1.4 mm long, dilated in the middle; parameres sinuous; inner sac narrow in the median part, folded on itself, covered with very fine and dense small scales, with two clearly visible series of minute thorny scales on the margins and with a distal group of large spines. Female genital segment (Fig. 142).

DISTRIBUTION. Uganda, Kenya, Congo, Tanzania, Botswana, Namibia, South Africa (Fig. 145).

REMARKS. The specimen from Congo (demaged) is smaller than the other specimens, but the aedeagus is identical. This is the most common African *Stenistoderus*, variable in size and colouration (more or less infuscate) and shape of inner sac of aedeagus.

4. Genus ***Agoreina*** n. gen. (Figs. 146–155, 181)

TYPE SPECIES. *Pachycorynus sulciceps* Bernhauer, 1937.

DESCRIPTION. Body similar in the general features to *Neoxantholinus* (Fig. 146). It differs from the known genera of Xantholinini in the combined presence of the following characters: body slightly flat; head with lateral groove from eyes to the posterior angles, and the lateral surface with another groove; superficial frontal grooves; short ocular grooves; mandibles with lateral groove; eyes very small and flat; maxillary and labial palpi as in figures 147, 148; 3rd antennomere longer than 2nd; labrum with a very feeble median emargination (Fig. 149); gular sutures fused; antesternal plate with suture; coxae large; upper epipleural line of pronotum present in the median-posterior portion; pronotum with dorsal and lateral series of punctures; anterior tarsi short; metatibiae with a single apical ctenidium; male genital segment oblong; aedeagus of characteristic shape (Figs. 152, 153); female genital segment as in figures 154, 155.

ETYMOLOGY. Fancy name. Gender feminine.

DISTRIBUTION. This genus is known by a single species from Tanzania and Kenya (Fig. 181).

BIONOMICS. The only known species of this genus is probably a sub-corticicolous entity.

1. ***Agoreina sulciceps*** (Bernhauer, 1937) comb. n. (Figs. 1670, 1746)

Pachycorynus sulciceps - Bernhauer, 1937: 609; Herman, 2001a: 3735

TYPE MATERIAL. The Field Museum of Natural History of Chicago preserves 1 specimen labelled "*W. Usumbara / II.12*", "*D. O. Afrika/ Methner lg.*", "sulciceps */ Brh. Typ. un.*", "sulciceps */ Brnh. Typus / unic. Leptacinus*" (handwritten by Bernhauer). It is a female.

EXAMINED MATERIAL. Kenya, Central Prov., Mts Kenya, face W Naro Moru track, 2400 m, G. Coulon, 1–20.IX.1977, 1 male, 1 female (MRAC), 1 female (cB).

DESCRIPTION. Length of body: 7.5 mm; from anterior margin of head to posterior margin of elytra: 3.5 mm. Body slightly flat, reddish brown with lighter elytra, fully winged. Head broad, dilated posteriad and narrow anteriorly, with largely rounded posterior angles. Eyes very small and flat. Surface of head shiny, with superficial traces of transverse micro-striature; punctures large, partially elongated, very sparse. A lateral groove between the eyes and the posterior angles, with a few punctures. Lateral surface of head with a groove. Neck narrow. Pronotum shorter and narrower than head, dilated anteriorly, with broadly rounded anterior angles; surface with transversal micro-striation, dorsal series of 6 punctures and oblique lateral series of 3 punctures. Elytra longer and wider than pronotum, dilated posteriad, with rounded humeral angles. Surface with very fine and sparse punctures, arranged in 3 series, one near the suture, one median and one lateral. Scutellum very large. Abdomen with transverse micro-striation and fine, sparse punctation on the sides. Tergite and sternite of the male genital segment as in figures 150, 151. Aedeagus about 0.88 mm long (Figs. 152, 153), of characteristic shape, with long, arched parameres; inner sac almost filiform, apparently without scales.

DISTRIBUTION. This species is only known from Tanzania and Kenya (Fig. 181).

5. Genus ***Amharina*** n. gen. (Figs. 156–182)

TYPE SPECIES. *Leptacinus trapeziceps* Scheerpeltz, 1974.

DESCRIPTION. Body convex (Fig. 156), shiny; head very convex, squat, anteriorly dilated; eyes large; pubescence light, long and erected; maxillary palpi with elongated articles, 2° and 3° articles sub-equal, the last longer than 3°, with sub-acute apex (Fig. 157); labial palpi of similar shape, with 2° and 3° articles sub-equal (Fig. 158); labrum as in Fig. 159; mandibles for a long tract narrow, with lateral groove, with short prostheca (Fig. 160); epistome convex and protruding; frontal and ocular grooves present; gular sutures spaced apart throughout their lenght; antesternal plate short and entire; upper epipleural line present for a short tract, anteriorly and posteriad; pronotum with dorsal and lateral series of punctures (Fig. 156); metasternum long and very convex; anterior tarsi dilated (Fig. 161); median and posterior tarsi with elongated articles, the last longer than two previous together (Fig. 162). Male genital segment with dorsally fused pleurae; tergite little and sternite sub-ovoidal (Figs. 163, 164). Aedeagus (Fig. 165) membranous, cylindrical, with large and symmetrical parameres; inner sac ribbon-like, ending in a series of spines. Female unknown.

ETYMOLOGY. From Amhara, african ethnic group.

DISTRIBUTION. Ethiopia, Guinea, Uganda, Congo, Zambia (Fig. 182).

REMARKS. In this genus the aedeagus is similar to that of *Metocinus*, composed of two or three parts telescoped into one another.

KEY TO THE SPECIES

1. Body larger, 5–5.7 mm long.....2
-. Body smaller, 4–4.8 mm long.....3

2. Head larger, with less rounded sides and larger eyes; pronotum wider; dorsal series of 2 anterior and 4 posterior punctures; elytra more sub-rectangular, not dilated posteriad. Aedeagus (Fig. 156). Guinea, Uganda, Angola.....1. *A. inopinata*
-. Head smaller, with rounded sides and smaller eyes; pronotum narrower; dorsal series of 7–8 punctures; elytra broader, dilated posteriad. Aedeagus (Fig. 169). Congo.....2. *A. oculata* n. sp.

3. Body darker, brownish black, 4–4.5 mm long....4
-. Body paler, reddish brown with darker head, 4.8 mm long; dorsal series of pronotum with 2 anterior and 3 posterior punctures. Aedeagus (Fig. 172). Zambia.....3. *A. hariolus*

4. Head narrower posteriad, with finer and sparser punctation; dorsal series of pronotum with 2 anterior and 2 posterior punctures; elytra and scutellum smaller. Aedeagus (Fig. 176). Ethiopia.....4. *A. trapeziceps*
-. Head broader posteriad, with coarser and denser punctation; dorsal series of pronotum with 2 anterior and 3 posterior punctures; elytra and scutellum larger. Aedeagus as in figure 180. Congo.....5. *A. kafwi* n. sp.

1. ***Amharina inopinata*** (Cameron, 1951) comb. n. (Fig. 1671)

Xantholinus inopinatus - Cameron, 1951a: 400; Herman, 2001a: 3800

TYPE MATERIAL. The Natural History Museum of London preserves 1 specimen labelled "*Type*" (printed on round label with red edge), "*Nairobi Museum / Kampala / 10.XII.20/ A. F. J. Gedye*", "Xantholinus/ inopinatus / *TYPE Cam.*". It is a male to which I have affixed the determination label "Amharina inopinata *(Cam.), Bordoni det. 2006*".

EXAMINED MATERIAL. Guinea, Foufa Djallon (Fouta Djalon), Dalaba, 1200 m, Exped. D. Mus. Frey 1951, Bechyne, 22.VI.1951, 4 males (NMW), 2 males (cB).

Angola, Kalukembe, Miss. Sc. Suisse, 1932–1933, 1 male (cB).

DESCRIPTION. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Fully winged. Head black, pronotum and abdomen dark brown, elytra testaceous to dark brown, with darker scutellum; antennae and legs light brown. Similar to *A. trapeziceps* but larger, more robust; head more dilated anteriorly and with more broadly rounded posterior angles. Surface of head with denser punctation. Eyes very larger and more protruding. Antennae with segments 4–11 more transverse. Pronotum broader and proportionately shorter; dorsal series of 2 anterior and 4, 5 posterior punctures and lateral series of 4, 5 anterior punctures. Elytra larger, longer and wider than that of *A. trapeziceps*. Tergite and sternite of the male genital segment as in figures 163, 164. Aedeagus 1 mm long (Fig. 165), membranous; parameres robust; inner sac everted, tube-shaped, covered with spinules and scales on a margin and ending in two groups of dark, thickened and opposing spines.

DISTRIBUTION. Guinea, Uganda, Angola (Fig. 182).

2. ***Amharina oculata*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Usambi (ara), P. Weise (MNB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.7 mm; from anterior margin of head to posterior margin of elytra: 2.7 mm. Fully winged, shiny. Body brown, with elytra and abdomen light brown. Head sub-quadrangular, convex, anteriorly dilated, with slightly rounded sides and very narrowly rounded posterior angles (Fig. 166). Eyes large and very prominent. Surface of head with coarse, deep and sparse punctation. Pronotum a little longer than head, anteriorly scarcely dilated, where it is as wide as head, with less oblique anterior margins, narrowly rounded anterior angles and strongly sinuate sides; dorsal series of 7, 8 widely spaced punctures and lateral series of 4, 5 punctures. Elytra large, broad, dilated posteriad, much longer and wider than pronotum, with marked humeral angles. Surface with superficial, but visible and dense punctation, arranged in numerous series. Tergite and sternite of the male genital segment as in figures 167, 168. Aedeagus 1.1 mm long **(**Figs. 169, 1747), narrow and long, with a distal structure on which are inserted the large parameres; inner sac ribbon-shaped, long and narrow, coiled on itself several times, covered with scales and with distal spinules.

ETYMOLOGY. The specific epithet refers to the Latin *oculatus -a -um* (with big eyes).

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 182).

REMARKS. Female unknown.

3. ***Amharina hariolus*** (Herman, 2001) comb. n.

Leptacinus sinuatocollis - Scheerpeltz, 1974: 118
Leptacinus hariolus - Herman, 2001: 45 (n. n. for *Leptacinus sinuatocollis* Scheerpeltz, 1974 (n. preocc. by *L. sinuatocollis* Scheerpeltz, 1957: 233); Herman, 2001a: 3675

TYPE MATERIAL. The Zoological Museum of Lund preserves 1 specimen labelled "*N-Rhodesia / Livingstone / 16.V.51, Swedish South Africa / Expedition / 1950-1951 (Brink-Rudebeck)*", "*Holotypus*" (on red label), "Leptacinus / sinuatocollis / *n. sp.*", "Leptacinus / sinuatocollis / *n. sp. / det. Scheerpeltz 1968*", "*Zool. Mus. Lund Sweden / Staphylinidae / Type n. 619*". It is a male, now labelled "Amharina hariolus *Herm., Bordoni det. 2001*".

DESCRIPTION. Length of body: 4.8 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Winged. Body shiny, reddish brown with darker head. Head convex, sub-quadrangular, with a little rounded sides and strictly rounded posterior angles. Eyes very large and protruding. Surface with deep, large punctation, apart a median strip. Pronotum as long and wide as head, narrow, an-

terioly dilated, with very sinuate sides and scarcely oblique anterior margins; dorsal series of 2 anterior and 3 posterior punctures and lateral series of 4 punctures. Elytra very long, sub-rectangular, very longer and wider than pronotum, with marked humeral angles. Surface with dense, superficial punctation, arranged in some series. Tergite and sternite of the male genital segment as in figures 170, 171. Aedeagus 1.1 mm long (Fig. 172), narrow and long, narrow in the distal portion and with acute apex, with large and short parameres; inner sac ribbon-shaped, long and narrow, covered with short spines.

DISTRIBUTION. Zambia (Fig. 182).

REMARKS. In the original description Scheerpeltz (1974) wrote "*1 female*" (sic).

4. ***Amharina trapeziceps*** (Scheerpeltz, 1974) comb. n.

Leptacinus trapeziceps - Scheerpeltz, 1947a: 18; Herman, 2001a: 3687

TYPE MATERIAL. The Museum Zoologicum of Helsinki preserves 1 specimen labelled "*Ethiopia / Mai Chew / 1.6.1963 / Linnavuori*", "*Leptacinus / trapeziceps / n. sp. Scheerp.*" (handwritten by Scheerpeltz), "*Typus /* Leptacinus / trapeziceps */ O. Scheerpeltz*" (on red label), "Leptacinus / trapeziceps */ nov. sp.*", "Leptacinus / trapeziceps */ n. sp. Scheerp./ det. Scheerpeltz 1968*", "*Mus. Zool. H.fors/ Spec. typ. No 2952/* Leptacinus / trapeziceps *Scheerp.*". It is a male with everted inner sac.

The Naturhistorisches Museum of Wien preserves 1 specimen labelled "*Ethiopia / Dessiè-Karakore*", "*1.VI.1963 / Linnavuori*", "Leptacinus / trapeziceps */ n. sp. Scheerp.*" (handwritten by Scheerpeltz), "*Typus /* Leptacinus */* trapeziceps */ O. Scheerpeltz*" (on red label). It is a male.

Both have the identification "Amharina trapeziceps *(Scheerp.), Bordoni det. 2006*".

DESCRIPTION. Length of body about 4 mm; from anterior margin of head to posterior margin of elytra: 2.2 mm. Winged, shiny. Head black, pronotum, elytra and abdomen reddish brown; antennae and legs brown; tarsi yellowish light. Head of characteristic shape (Fig. 173), with very large and protruding eyes. Surface of head with sparse punctation. Pronotum with very sinuate sides and punctation as in figure 173 elytra very long, sub-rectangular, with sub-rectilinear and sub-parallel sides, slightly dilated posteriad, with marked humeral angles. Surface with some spaced series of very fine and sparse punctures. Abdomen with traces of transverse micro-striation and fine and very sparse punctation. Tergite and sternite of the male genital segment as in figures 174, 175; sternite sub-ovoidal, narrow.. Aedeagus membranous (Fig. 176), sub-ovoid, 0.85 mm long; parameres robust and a little arched; inner sac everted, tube-shaped, covered with scales and ending in a group of dark spines.

DISTRIBUTION. Ethiopia (Fig. 182).

REMARKS. The specimen in the Museum of Helsinki have part of elytra and abdomen missing.

5. ***Amharina kafwi*** n. sp.

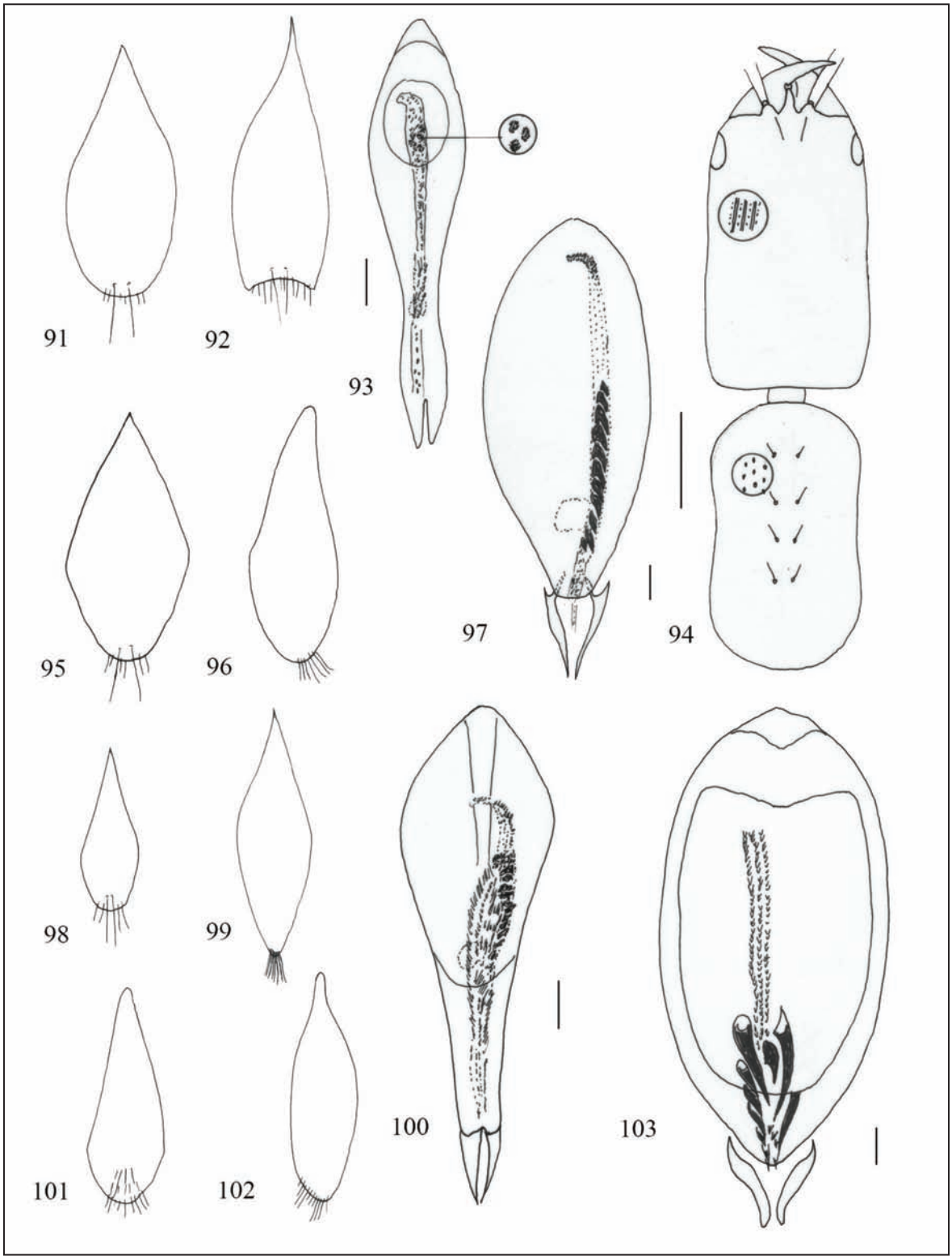
EXAMINED MATERIAL. Holotype male: Congo, R. Kafwi, af. dr. Lufwa, 1780 m, G. de Witte, 15.III.1948 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.5 mm; from anterior margin of head to posterior margin of elytra: 2.4 mm. Fully winged. Body shiny, very dark reddish brown with paler elytra. Characterized by the particular shape of forebody (Fig. 177). Head broad, squat, with wide neck. Pronotum narrower than head, with sinuate sides; elytra very long, sub-rectangular, proportionately narrow, with salient humeral angles. Head with large, very deep, not sparse punctation; dorsal series of 2 anterior and 3 posterior punctures and lateral series of 4 punctures; elytra with fine and sparse punctation, arranged in 5, 6 series. Tergite and sternite of the male genital segment as in figures 178, 179. Aedeagus 0.77 mm long (Fig. 180), narrow and long, with a distal structure on which are inserted the large parameres; inner sac ribbon-shaped, not particularly long, and narrow, coiled on itself several times, covered with scales and with distal spinules.

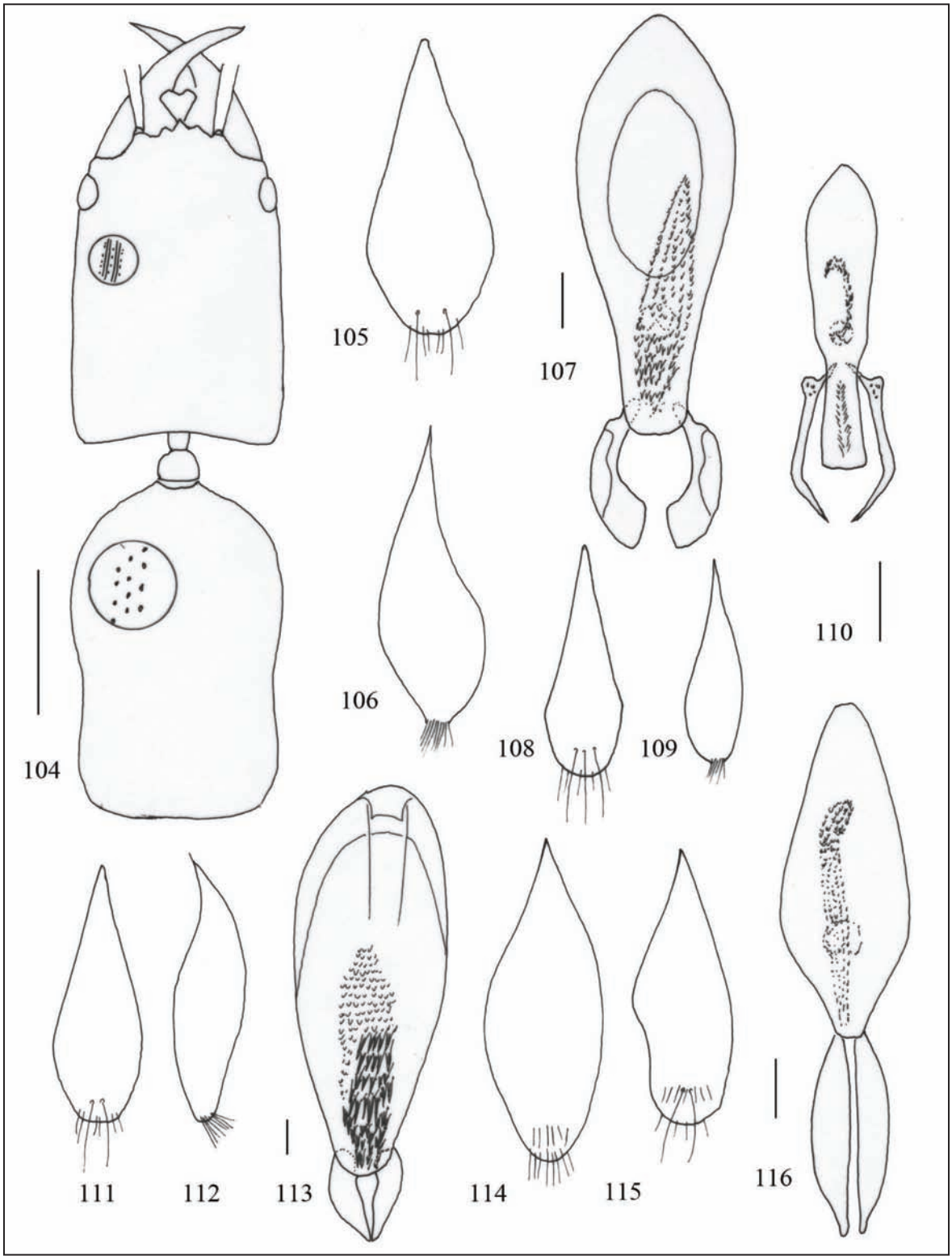
ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is actually known only from the type locality, in Congo (Fig. 182).

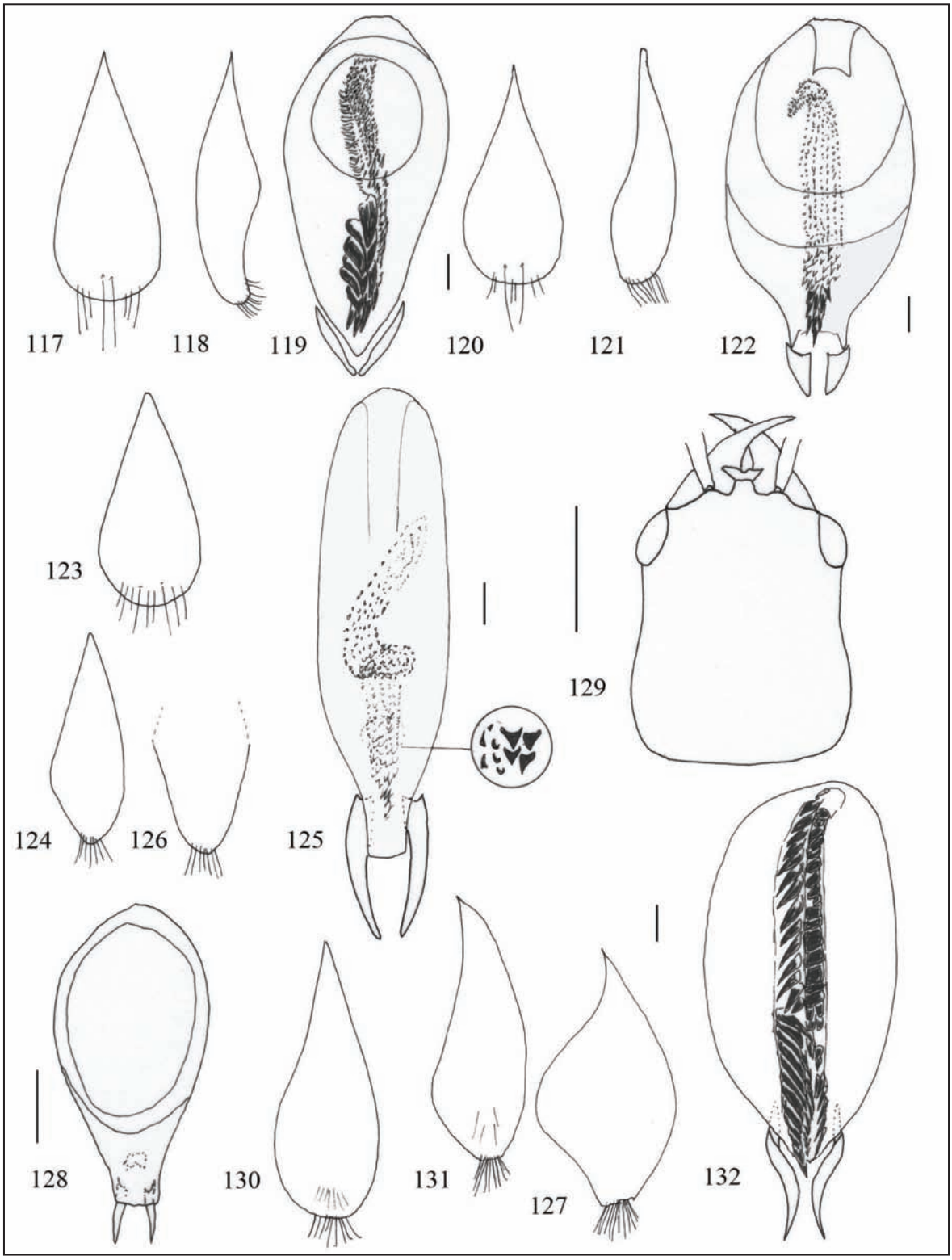
REMARKS. Female unknown. The Kafwi river is a right tributary of Lufwa in the Upemba Nat. Park.



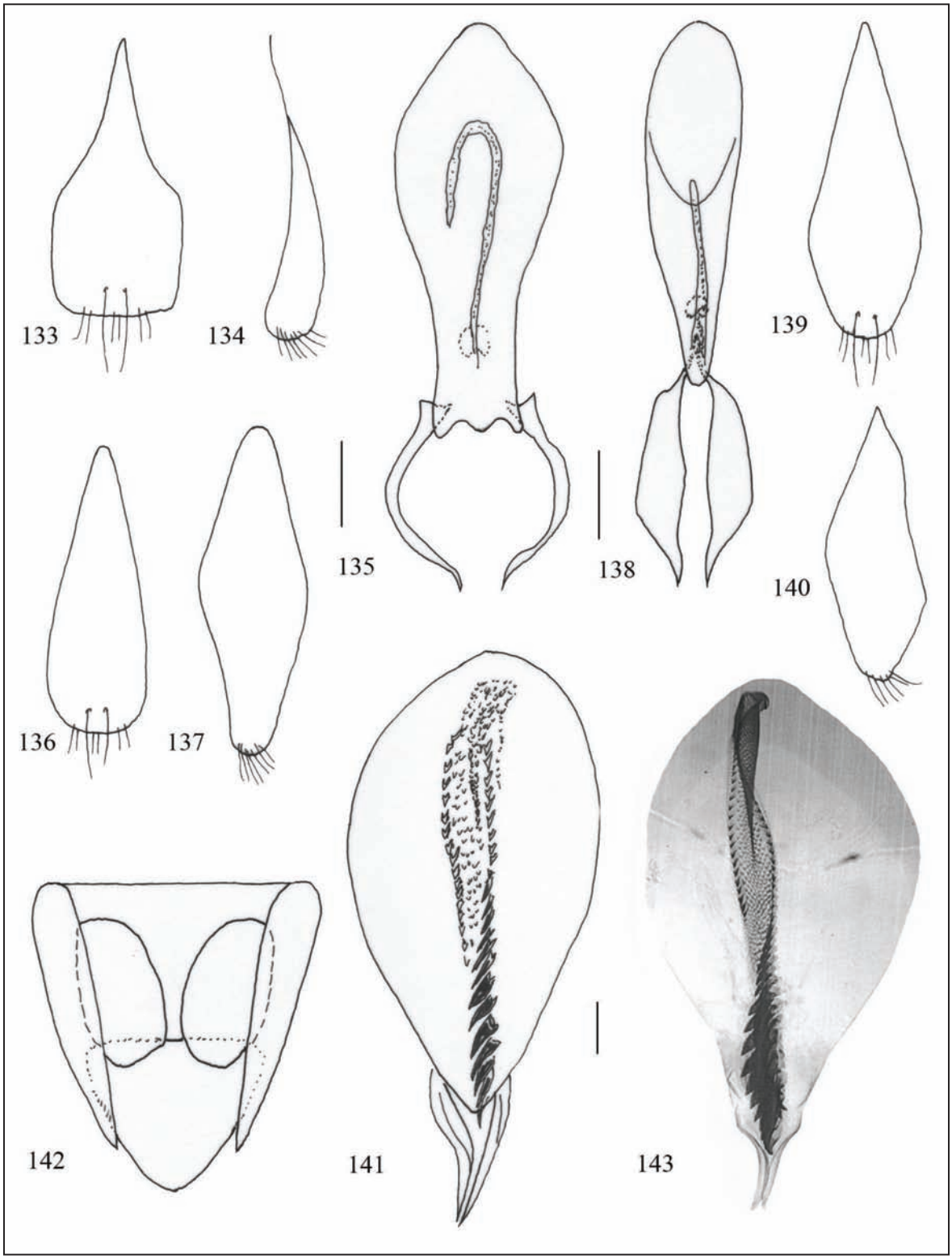
Figures 91–103. Tergite, sternite of the male genital segment and aedeagus of *Stenistoderus africanus* n. sp. (Figs. 91–93). Head and pronotum (bar scale: 0.5 mm), tergite, sternite of the male genital segment and aedeagus of *S. bozo* n. sp. (bar scale: 0.1 mm) (Figs. 94–97). Tergite, sternite of the male genital segment and aedeagus of *S. ugandae* n. sp. (Figs. 98–100). Idem for *S. sibiti* n. sp. (bar scale: 0.1 mm) (Figs. 101–103).



Figures 104–116. Head and pronotum (bar scale: 0.5 mm), tergite, sternite of the male genital segment and aedeagus of *Stenistoderus mirabilis* n. sp. (Figs. 104–107). Tergite, sternite of the male genital segment and aedeagus of *S. punctatissimus* n. sp. (bar scale: 0.1 mm) (Figs. 108–110). Tergite, sternite of the male genital segment and aedeagus of *S. senegalensis* n. sp. (Figs. 111–113) and *S. ikelanus* n. sp. (Figs. 114–116) (bar scale: 0.1 mm).



Figures 117–132. Tergite, sternite of the male genital segment and aedeagus of *Stenistoderus palustris* n. sp. (Figs. 117–119) and *S. fuscipennis* (Figs. 120–122) (bar scale: 0.1 mm). Tergite, sternite of the male genital segment and aedeagus of *S. morogorensis* n. sp. (Figs. 123–125), and *S. striolatus* (Figs. 126–128). Head (bar scale: 0.5 mm) (Fig. 129), tergite, sternite of the male genital segment and aedeagus of *S. subnitidiceps* (Figs. 130–132) (bar scale: 0.1 mm).



Figures 133–143. Tergite, sternite of the male genital segment and aedeagus of *Stenistoderus congoensis* (Figs. 133–135). Idem, *S. minutus* n. sp. (Figs. 136–138). Figures 139-142. Idem, *S. usugarae*, with female genital segment (bar scale: 0.1 mm) (Figs. 139–142). Fig. 143: aedeagus of *S. usugarae*.

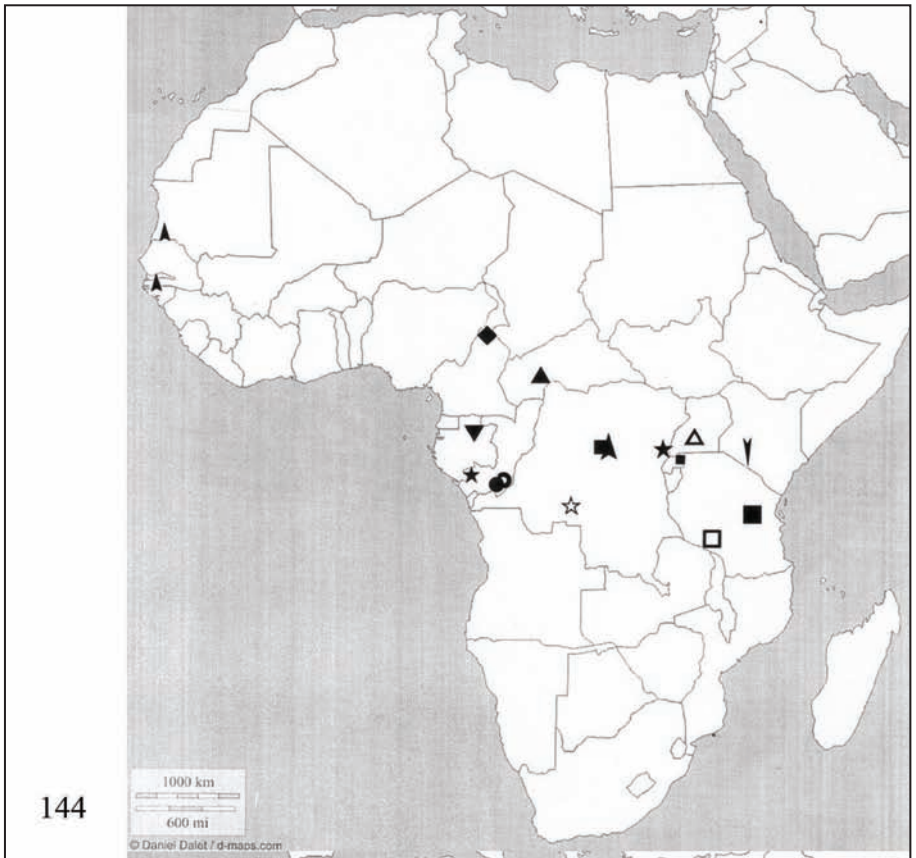


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Figure 144. Distribution of the genus *Stenistoderus*: *S. ruandensis* n. sp. (very small square), *S. africanus* n. sp. (square), *S. bozo* (filled triangle), *S. ugandae* n. sp. (open triangle), *S. sibiti* n. sp. (filled circle), *S. mirabilis* n. sp. (open circle), *S. punctatissimus* n. sp. (small star), *S. senegalensis* n. sp. (small arrow), *S. ikelanus* n. sp. (big arrow), *S. palustris* n. sp. (big star), *S. fuscipennis* (inverted arrow), *S. morogorensis* n. sp. (big square), *S. striolatus* (inverted triangle), *S. subnitidiceps* (open square), *S. congensis* (open star), *S. minutus* n. sp. (rhombus).

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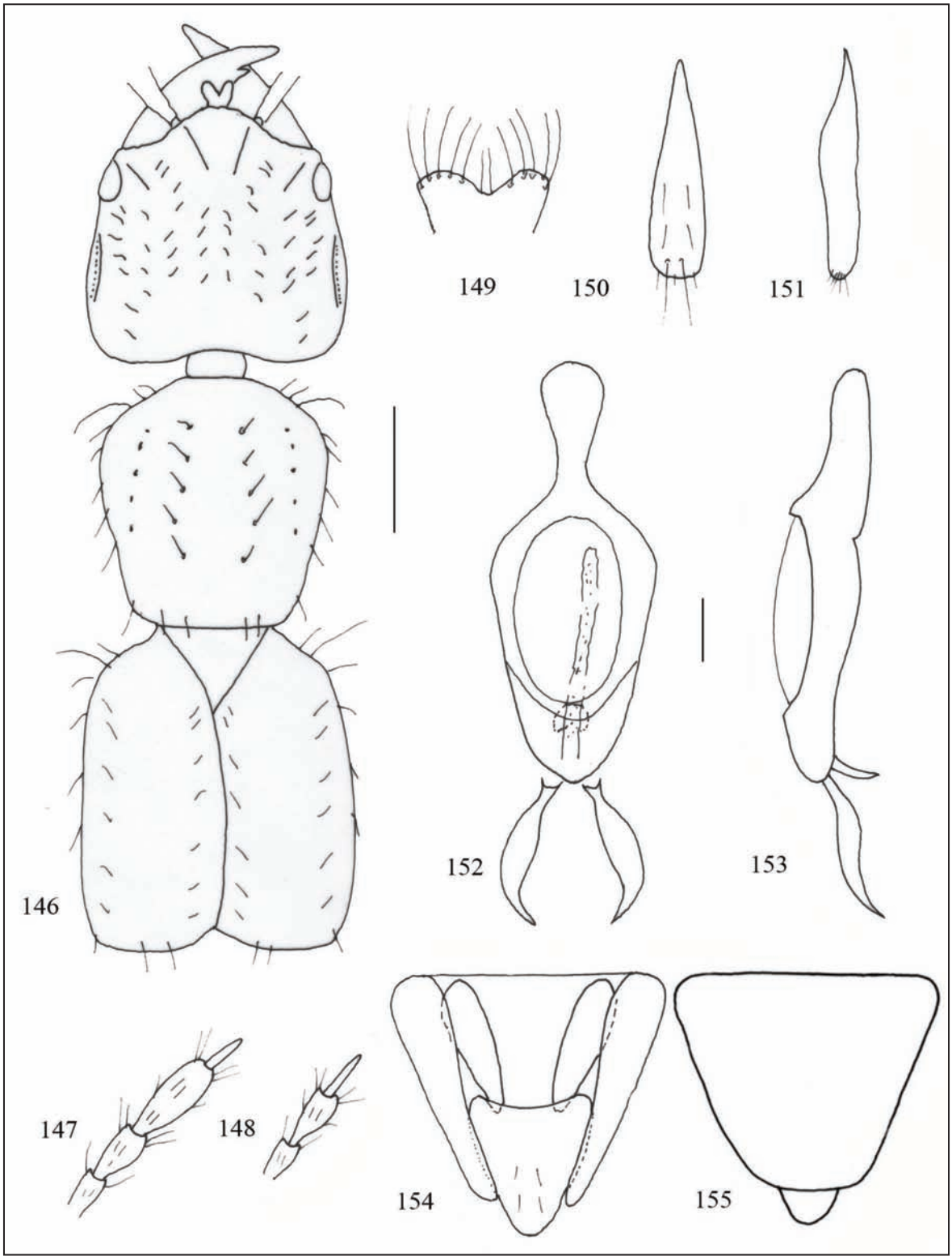
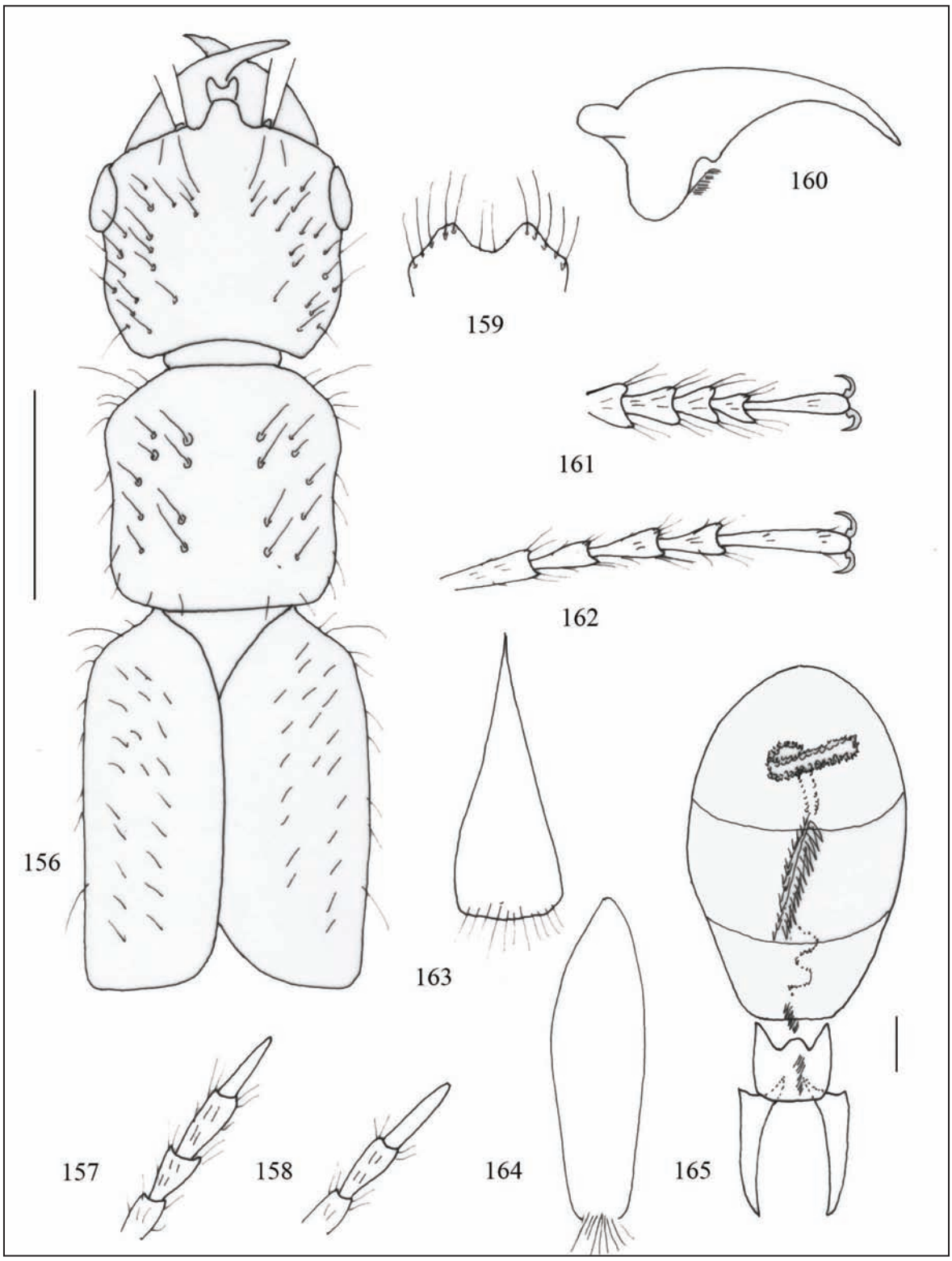
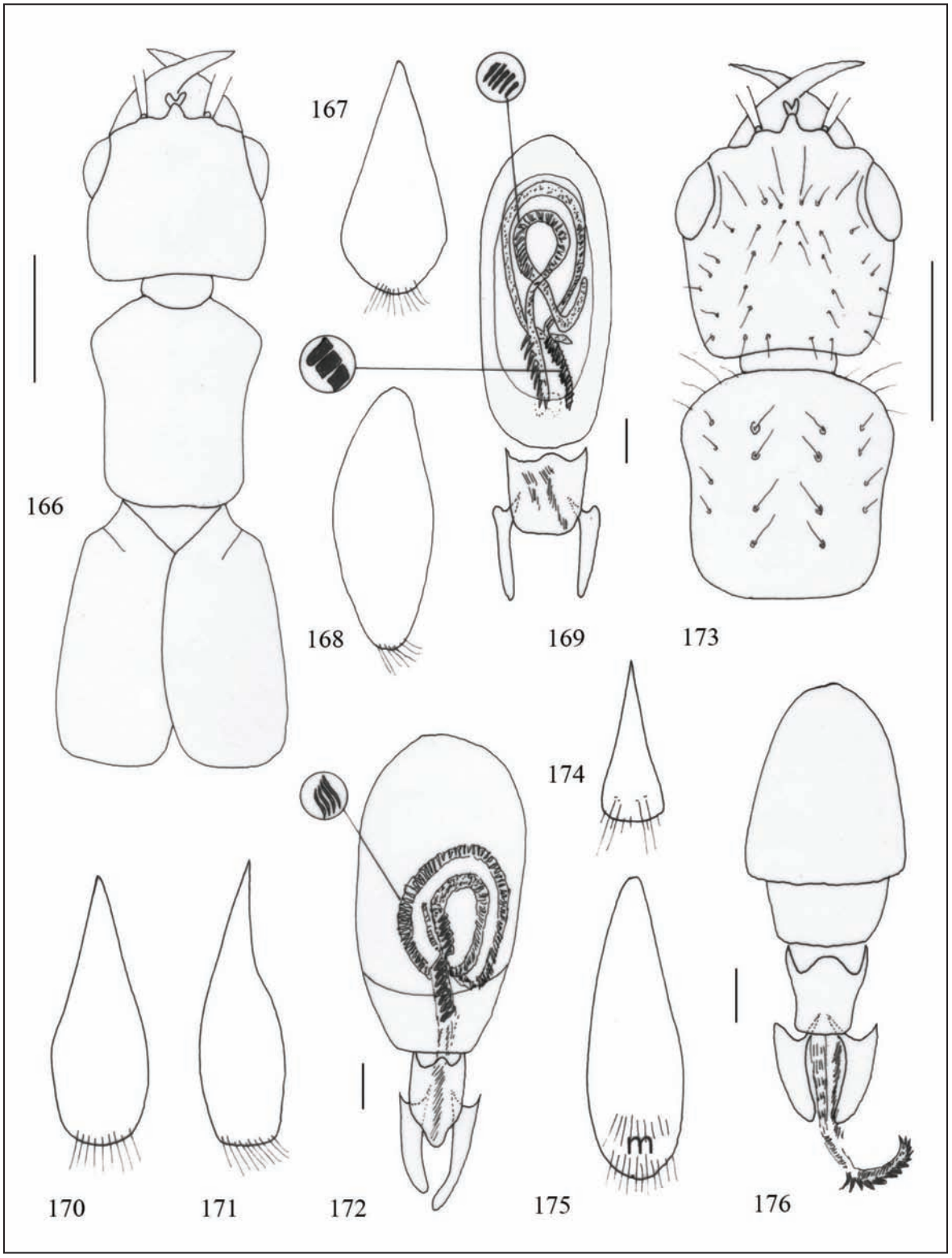
Figure 145. Distribution of *Stenistoderus usugarae*.



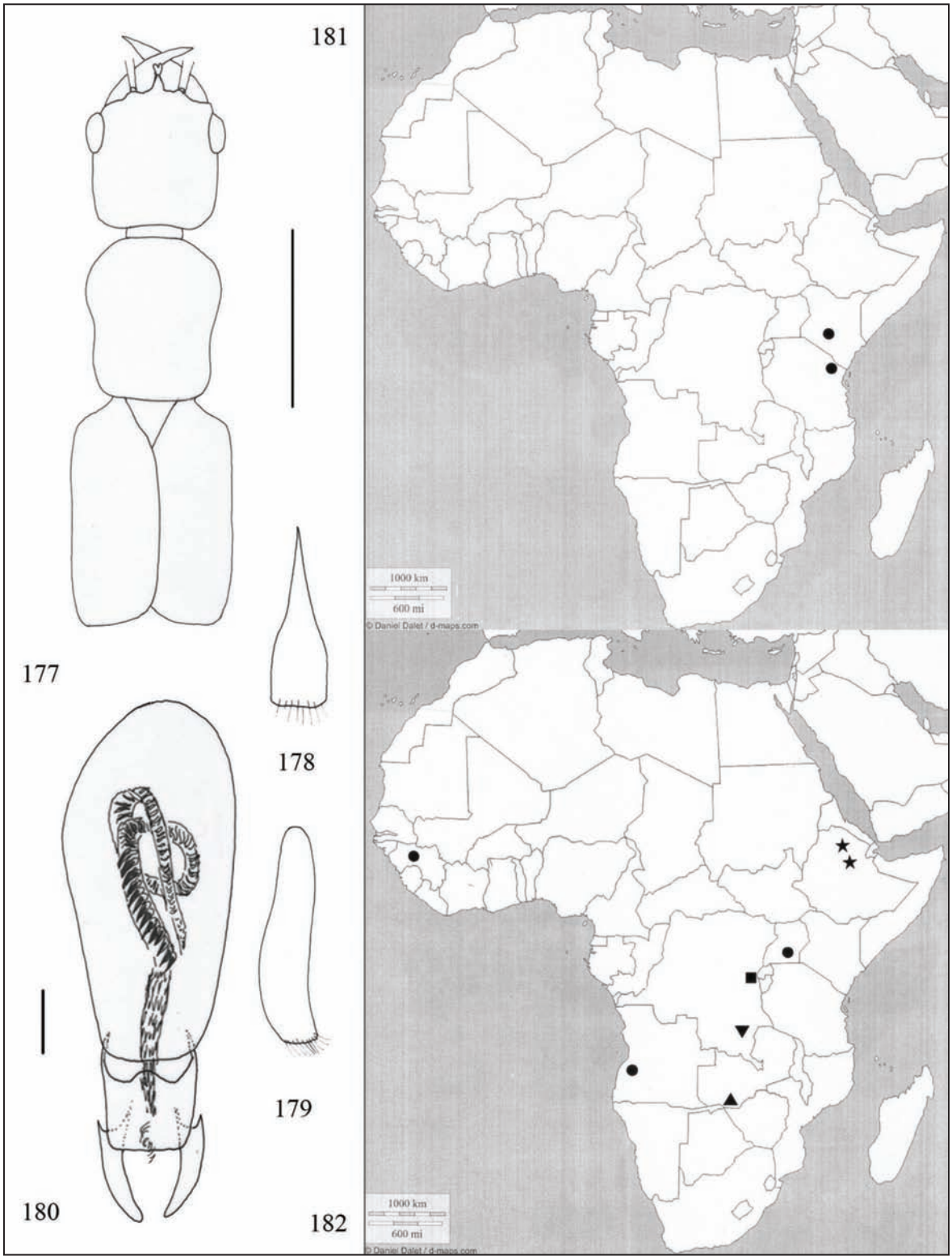
Figures 146–155. *Agoreina sulciceps*: fore-body (Fig. 146) (bar scale: 0.5 mm), maxillary and labial palpi (Figs.147, 148), labrum (Fig.149), tergite and sternite of the male genital segment (Figs. 150, 151), aedeagus in dorsal and lateral view (Figs. 152, 153), female genital segment (Figs. 154, 155) (bar scale: 0.1 mm).



Figures 156–165. *Amharina inopinata* n. sp.: fore-body (bar scale: 0.5 mm) (Fig. 156), maxillary and labial palpi (Figs. 157, 158), labrum (Fig. 159), mandible (Fig. 160), anterior and posterior tarsi (Figs. 161, 162), tergite, sternite of the male genital segment and aedeagus (Figs. 163–165) (bar scale: 0.1 mm).



Figures 166–176. *Amharina oculata* n. sp.: fore-body (bar scale: 0.5 mm) (Fig. 166), tergite, sternite of the male genital segment and aedeagus (Figs. 167–169) (bar scale: 0.1 mm). *Amharina hariolus*: tergite, sternite of the male genital segment and aedeagus (Figs. 170–172) (bar scale: 0.1 mm). *Amharina trapeziceps*: head and pronotum (Fig. 173) (bar scale: 0.5 mm); tergite, sternite of the male genital segment and aedeagus (Figs. 174–176) (bar scale: 0.1 mm).



Figures 177–182. *Amharina kafwi* n. sp.: fore-body (bar scale: 0.5 mm) (Fig. 177); tergite, sternite of the male genital segment and aedeagus (Figs. 178–180) (bar scale: 0.1 mm). Fig. 181: distribution of *Agoreina sulciceps*. Fig. 182: distribution of the genus *Amharina*: *A. inopinata* (circle), *A. oculata* n. sp. (square), *A. trapeziceps* (star), *A. hariolus* (triangle), *A. kafwi* n. sp. (inverted triangle).

6. Genus ***Neoxantholinus*** Cameron, 1944 (Figs. 183–198)

Neoxantholinus - Cameron, 1944: 783; Steel, 1949: 268; Smetana, 1977: 361; 1982: 62; Herman, 2001a: 3715; Bordoni, 2002: 127.; 2005: 452; 2010a: 291

Oligolinus - Bernhauer & Schubert, 1914: 291; Blackwelder, 1943: 473 and 504; Steel, 1949: 268; Scheerpeltz, 1953: 601; Arnett, 1960: 246; Moore, 1963: 94; Moore & Legner, 1974: 557; 1979: 71 (nec Casey, 1906)

TYPE SPECIES of *Neoxantholinus*: *Metoponcus rufulus* Broun, 1880, fixed by Cameron, 1944, by original designation.

DESCRIPTION. Body (Fig. 197) of small to medium size (4–6 mm). Fully winged. Similar in some respects on the one hand to *Zeteotomus* and on the other hand to *Tetraulacus*. Body very flat; head large in proportion, sub-rectangular, with subparallel and subrectilinear sides, with the folded surface of the temples almost flat or slightly rounded and impuctate; frontal grooves obsolete, the ocular grooves very long, converging and not very deep. Eyes very small and almost flat. Ventral surface of the head often delimited laterally by a more or less prominent carina. Epistoma not prominent between the antennae, flat, placed at the same level as the antennal tubercles, only slightly salient anteriad, with the dorsum weakly rounded. Antennae partially similar to those of *Zeteotomus*, but with the segments not dilated, not depressed and not cupuliform, almost similar to those of *Tetraulacus*. The distance between the antennae is subequal or hardly shorter than that between them and the inner margin of the eyes. Mandibles with the lateral groove very shallow, and the prostheca tiny. Maxillary palpi with the last segment very small, narrower and obviously shorter than the preceding one, which is longer than the 2nd. Labial palpi with the last segment tapering along its entire length, narrower and shorter than the preceding one whiich is longer and wider than the 1st. Labrum narrow and short, transverse, with a faint median emargination. Gular sutures longly contiguous. Surface of head and pronotum with microstriation in a longitudinal mesh, and micropunctuation with some larger punctures; on the elytra the punctures are placed in a transverse row in front, generally formed of 4 punctures. Neck very narrow, about as wide as 1/6 of the head's width. Pronotum with 4 transversely arranged punctures before the half of its length; other punctures may be present close to the anterior angles and behind the 4 aforementioned ones. Antesternal plate with a suture. Prosternum long, convex in the middle, with the intercoxal apophysis short and small, only slightly prominent, of a subtriangular shape. Upper epipleural line of the pronotum bent downwards immediately after the posterior angles, subparallel with the lower one, and very close to it, joining it at the level of the insertion of the forelegs. Mesosternum short, with the posterior margin prolonged in the middle into a long subtriangular prominence. Metasternum short and scarcely convex; space between the coxae narrow and only slightly prominent. Legs with anterior tarsi not dilated; middle and posterior tarsi with the last segment about as long as the preceding ones combined. Metatibiae with a single apical ctenidium that goes extends in part along their inner margin (for all these characters cf. Bordoni, 2002). Male genital segment tapered, with pleura similar to those of *Zeteotomus*, and the tergite often apparently composed of two parts, the distal one dilated and the proximal one very narrow, the sternite large, very long, with the distal apex broadly rounded and furnished with several rather long setae. Aedeagus (Figs. 184, 193) ovoid elongate, very similar to that of *Zeteotomus*, with short and narrow parameres and the inner sac furnished with small scales. Female genital segment (Bordoni, 2002: Fig. 57).

DISTRIBUTION. This genus is present in the New Zealand subregion (Bordoni, 2005a), in the Neotropical Region and in the Nearctic where only one species is known (Smetana, 1982). Concerning the Oriental Region, I presently know species exclusively in the Indomalayan subregion, with a predominently equatorial distribution (Bordoni, 2002). In the Australian Region, this genus is found only in the Norfolk, Philip, and Lord Howe Islands and North Queensland (Bordoni, 2005). In Africa this genus occurs in western and central regions (Fig. 198).

BIONOMICS. The species included in this genus, all with characteristically flattened bodies, live beneath the bark of plants.

KEY TO THE SPECIES

1. Body larger, 6.5 mm long, reddish brown.....2
-. Body smaller, 3.8–5.5 mm long.....3
2. Body a little narrower; head not narrow anteriorly, with more marked posterior angles; pronotum shorter, wider anteriorly; elytra shorter and broader. Aedeagus sub-spherical, with elongate median lobe and short parameres (Fig. 184). Rep. Congo.....1. *N. congoensis* n. sp.
-. Body a little broader; head narrow anteriorly with more rounded posterior angles; pronotum less wide anteriorly, longer; elytra longer and narrower. Aedeagus ovoidal, with long parameres (Fig. 187). Uganda.....2. *N. kibale* n. sp.

3. Body 5.5 mm long, slender, narrow, dark reddish brown; head with little rounded sides; elytra as long as pronotum. Aedeagus very broad, subspherical (Fig. 190). Principe Isl....3. *N. superbus*
-. Body less under 5 mm long.....4

4. Body normally shaped, slightly convex, 4.7 mm long, yellowish orange with infuscate elytra; head subquadrate, with lateral grooves and visible, very sparse punctation. Aedeagus larger, sub-spherical, with long parameres (Fig. 193). Gabon.....4. *N. belinganus* n. sp.
-. Body very flat, very narrow, 3.8 mm long, infuscate reddish brown; head sub-rectangular, without lateral grooves, with fine and extremely sparse punctation. Aedeagus smaller, ovoidal-elongate, with shorter parameres (Fig. 196). Congo.....5. *N. aequatorialis* n. sp.

1. ***Neoxantholinus congoensis*** n. sp.

Examined material. Holotype male: Rep. Congo, Brazzaville, Kindamba, Méya, near Adam cave, Endrödy-Younga, 7.XI.1963 (MTM); paratypes: Congo, Kivu, contr. S Kahuzi, 2200 m, P. Basilewsky, 27.III.1953, 2 females (MRAC), 2 females (cB); Congo, Massif Ruwenzori, Kalonge, 2130 m, R. Kiondo ya Kwanza, af. Butaho, P. Vanschuytbroek and J. Kekenbosch, 5.VIII.1952, 1 male (MRAC).

Description of Holotype. Male. Length of body: 6.5 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Fully winged. Reddish brown. Head sub-rectangular. Eyes small and not protruding. Surface of head with longitudinal micro-striation, and a groove, including punctures, between the eyes and the posterior angles; punctation ovoid, not dense. Pronotum as long as head, dilated anteriorly and there as wide as head. Surface with the micro-striature similar to that of head; 4 punctures anteriorly; some punctures around. Elytra long and narrow, long as pronotum, dilated posteriad and there a little wider than pronotum. Surface with fine, deep, dense punctation, arranged in numerous series. Abdomen with evident transverse micro-striation and fine and very sparse punctation. Tergite and sternite of the male genital segment as in figure 183. Aedeagus (Fig. 184) 1 mm long, ovoid, with very narrow and long distal portion; parameres short and thin; inner sac ribbon-shaped, narrow, and covered with fine scales.

Variability. The paratypes have no substantial morphological differences with the holotype described.

Etymology. The specific epithet refers to Congo (Fig. 198).

Distribution. This species is actually known only from Rep. Congo and Congo.

Bionomics. The holotype was collected in "*trunke*".

2. ***Neoxantholinus kibale*** n. sp.

Examined material. Holotype male: Uganda, Kabarole, 25 km Fort Portal, Mubfs, Kibale Nat. Park, 1600 m, Schmidt, 26.VII–22.VIII.1998 (cA); paratype: same data, 1 female (cB).

Description of Holotype. Male. Length of body: 6.65 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Fully winged. Reddish brown. Similar to *N. congoensis* n. sp., with the same micro-striation, but a little larger, and of darker colouration. Head broader and shorter than that of congoensis, with rounded posterior margin. Eyes smaller. Surface of head without a lateral groove, but with two widely spaced lateral punctures surrounded by some small and large punctures. Pronotum narrower than that of *N. congoensis* n. sp., less dilated anteriorly, with 4 anterior punctures and 2 posterior punctures. Elytra very narrow, with less marked humeral angles. Surface with deeper punctation. Tergite and sternite of the male genital segment as in figures 185, 186. Aedeagus 0.66 mm long

(Fig. 187), ovoid, with narrow and long, sub-parallel parameres; inner sac not visible.

VARIABILITY. The paratype female has no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is actually known only from the type locality, in Uganda (Fig. 198).

3. ***Neoxantholinus superbus*** (Bernhauer, 1915) comb. n.

Metoponcus superbus - Bernhauer, 1915a: 298; Scheerpeltz, 1933: 1299; 1956b: 8
Zeteotomus superbus - Herman, 2001a: 3835

TYPE MATERIAL. The Museo civico di Storia naturale of Genoa preserves 1 specimen labelled "*Is. Principe / Roca Inf. D. Henrique / I-IV.1901 / 100-300 m L. Fea*", "*Typus*" (printed on labed with red edge), "superbus / *Bernh*", "Metoponcus / superbus *sp. n.*" (handwritten by Bernhauer), "*Syntypus*" (printed), "Metoponcus / superbus / *Bernhauer*" (on orange label). It is a female that I choose as paralectotype of the species; it bears the label "*Paralectotypus* Metoponcus superbus *Bh., Bordoni des. 2006*". The Field Museum of Natural History of Chicago preserves 1 specimen with the same locality labels and "*Museo di / Genova*" (printed on orange label), "Metoponcus / superbus *Brnh. / Cotypus*" (handwritten by Bernhauer). It is a male in poor condition that I choose as lectotype of the species; it have the label "*Lectotypus* Metoponcus superbus *Bh., Bordoni des. 2006*". Both specimens bear the determination label "Neoxantholinus superbus *(Bh.), Bordoni det. 2006*".

EXAMINED MATERIAL. Fernando Poo, Spanisch Guinea, Schlüter, I–II.1940, 1 ex. (MNB); Spanisch Guinea, Eidmann, 1940, 1 ex. (MNB)

DESCRIPTION. Length of body: 5.5 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Fully winged. Shiny, reddish brown with anterior half of elytra and posterior margins of the abdominal segments pale yellow; scutellum reddish brown. Body narrow and elongated; head cylindrical, sub-rectangular, very elongate, with sub-rectilinear and sub-parallel sides and narrowly rounded posterior angles. Eyes medium-sized, located towards the median axis of head. epistoma narrow and emarginate in the middle. Surface of head with fine, irregular sparse punctation, mixed with some large punctures. Some punctures bear setae, one under the eyes, one near the posterior angles, one between these. Pronotum much shorter than head, a little dilated anteriorly where it is narrower than head, with oblique anterior margins, broadly rounded anterior angles and sinuate sides. Surface with micro-punctation, with 4 horizontal punctures forward, followed sometimes by 1 posterior, lateral puncture and by 2 dorsal punctures. Elytra sub-rectangular, much longer and narrower than pronotum, with sub-parallel sides and very obsolescent humeral angles. Surface rugose, opaque, with some widely spaced and very fine puntures arranged in three series, one near the suture, one median and one lateral. Abdomen lustrous, with some sparse punctures on the sides. Tergite and sternite of the male genital segment as in figures 188, 189. Aedeagus small (Figs. 190, 1748), 1 mm long, roundish, with median lobe narrow and slightly rounded; parameres asymmetrical, narrow and short; inner sac broad, covered in sparse scales, denser in two parallel series in the proximal portion.

DISTRIBUTION. São Tomé and Principe Isl., Equatorial Guinea: Bioko isl. (Fernando Poo Isl.) (Fig. 198).

REMARKS. The two examined specimens from Fernando Poo bear the following label: "*Typus* / Metolinus / africanus / *Scheerpeltz*" (in litt.), respectively on red and orange labels. One is a teneral female, the other has a demaged genital segment, so I can not indicate the sex, probably male. The genus *Metolinus* occurs in the Oriental and part of the Australian regions only.

4. ***Neoxantholinus belinganus*** n. sp.

EXAMINED MATERIAL. Holotype male: Gabon. Belinga, H. Coiffait, 2.II.1963 (cB); paratype: Tanzania, Usambara Mts., Lushoto env., M. Kubon, 27.III–1.IV.1997, 1 male (cJ).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.7 mm; from anterior margin of head to posterior margin of elytra: 2.4 mm. Fully winged. Head and pronotum with longitudinal micro-striation. Reddish brown. Head sub-rectangular, with sub-rectilinear and sub-parallel sides and narrowly rounded

posterior angles. Eyes small an a little protruberent. Surface of head with feeble lateral groove, deep ocular and frontal grooves and two median punctures arranged in an oblique line. Pronotum longer than head, slightly dilated anteriorly where it is as wide as head, with less sinuate sides. Surface with dorsal series of 3 widely spaced punctures and lateral series of 2 median punctures. Elytra long, dilated posteriad, longer and wider than pronotum, with rounded humeral angles. Surface with fine and sparse, less well defined punctation arranged in a few series. Tergite and sternite of the male genital segment as in figures 191, 192. Aedeagus 0.7 mm long (Fig. 193), ovoid, with narrow and long, sub-parallel parameres; inner sac not visible.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the locality of Belinga.

DISTRIBUTION. Gabon and Tanzania (Fig. 198).

REMARKS. Female unknown. The specimen from Tanzania have darker body, larger aedeagus (0.77 mm long), with less L-like sclerite near the right paramere and larger inner sac. I refer it temporarily to *N. belinganus* n. sp.

5. ***Neoxantholinus aequatorialis*** n. sp.

EXAMINED MATERIAL. Holotype male: (Rep. Dem. Congo,) Equator, Flandria, R.P. Hulstaert, X.1928 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 3.8 mm; from anterior margin of head to posterior margin of elytra: 2.1 mm. Fully winged. Reddish brown with lighter antennae and legs. Similar to *N. belinganus* n. sp. but flatter, shorter, more slender and a little darker. Head narrower and longer, eyes almost flat; surface of head without lateral groove, with sparser and more superficial punctation; pronotum narrower and less dilated anteriorly; elytra very narrower, not dilated posteriad, with sparser and finer punctation. Tergite and sternite of the male genital segment as in figures 194, 195. Aedeagus very small (Fig. 196), 0.48 mm long, narrow, with distal portion of characteristic shape and slender parameres; inner sac not visible.

ETYMOLOGY. The specific epithet refers to the equator.

DISTRIBUTION. The species is actually known only from the type locality, in the Dem. Rep. of Congo (Fig. 198).

REMARKS. Female unknown. Flandria is located near Coquilhatville (now Mbandaka) in Équator. Province.

7. Genus ***Zeteotomus*** Jacquelin du Val, 1857 (Figs. 199–214)

Zeteotomus - Jacquelin du Val, 1857: 33; Blackwelder, 1952: 408; Smetana, 1958: 83; Szujecki, 1976: 14; Herman, 2001a: 3830; Bordoni, 2002: 137; 2010a: 295

Metoponcus - Kraatz, 1857: 651; Fauvel, 1873: 379; Ganglbauer, 1895: 489; Casey, 1906: 360; Reitter, 1908: 12; 1909: 135; Porta, 1926: 87; Scheerpeltz, 1930: 63; 1940: 39; Coiffait, 1956: 44; 1972: 131; Lohse, 1964: 158; Bordoni, 1982: 160; Shibata, 1983: 67

Cylindrocephalus - Motschulsky, 1860: 128

TYPE SPECIES of *Zeteotomus*: *Leptacinus brevicornis* Erichson, 1839, fixed by monotypy by Jacquelin du Val (1857).

TYPE SPECIES of *Metoponcus*: *Metoponcus brevicornis* Erichson, 1839 (*Leptacinus*), fixed by monotypy by Kraatz (1857).

TYPE SPECIES of *Cylindrocephalus*: *Cylindrocephalus pictus* Motschulsky, 1860, by monotypy (syn. of *scripticollis* Hochhuth, 1849).

DESCRIPTION. Body slender to robust (Fig. 199), variable in size (5–7.5 mm). Head cylindrical, very elongate, narrow, sometimes with a denticle at the posterior angles; frontal grooves short and less visible; ocular grooves long, convergent, reaching the disc of head; surface of head usually with longitudinal micro-striation, sparse micro-punctation, and some large punctures bearing long setae; mandibles with lateral groove and small prostheca; epistoma narrow and very long, with dorsal surface rounded or with a deep median groove; labrum, antennae, maxillary and labial palpi as in figs; neck very narrow; gular sutures fused; pronotum with longitudinal micro-striation and dorsal and lateral series of punctures, or with

a transverse anterior series of 4 punctures; antesternal plate divided; upper epipleural line visible for a short distal tract and meeting the lower line; epipleura very narrow; elytra long, overlapping only near the scutellum, with superficial and extremely fine punctation; anterior tarsi not dilated; metatibiae with a single ctenidium (for all these characters cfr Bordoni, 2002). Male genital segment a little elongated, with sternite similar to that of *Nudobius*. Aedeagus sub-ovoid (Figs. 202, 205), with symmetrical parameres, apparently formed of two parts; inner sac ribbon-like, covered with fine scales. Female genital segment with large additional sclerites (Bordoni, 2002: Fig. 58).

DISTRIBUTION. The genus occurs with few species in the Palaearctic Region because it typically lives in warm areas. Many species have been described from Africa and Australia, but the taxa of the latter region should be referred to other genera (Bordoni, 2005). In the Oriental Region this genus occurs in India (Bordoni, 1997) but is especially widespread in the Indomalayan sub-region (Bordoni, 2002), with an equatorial distribution. In Africa this genus occurs in the western and central regions (Fig. 213).

BIONOMICS. The species of *Zeteotomus* live under bark and in decaying wood. A close association with forests is evident when considering that the best known taxa, the Mediterranean species, have a geographical distribution that coincides with that of patches of woodland that survive as relicts from once extensive spreads (Bordoni, 1983). The sporadic occurence of the species, usually as single specimens, often females, in museums and also in recent collections, suggests that they are not common, perhaps requiring special conditions of decay of plants.

KEY TO THE SPECIES

1. Body larger, 7–7.5 mm long.....2
-. Body smaller, less than 6.5 mm.....3

2. Body 7.5 mm long, brown, almost black, with posterior half of elytra and 1st-2nd visible abdominal segments reddish yellow. Aedeagus as in figure 202. Rep. Congo.....1. *Z. congoensis*
-. Body 7 mm long, light brown with anterior half of elytra and tarsi yellowish. Male unknown. Tanzania.....2. *Z. urewekensis*

3. Abdomen brown, mostly with yellowish membranous margins between segments. Head without groove behind eyes; pronotum shorter than head; elytra with yellowish anterior half and indistinct punctation; body reddish brown with yellowish anterior half of elytra, 5.5 mm long. Male unknown. Congo.....3. *Z. striolatus*
-. Abdomen with yellowish first visible segment.....4

4. Anterior half of elytra yellowish.....5
-. Anterior half of elytra brown.....6

5. Body larger, 6.5 mm long; 1st, 2nd visible abdominal segments yellow; head very long, with large eyes; pronotum massive. Aedeagus (Fig. 205). Ghana.....4. *Z. ghanensis* n. sp.
-. Body smaller and narrower, 5 mm long; 1st visible abdominal segment yellow; head less long, with medium-sized eyes; pronotum not massive. Aedeagus as in figure 208. Congo.....5. *Z. schedli*

6. First visible abdominal segment and posterior half of 2nd yellow (but sometimes only the first yellow); body slender and very narrow (Fig. 209), 5 mm long; elytra long and very narrow, subrectangular. Aedeagus as in Coiffait, 1968: 131). Gabon.....6. *Z. gabonicus*
-. First two visible abdominal segments yellow; body not particularly narrow (Fig. 214), 6.2 mm long; elytra proportionally short, not narrow, dilated posteriad. Male unknown. Ivory Coast.....7. *Z. ivorianus* n. sp.

1. ***Zeteotomus congoensis*** (Scheerpeltz, 1956)

Metoponcus congoensis - Scheerpeltz, 1956a: 11; Schedl, 1961: 159
Zeteotomus congoensis - Herman, 2001a: 3833

TYPE MATERIAL. The Naturhistorisches Museum, Wien preserves 1 specimen labelled "*Franz Kongo / Umg. Brazzaville / J. Perroud leg.*", "*Typus /* Metoponcus / congoensis */ O. Scheerpeltz*" (on reddish-purple label). It is a male to which I have affixed the determination label "Zeteotomus congoensis *(Scheerp.), Bordoni det. 2007*".

DESCRIPTION. Length of body: 7.5 mm; from anterior margin of head to posterior margin of elytra:

3.8 mm. Fully winged. Head and pronotum black, elytra brownish black with yellow anterior half; scutellum, anterior margin of elytra and abdomen (apart the 1st-2nd visible segments) brownish black; abdominal visible segments 1, 2 yellow; antennae and legs brown. Similar to *Z. schedli* but larger, with larger eyes, larger and more elongated punctation of head, anteriorly rugose. Pronotum shorter and wider, more dilated anteriorly, with superficial and short lateral grooves; surface with very fine micro-punctation and with two anterior setiferous punctures. Elytra much shorter and wider than that of schedli, with little marked humeral angles. Surface with sparse punctation arranged in three series, one near the suture, one median and one lateral. Tergite and sternite of the male genital segment as in figures 200, 201. Aedeagus broad (Fig. 202) but more elongate than that of *Z. schedli*, 1.55 mm long; parameres shorter; inner sac narrow, sub-rectilinear, covered with very fine small scales.

Distribution. The species is so far only known from the type locality in Rep. Congo (Fig. 213).

Bionomics. "*In Larvengängen von* [= in larval galleries of] Metamelus crassirostris *Fst. (Curculionidae)*" (Schedl, 1961).

Remarks. The type should be in Tervuren museum.

2. ***Zeteotomus ukerewensis*** (Bernhauer, 1937)

Metoponcus ukerewensis - Bernhauer, 1937: 607; Scheerpeltz, 1956ba: 9
Zeteotomus ukerewensis - Herman, 2001a: 3835

Type material. The Field Museum of Natural History of Chicago preserves 1 specimen labeled "*Muruna- / tugura*", "*D. O. Afrika / Ukerewe I. / Conrads*", "ukerewensis / *Brnh. Typus / un.* Metoponcus". It is a female with the determination "Zeteotomus ukerewensis *(Bh.), Bordoni det. 2006*".

Description. Length of body: 7 mm; from anterior margin of head to posterior margin of elytra: 4.4 mm. Fully winged. Shiny, light brown with anterior half of elytra and tarsi yellowish. Head cylindrical, sub-rectangular very elongate, sub- rectilinear and sub-parallel sided, with narrowly rounded posterior angles. Eyes small and displaced towards the median axis of head. Surface of head with dense punctation, composed of irregular, small and large punctures; some punctures with setae, one under the eyes, one just beyond, one near the posterior angles. Epistoma narrow, very protruberent, not emarginate in the middle. A carina and a groove separate the rounded surface of the tempora from the ventral surface of head. Pronotum much shorter than head, anteriorly a little dilated, where it is as wide as head, sinuate sided. Surface with micropunctation and two anterior punctures in a transverse line on each side; one puncture on each side near the median axis of the pronotum. An oblique groove near the lateral sinuosity of pronotum; between it and the lateral margin of pronotum are some irregular and superficial punctures. Elytra large, dilated posteriad, much longer and wider than pronotum, with obsolescent humeral angles. Surface with extremely fine, scarcely visible, widely spaced punctures, arranged in three series, one near the suture, one median and one lateral. Abdomen with transverse micro-striation and fine, sparse punc-tation on the sides. Male unknown.

Distribution. The species is so far only known from the type locality in Tanzania (Fig. 213).

3. ***Zeteotomus striolatus*** (Scheerpeltz, 1956)

Metoponcus striolatus - Scheerpeltz, 1956a: 9
Zeteotomus striolatus - Herman, 2001a: 3835

Type material. The Nuturhistorisches Museum, Wien preserves 1 specimen labelled "*Congo Belge / Elisabethville / Ch. Seydel*", "*Typus /* Metopuncus / striolatus / *O. Scheerpeltz*" (on reddish-purple label). It is a female to which I have affixed the determination label "Zeteotomus striolatus *(Scheerp.), Bordoni det. 2007*".

Description. Length of body: 5.5 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Fully winged. Head, pronotum, elytra and scutellum reddish brown; anterior half of elytra yellow; abdomen reddish brown with the last three segments brownish black; antennae and legs brown. Head with large, ovoid, dense punctation, rugose around the eyes. Pronotum with long and narrow medio-lateral groove, with rugose, elongated and dense punctation forming striae. Two anterior setiferous punctures on either side. Abdomen with evident, sparse and deep, transverse microstriation. Male unknown.

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 213).

REMARKS. The Author gives the main characters in his key to African *Metoponcus*, without a formal description.

4. ***Zeteotomus ghanensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Ghana, Ashanti reg., Mampong scarpe, 600 m, Endrödy-Younga, 1.I.1966 (MTM).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.5 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Winged. Head, pronotum, anterior margin of elytra and scutellum light brown; elytra dark brown with posterior part pale yellow; abdomen dark brown with visible segment 1, 2 pale yellow; antennae and legs light brown. Similar to *Z. schedli* but larger and broader, with head and pronotum more dilated. Head with sparser punctation; pronotum much shorter and broader, anteriorly dilated, with less oblique anterior margins and much sparser micro-punctation. Elytra similar to that of *Z. congoensis*, dilated posteriad. Tergite and sternite of the male genital segment as in figures 203, 204. Aedeagus very small (Figs. 205, 1749), 0.74 mm long, ovoid; parameres narrow and long; inner sac narrow and short, covered with very fine scales.

ETYMOLOGY. The specific epithet refers to Ghana.

DISTRIBUTION. The species is so far only known from the type locality in Ghana (Fig. 213).

REMARKS. Female unknown.

5. ***Zeteotomus schedli*** (Scheerpeltz, 1956)

Metoponcus Schedli - Scheerpletz, 1956a: 9
Metoponcus schedli - Schedl, 1961: 159
Zeteotomus schedli - Herman, 2001a: 3834

TYPE MATERIAL. The Naturhistorisches Museum, Wien preserves 2 specimens, one labelled "*Congo Belge / Elisabethville / Ch. Schedl*", "T*ypus /* Metoponcus / Schedli / *O. Scheerpeltz*" (on reddish purple label) and the second labelled "*Congo Belge / Yangambi / 5.VII.1952 / Dr. Schedl*", "*K. Schedl / n. 315*", "*Cotypus /* Metoponcus / Schedli / *O. Scheerpeltz*" (on redish purple label). The first is a male and the second is a female; both are determinate "Zeteotomus schedli *(Scheerp.), Bordoni det. 2007*".

DESCRIPTION. Length of body: 5.5 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Body fully winged (Fig. 212). Reddish brown with anterior half of elytra, first visible abdominal segment, anterior and posterior margins of visible segments 2, 3 palle yellow; antennae and legs light brown. Head long, sub-rectangular, narrow. Eyes proportionately large and almost flat. Surface of head with very fine, slightly elongated, sparse punctures, with some larger setiferous punctures. Pronotum shorter than head, anteriorly dilated where it is as wide as head, with broadly rounded anterior angles. Surface shiny, with a medio-lateral groove and punctation similar to that the head, and with some larger punctures arranged so as to form almost a dorsal series. Elytra sub-rectangular, very long and narrow, much longer than pronotum, with obsolete humeral angles. Surface rugose, with very superficial and dense punctation. Abdomen with transverse, fine and dense micro-striation and very superficial and dense punctation on the sides. Tergite and sternite of the male genital segment as in figures 206, 207. Aedeagus broad (Fig. 208), 1.3 mm long; parameres long and narrow; inner sac broad, more or less ribbon-like, folded on itself and covered with minute scales and with a distal, narrow area of thickened spinules.

DISTRIBUTION. The species is at present only known from the type locality in Congo (Fig. 213).

BIONOMICS. "*In Brutgängen von* [= in the "brood galleries" of …] Polygraphus longipilis *Schedl,* P. subsulcatus *Schedl, und* P. tenuis *Schedl*" (Schedl, 1961).

REMARKS. In the description the type and cotype are recorded as being deposited in the MRAC, Tervuren.

6. ***Zeteotomus gabonicus*** (Coiffait, 1968)

Metoponcus gabonicus - Coiffait, 1968: 129
Zeteotomus gabonicus - Herman, 2001a: 3833

TYPE MATERIAL. The Muséum national d'Histoire naturelle in Paris preserves 1 specimen labelled "*Makokou 195 / 10.3.63 / H. Coiffait*", "*Mis-*

sion Biologique / au Gabon / P. P. Grassé Directeur", "*Holotype*" (printed on red label), "Metoponcus / gabonicus *Coiff./ H. Coiffait 1967*". It is a male to which I have affixed the determination label "Zeteotomus gabonicus *(Coiff.), Bordoni det. 2006*".

EXAMINED MATERIAL. Gabon, Belinga, H. Coiffait, 20.III.1963, 1 female (IRSNB).

DESCRIPTION. Length of body: 4.6–5 mm; from anterior margin of head to posterior margin of elytra: 2.2 mm. Fully winged. Body slender and narrow (Fig. 209). Head and pronotum orange-testaceous, the latter with posterior margin yellowish; elytra with anterior third yellow and posterior two thirds light brown; abdomen with 1st visible segment yellow, second segment with anterior half light brown and posterior half yellow; other segments dark brown; antennae light brown; legs yellowish with darker femora (the second specimen examined is reddish brown with darker head and partially yellow first visible abdominal segment). Head very narrow, elongate, sub-cylindrical, subrectilinear and sub-parallel sided, with very narrowly rounded posterior angles. Eyes large and almost flat. Epistoma narrow, without median groove. Surface of head with sparse punctation, composed of small and large punctures and a few setiferous punctures: one in the short frontal grooves, one under the posterior margin of eyes, one under it, and one near the posterior angles. Pronotum much shorter (not longer stated by Coiffait, 1968) and a little narrower than head, slightly dilated anteriorly, with oblique anterior margins, obsolescent anterior angles and sinuate sides. Surface shiny, with sparse micro-punctation, and with a lateral groove directed towards the median axis of the pronotum. There are a few punctures that bear pubescence in this groove and two large, median punctures on either side, one anterior and one posterior. Elytra broad, as long as head, dilated posteriad, with almost obsolete humeral angles. Surface slightly rugose, with some fine, less visible punctures arranged in three series, one near the suture, one median and one lateral. Abdomen with transverse micro-striation and fine, sparse punctation on the sides. Tergite and sternite of the male genital segment as in figures 210, 211. Aedeagus (see REMARKS).

DISTRIBUTION. Gabon (Fig. 213).

REMARKS. Coiffait had made microscope preparations of the species collected in Gabon. It has not been possible to find the one of this species, so I refer to the original figure (Coiffait, 1968: 131, figs. 1, 2).

7. ***Zeteotomus ivorianus*** n. sp.

EXAMINED MATERIAL. Holotype female: Côte d'Ivoire, Ft. du Banco, Gerard, VIII.1968 (MNHNP).

DESCRIPTION OF HOLOTYPE. Female. Length of body: 6.2 mm; from anterior margin of head to posterior margin of elytra: 3.5 mm. Fully winged. Pale reddish brown (including scutellum), with anterior half of elytra and first two abdominal segments yellow. Body slender (Fig. 214), with long and narrow head; pronotum with long and evident lateral carina behind which there is a deep fossa; punctation of head, pronotum and elytra as in figure 214.

ETYMOLOGY. The specific epithet refers to Ivory Coast.

DISTRIBUTION. This species, at moment, is only known from the type locality in Ivory Coast (Fig. 213).

BIONOMICS. The specimen was collected "*sous écorce*" (= under bark).

REMARKS. Male unknown.

8. Genus ***Homorocerus*** Boheman, 1848 (Figs. 215–226, 1674)

Homorocerus - Boheman, 1848; 272; Lacordaire, 1854: 67; Gemminger & Harold, 1868: 573; Duvivier, 1883: 141; Bernhauer & Schubert, 1916: 410; Scheerpeltz, 1933: 1316; Blackwelder, 1952: 191; Herman, 2001a: 3654

TYPE SPECIES. *Homorocerus rufipennis* Boheman, 1848, fixed by Boheman by monotypy.

DESCRIPTION. Body large, 14–16 mm long, robust, massive, sub-cylindrical, fully winged (Fig. 215). Maxillary and labial palpi and labrum as in figures 216, 217; mandibles robust, without lateral groove, with a preapical tooth and short prostheca (Fig. 219); epistoma protruberent, narrow, securiform; antennae short, very closed to the epistoma,

composed of broad short, increasingly wider segments, with the last hemispherical (Fig. 220); gular sutures fused; neck very wide; antesternal plate divided; sternum short; superior epipleural line meeting the lower line at the anterior angles; pronotum with a small puncture near the anterior angles; elytra with three series of punctures; mesosternum with sub-rectilinear posterior margin (Fig. 221); metasternum long and protruding; legs with all tarsi dilated; tibiae with large thorny setae; metatibia with ctenidium formed by few large setae. Male genital segment with long pleura, covered with dense pubescence; tergite and sternite as in figures 223, 224. Aedeagus large, ovoid (Fig. 225), similar to that of large *Thyreocephalus*, with median lobe lanceolate; parameres symmetrical. Female genital segment (Fig. 222).

DISTRIBUTION. Ethiopia, Ivory Coast, Cameroon, Congo, Tanzania, Zambia, South Africa (Fig. 226).

1. ***Homorocerus rufipennis*** Boheman, 1848

Homorocerus rufipennis - Boheman, 1848: 273; Fauvel, 1899: 32; Bernhauer & Schubert, 1916: 410; Scheerpeltz, 1933: 1316; Bernhauer, 1947: 158; Herman, 2001a: 3654

TYPE MATERIAL. The Naturhistoriska Riksmuseet in Stockholm preserves 1 specimen labelled "*Caffra / ria*", "*I. Wahlb*", "*type*" (printed on white label), "*Typus*" (printed on red label with black edge), "Homorocerus / rufipennis *Bhn.*". It is a male that I choose as lectotype of the species. I have affixed the labels "*Lectotypus* Homorocerus rufipennis *Boh., Bordoni des. 2006*" and "Homorocerus rufipennis *Boh., Bordoni det. 2006*".

EXAMINED MATERIAL. Ethiopia, Bedele, Lizler, V.1992, 1 male (cB).

Ivory Coast, Bingerville, Hardy, J. Jarrige, 1 female (MNHNP).

Cameroon, Dschang, Vadon, XII.1930, 1 female (MNHNP); Jacum (?), L. Kolin, VI.1918, 1 female (MNB); Daula, David, 1 male (cB); Joko, 1 male (cB); Jaunda, S. Tassmann, X.1914, 1 ex. (MNB).

(Congo), Massif des Kundulungu, N. Leleup, 15.I.1949, 1 male (MRAC).

Zambia, Capperbelt, 50 km W Chingola, A. Kudrna jr., 31.XII.2002, 1 ex. (cJ).

Swaziland, Piggs Peak, 7 mls S, N. Leleup, X.1991, 1 ex. (cB).

South Africa, Kapland, 1 ex. (NMW); Natal, Cathedral Peak, 28.57S, 29.12E, Endrödy-Younga leg. 16.III.1976, 1 ex. (TMSA); Natal, Unhlanga Rocks, leg.?, 23.VIII. 1952, 1 ex. (TMSA); Maritzburg, W. Cullingworth leg., 26.IX.1932, 1 ex. (cB).

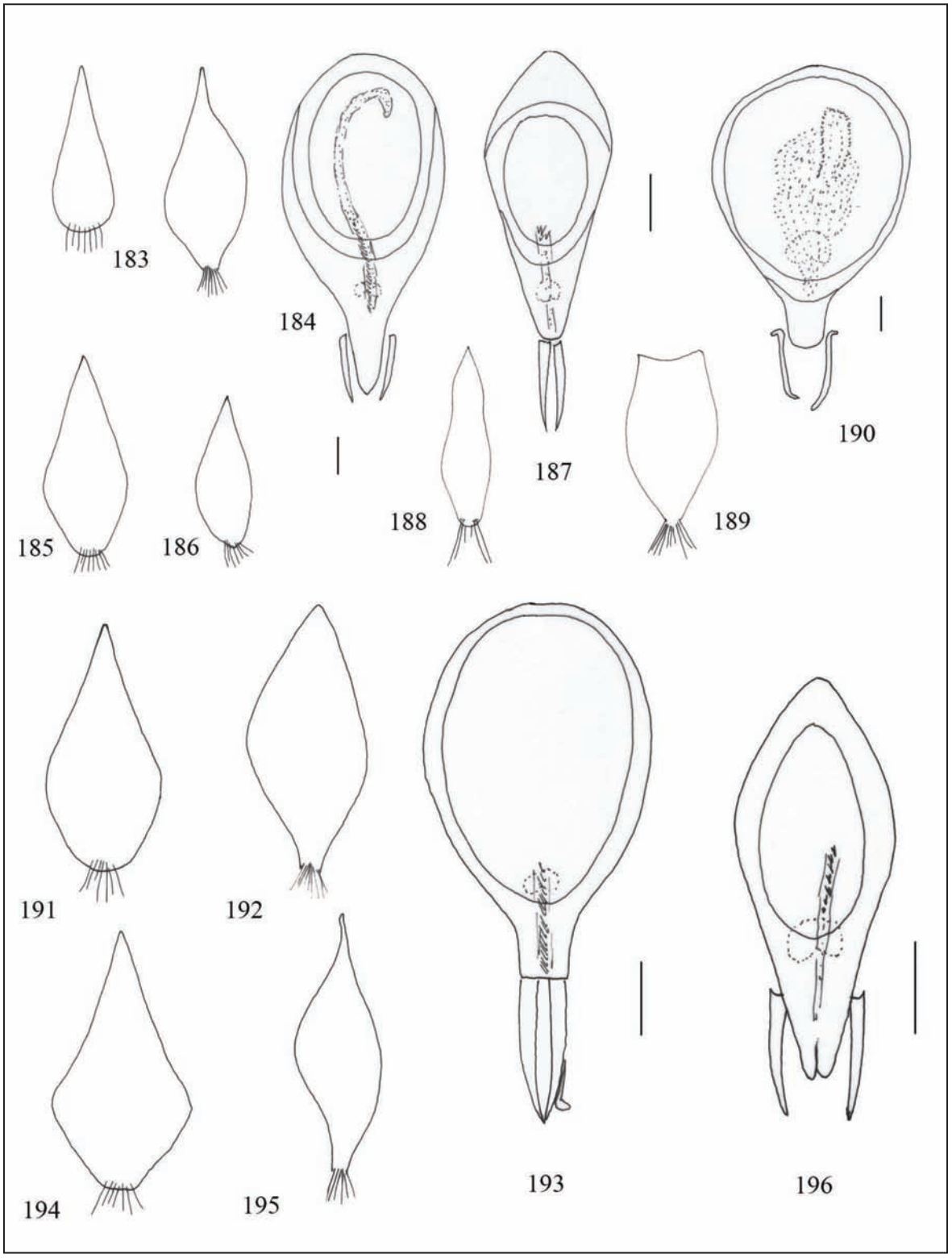
CITED MATERIAL (not examined). Tanzania, Ugano, 1500–1700 m; Kapland, Natal, Congo (Bernhauer, 1947).

DESCRIPTION. Length of body: 14–16 mm; from anterior margin of head to posterior margin of elytra: 7.5–8 mm. Body shiny, black with red elytra and black scutellum; last three abdominal segments red; antennae dark brown; legs blackish. Head squat, dilated posteriad, slightly dilated sides, with broadly rounded posterior angles. Eyes small and flat. Surface of head with traces of micro-punctation on the disc, with irregular, dense punctation, obsolescent on the disc, and with some setiferous punctures. Pronotum a little longer than head, strongly dilated anteriorly where it is wider than head, with oblique anterior margins, narrowly rounded anterior angles, and scarcely sinuate sides. Surface with sparse micro-punctation, with a puncture near the anterior angles; a few small punctures behind it. Elytra longer and posteriad slightly wider than pronotum, with marked humeral angles. Surface with punctation arranged in three series, one near the suture, one oblique median and one lateral. Abdomen with deep, very dense punctation. Tergite and sternite of the male genital segment as in figures 223, 224; sternite modified, with conspicuous thickened right margin. Aedeagus large (Fig. 225), 2.4 mm long, with lanceolate median lobe; parameres asymmetrical; inner sac ribbon-like, long and narrow, with small scales on the margins.

BIONOMICS. Some specimens were collected in "*horse and cattle dung*", "*sous pierres*", "*savane boisé*" (= "under stones", "savanna woodland".)

DISTRIBUTION. Ethiopia, Ivory Coast, Cameroon, Congo, Tanzania, Zambia, Swaziland, South Africa (Fig. 226).

REMARKS. This species is very variable in size, colouration, shape and punctation of head, shape of tergite and sternite of the male genital segment, but the aedeagus is identical in all the examined males.



Figures 183–196. Tergite, sternite of the male genital segment and aedeagus of *Neoxantholinus congoensis* n. sp. (Figs. 183-184), *N. kibale* n. sp. (Figs. 185–187), and *N. superbus* (Figs. 188–190) (bar scale: 0.1 mm). Tergite, sternite of the male genital segment and aedeagus of *Neoxantolinus belingana* n. sp. (Figs. 191–193) and *N. aequatorialis* n. sp. (Figs. 194-196) (bar scale: 0.1 mm).

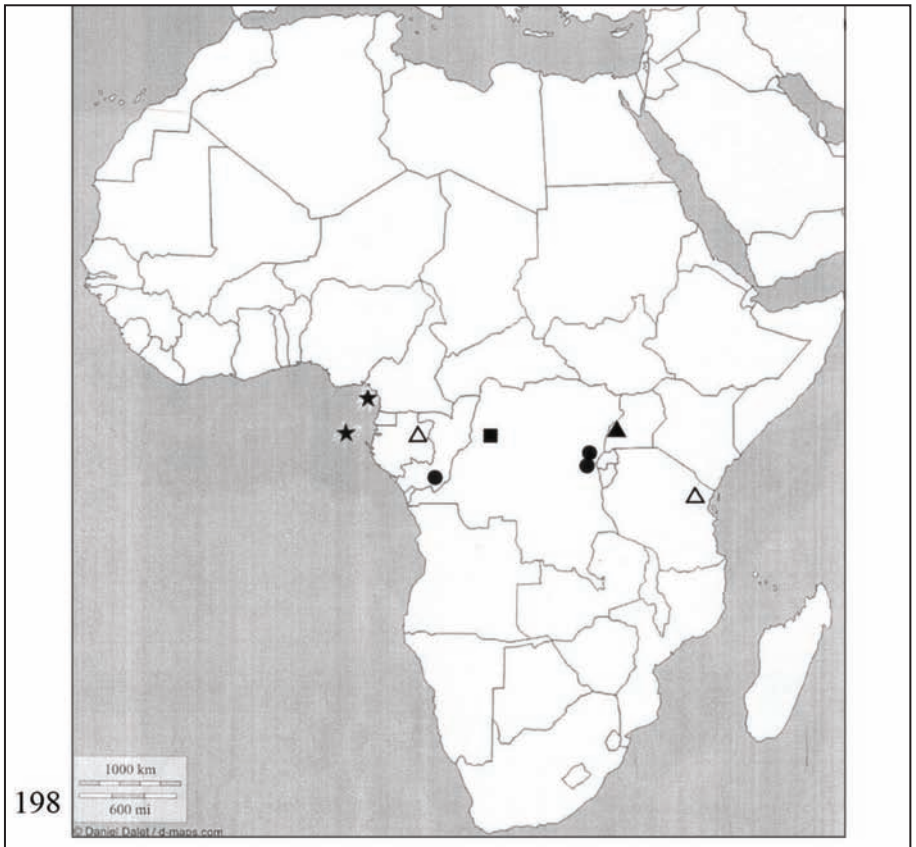


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Figure 198. Distribution of the genus *Neoxantholinus*: *N. congoensis* n. sp. (circle), *N. kibale* n. sp. (filled triangle), *N. superbus* (star), *N. belinganus* n. sp. (open triangle), *N. aequatorialis* n. sp. (square).

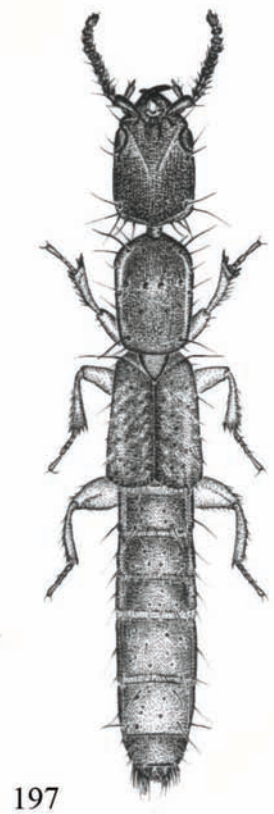

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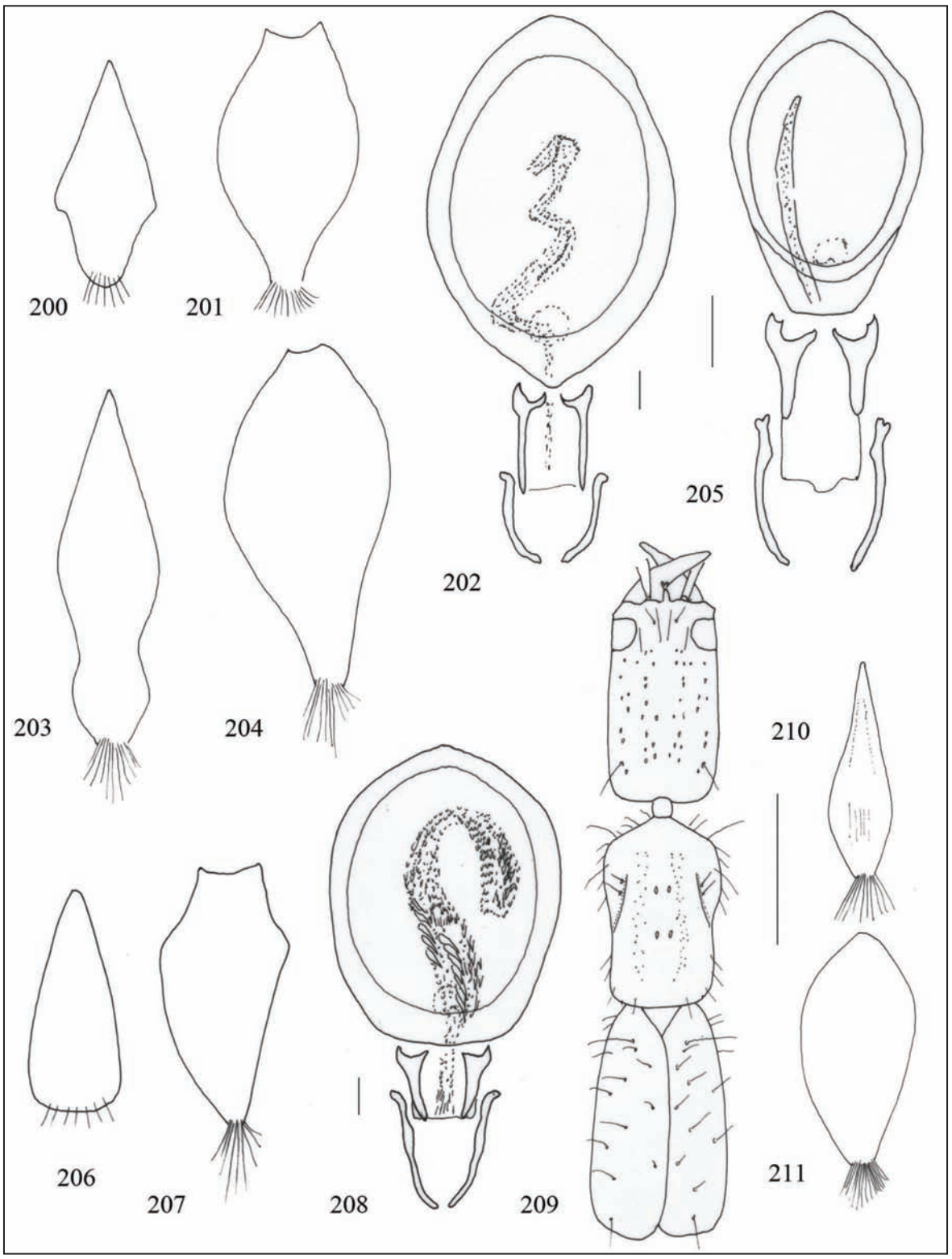
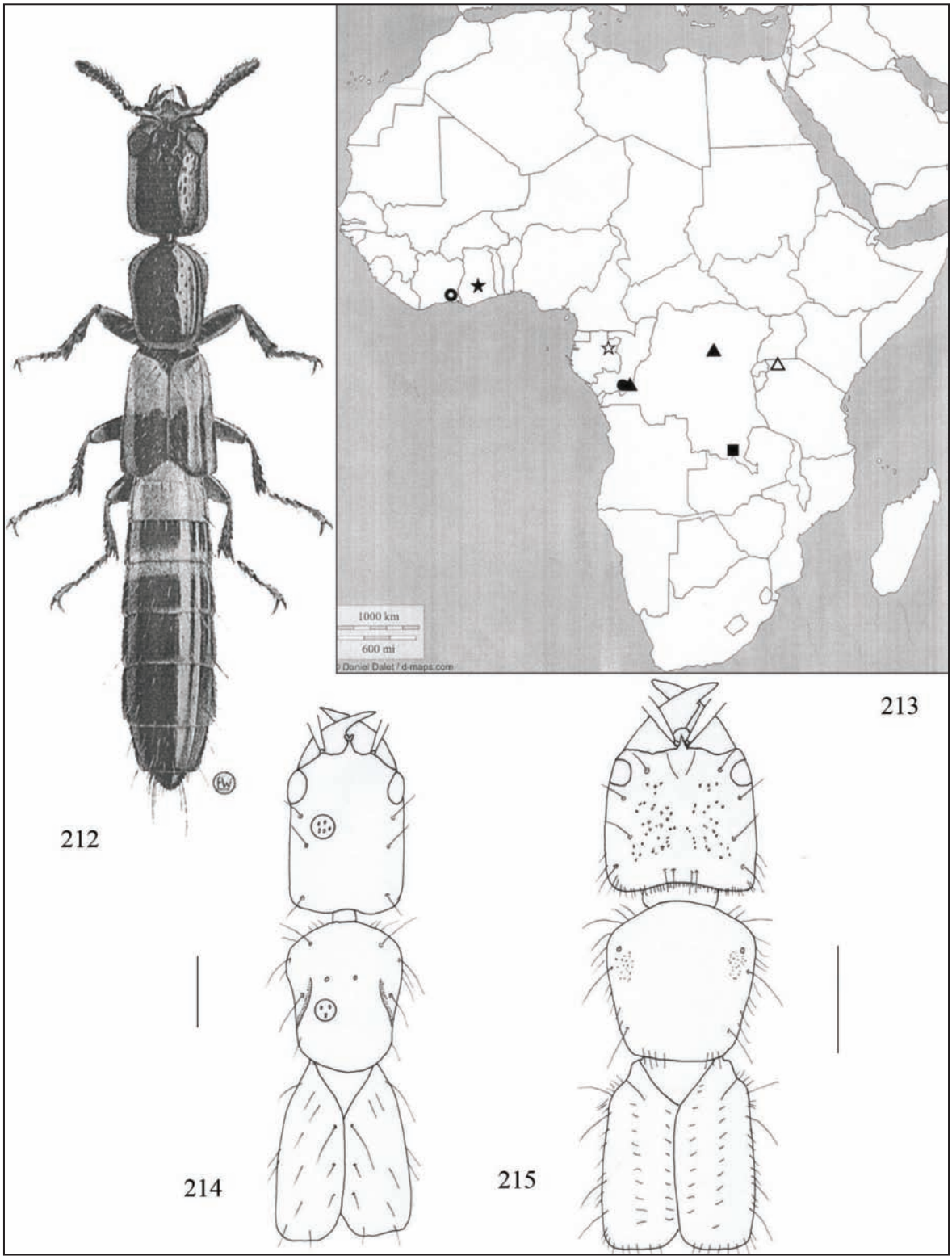
Figure 197. Habitus of *Neoxantholinus* sp. (ex. Bordoni, 2002).

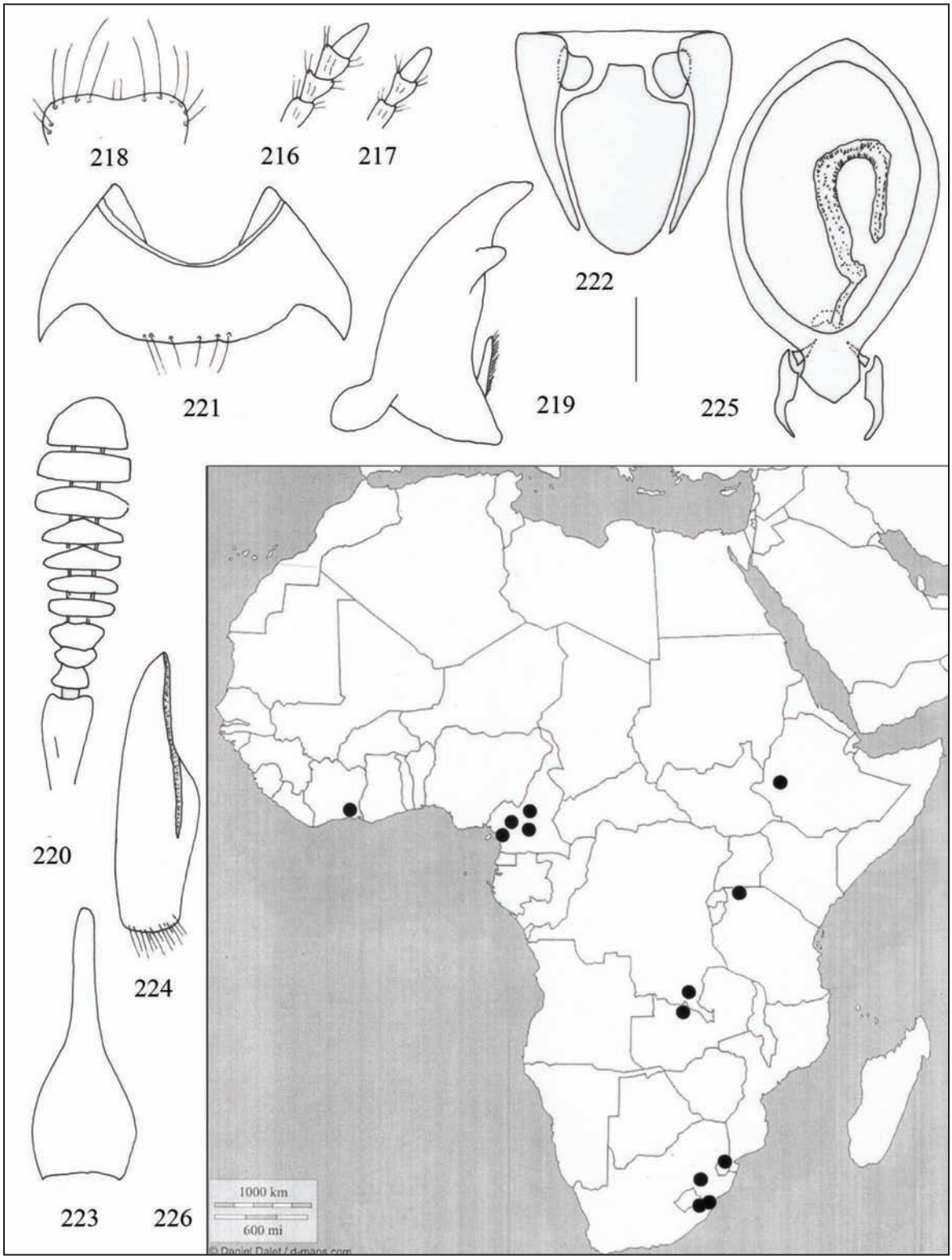
Figure 199. Habitus of *Zeteotomus* sp. (ex Bordoni, 2002).



Figures 200–211. Tergite, sternite of the male genital segment and aedeagus of *Zeteotomus congoensis* (Figs. 200–202) and *Z. ghanensis* n. sp. (Figs. 203–205) (bar scale: 0.1 mm). Tergite, sternite of the male genital segment and aedeagus of *Z. schedli* (Figs. 206–208) (bar scale: 0.1 mm). *Zeteotomus gabonicus*: fore-body (0.5 mm) (Fig. 209); tergite and sternite of the male genital segment (Figs. 210–211) (bar scale: 0.1 mm).



Figures 212–215. Fig. 212: habitus of *Zeteotomus schedli* (ex. Schedl, 1961). Fig. 213: distribution of the genus *Zeteotomus*: *Z. congoensis* (filled circle), *Z. urewekensis* (open triangle), *Z. striolatus* (square), *Z. ghanensis* n. sp. (filled star), *Z. schedli* (filled triangle), *Z. gabonicus* (oper star), *Z. ivorianus* n. sp. (open circle). Figs. 214–215. Fore-body of *Zeteotomus ivorianus* n. sp. (Fig. 214) and *Homorocerus rufipennis* (Fig. 215) (bar scale: 0.5 mm).



Figures 216–226. *Homorocerus rufipennis*: maxillary and labial palpi (Figs. 216, 217), labrum (218), mandible (Fig. 219), antenna (Fig. 220), mesosternum (Fig. 221), female genital segment (Fig. 222), tergite, sternite of the male genital segment and aedeagus (Figs. 223–225) (bar scale: 0.1 mm). Fig. 226: distribution of *Homorocerus rufipennis*.

9. Genus ***Nudobius*** Thomson, 1860 (Figs. 227–348)

Nudobius - C.G. Thomson, 1860: 188; Mulsant & Rey, 1877: 83; Fowler, 1888: 291; Ganglbauer, 1895: 475; Everts, 1898: 297; Casey, 1906: 367 and 380; Reitter, 1908: 17; 1909: 136; Johansen, 1914: 432; Porta, 1926: 91; Scheerpeltz, 1930: 63; 1940: 40: Hansen, 1952: 14; Coiffait, 1956: 55; 1972: 202; Hatch, 1957: 237; Smetana, 1958: 93; 1982: 75; Arnett, 1960: 247; 1968: 247; Moore, 1963: 94; Szekessy, 1963: 49; Palm, 1963: 40 and 44; Lohse, 1964: 157; Moore & Legner, 1974: 557; 1979: 68; Bordoni, 1982: 218; Shibata, 1983: 70; Toth, 1989: 15; Downie & Arnett, 1996: 398; Herman, 2001a: 3720; Bordoni, 2010: 19

TYPE SPECIES. *Staphylinus lentus* Gravenhorst, 1806, fixed by Thomson, 1860, by monotypy.

Subgen. *Pedinolinus* Bernhauer, 1912a: 479; Bernhauer & Schubert, 1914: 299; Scheerpeltz, 1933: 1206; 1956a: 13 (type species fixed by monotypy: *Nudobius africanus* Bernhauer, 1912a; Herman, 2001: 3722, syn. n.

DESCRIPTION. Body (Fig. 227) of medium to large size, 6–15 mm long, flat or convex, winged or apterous. Similar to *Xantholinus* but differing especially in the shape of the male and female genital segments and aedeagus. Frontal grooves deep, ocular grooves indistinct. Mandibles with lateral groove. Labrum short, bilobed (see characters of mouthparts in Bordoni, 2002: figs. 395–399). Gular sutures contiguous. Maxillary and labial palpi, anterior and posterior legs as in figures 228–231. Pronotum with dorsal and lateral series of punctures. Antesternal plate divided. Upper epipleural line meeting the lower line. Anterior tarsi not dilated. Male genital segment without particular characteristics but tergite of characteristc shape (Figs. 232, 278); aedeagus subovoid with more or less short parameres, sometimes with lateral setae; inner sac sometimes ribbon-like and folded on itself, covered with scales and spines (Figs. 234, 274). Female genital segment (Bordoni, 2002: fig. 61).

DISTRIBUTION. The genus includes few species in the Palaearctic Region, including Japan and China, in the Nearctic and Oriental Regions, and nemerous species of the Afrotropical Region (Figs. 347–349).

BIONOMICS. The species live under the bark of conifers and oaks where they prey on the larvae of Scolytidae and Bostrychidae (Schimitschek, 1944). In the mountains they occur especially in vegetal debris. Many authors have studied the biology of *Nudobius*, including Perris, 1853; Schiödte, 1864; Paulian, 1941; Kasule, 1970 and Pototskaia, 1967. An extensive study as been done on *N. pugetanus* Casey, 1920 from North America (Struble, 1930).

REMARKS. Bernhauer (1912a) described the subgenus *Pedinolinus* for the African species with more or less flat body, dark colouration, elytra often red or yellow, dilated head with deep and dense punctation, and evident eyes. Other *Nudobius*, especially in the mountains of Africa, have a convex body, small and flat eyes, brown or yellowish colouration, are apterous or micropterous. All have the same shape of aedeagus, so I prefer to consider the african species divided in two groups: *cavicola* (convexe, apterous species) and *pictipennis* (flat, winged species). In some species (for example *N. congoensi*s) palpi and tarsi are particularly elongated.

KEY TO THE SPECIES GROUPS

-. Body usually convex; head not dilated, subovoidal, without lateral grooves behind eyes; surface of head usually covered with fine punctation; pronotum normally shaped and sinuated; tergite of the male genital segment long, with sinuate sides and long setae on the posterior margin, as the sternite.....1. *N. cavicola* group

-. Body more or less flat; head usually dilated, often with lateral grooves behind eyes; surface of head usually covered with deep and dense punctation; pronotum dilated forward, with very sinuate sides; tergite of the male genital segment often squat, as the sternite, with short setae on the posterior margin.....2. *N. pictipennis* group

1. *Nudobius cavicola* group

This group includes many species that occur at different altitudes and slopes on Mt. Kenya, all of them apterous, brown more or less light or dark; the most useful diagnostic characters after the aedeagus are the size of the body, shape of head and pronotum, and number of punctures of the dorsal series of pronotum.

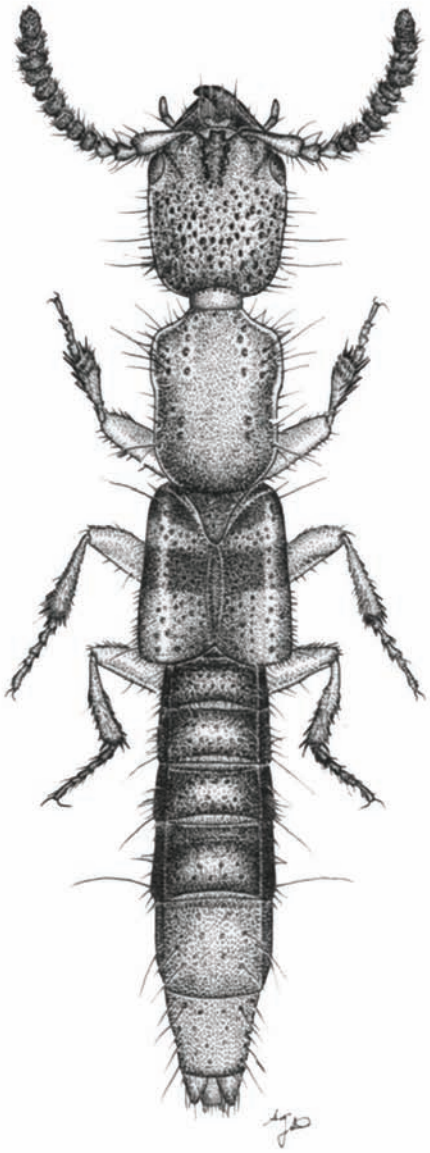


Figure 227. Habitus of *Nudobius* sp. (ex Bordoni, 2002).

KEY TO THE SPECIES

1. Body massive, reddishrown, sometime with darker head, 10–15 mm long.....2
-. Body smaller and more slender, 6–11 mm long....4
2. Head quadrate; body 13–15 mm long; head a little longer than wide, with slightly rounded sides; surface with fine and sparse punctation; pronotum dilated anteriorly, with dorsal series of 7 punctures. Aedeagus large (Fig. 234). Mt Elgon (Kenya).....1. *N. jeanneli*
-. Head ovoid.....3

3. Body 14 mm long; head longer than wide, narrow anteriorly, with evidently rounded sides; surface with dense and wide punctation; pronotum a little dilated forward, almost sub-rectangular; dorsal series of pronotum of 2 anterior and 2 pos-terior punctures. Male unknown. Mt Kenya (Kenya).....2. *N. ontulili* n. sp.
-. Body 12-12.5 mm long; head and pronotum similar to that of previous species; head with smaller and denser punctation, only on medio-anterior surface; dorsal series of pronotum of 8-9 punctures. Aedeagus very narrow and long (Fig. 237). Mt Elgon (Kenya, Uganda)..... ..... *N. altissimus*

4. Body fully winged, black, with posterior margin of elytra and last two abdominal segments reddish, 11 mm long; head ovoid, narrow anteriorly, with evident polygonal micro-reticulation and sparse, widely spaced punctation; dorsal series of pronotum of 6, 7 punctures. Aedeagus with large parameres (Fig. 240). Mt Kenya (Kenya).....4. *N. hausbergianus* n. sp.
-. Apterous, brown more or less paler.....5

5. Body 11–12.5 mm long.....6
-. Body less than 11 mm long.....11

6. Body massive, broad, 11 mm long, entirely reddish brown; head wide, narrow forward, with superficial and sparse punctation; dorsal series of pronotum of 5–7 irregular punctures. Aedeagus sub-ovoidal with long parameres (Fig. 243). Mt Kenya (Kenya).....5. *N. janaki* n. sp.
-. Body normally shaped.....7

7. Body about 12 mm long.....8
-. Body less than 12 mm long.....9

8. Head ovoid, narrow anteriorly, with broadly rounded posterior angles; surface without micro-sculpture; pronotum narrower than head, less dilated anteriorly; dorsal series of pronotum of 2 anterior and 2 posterior punctures. Aedeagus with long parameres and inner sac furnished with spines (Fig. 246). Mt. Kenya (Kenya) ..... *N. spinosus* n. sp.

-. Head sub-rectangular, not narrow anteriorly, with narrowly rounded posterior angles; surface with fine, dense, transverse micro-striation; pronotum anteriorly as wide as head, dilated posteriad; dorsal series of pronotum of 11 punctures. Aedeagus with short parameres and inner sac furnished with scales (Fig. 249). Mt Kenya (Kenya).....7. *N. naromoru* n. sp.

9. Surface of head with polygonal micro-reticulation; head massive, with deep punctation; pronotum longer than head; dorsal series of pronotum of 9, 10 irregular punctures; body 11 mm long. Aedeagus with divergent parameres (Fig. 252). Mt Kenya (Kenya).....8. *N. cavicola*
-. Surface of head with more or less transverse micro-striation.....10

10. Head elongate, with broadly rounded posterior angles; surface with finer punctation; pronotum as long as head; dorsal series of pronotum of 10, 11 punctures; body 11 mm long. Aedeagus with broad, short parameres (Fig. 255). Kinangop for. (Kenya).....9. *N. micropterus*
-. Head quadrate, with narrowly rounded posterior angles; surface with widely spaced punctures; pronotum longer than head; dorsal series of pronotum of 8, 9 punctures; body 11.5 mm long. Aedeagus small, with arched, short parameres (Fig. 258). Mt Kenya (Kenya).....10. *N. rossii* n. sp.

11. Body about 8 mm long.....12
-. Body less than 8 mm long.....14

12. Body wider; head ovoidal enlarged, with rounded sides and pronotum large, dilated forward; dorsal series of pronotum of 8, 9 punctures. Aedaegus small, with short parameres, outside directed (Fig. 261). Mt Kenya (Kenya).....11. *N. alluaudi* n. sp.
-. Body narrower; head sub-rectangular, slightly narrowed anteriorly, with less rounded sides; pronotum narrow, less dilated anteriorly.....13

13. Dorsal series of pronotum of 8 punctures. Aedeagus sub-spherical, with long, asymmetrical parameres with acute apices (Fig. 264). Mt Kenya (Kenya).....12. *N. alpestris* n. sp.
-. Dorsal series of pronotum of 11, 12 punctures. Aedeagus narrow, with long, asymmetrical parameres with acute apices (Fig. 267). Mt Elgon (Kenya).....13. *N. arambourgi*

14. Body about 7 mm long; head sub-ovoid.....15
-. Body less than 7 mm long; head sub-ovoid or sub-rectangular.....16

15. Body light reddish brown; head with sparser punctation and less rounded sides; pronotum longer and narrower, scarcely dilated forward; dorsal series of pronotum of 6, 7 punctures. Aedeagus smaller and narrower (Fig. 270). Mt Kenya (Kenya).....14. *N. kenyanus* n. sp.
-. Body very dark brown; head with dense punctation and more rounded sides; pronotum shorter and broader, visibly dilated anteriorly; dorsal series of pronotum of 6 punctures. Aedeagus larger and broader (Fig. 273, 274). Mt Kenya (Kenya).....15. *N. tenebrosus* n. sp.

16. Body a little longer than 6 mm.....17
-. Body about 6 mm long.....18

17. Head more ovoidal and long, with more evident posterior angles; pronotum sub-rectangular, not dilated forward, with slightly oblique anterior margins; dorsal series of pronotum of 6 punctures; body 6,6 mm long. Aedeagus with long parameres (Fig. 277). Cherangani Hills (Kenya).....16. *N. cheranganicus* n. sp.
-. Head less ovoidal and short, with less evident posterior angles; pronotum more ovoid, a little dilated forward, with very oblique anterior margins; dorsal series of pronotum of 6, 7 punctures; body 6.5 mm long. Aedeagus with very slender and short parameres (Fig. 280). Mt Kinangop (Kenya).....17. *N. apterus*

18. Head and pronotum with transverse micro-striation; eyes larger; pronotum narrower; dorsal series of pronotum of 7 punctures; body 6 mm long. Aedeagus small, broad short parameres and very short inner sac (Fig. 283). Mts. Aberdare (Kenya).....18. *N. minutus* n. sp.
-. Head and pronotum without transverse micro-striation; eyes smaller; pronotum broader; dorsal series of pronotum of 8, 9 punctures; body 5.8 mm long. Aedeagus larger, with long parameres and inner sac with spines (Fig. 285). Cameroon.....19. *N. camerunensis* n. sp.

1. ***Nudobius jeanneli*** (Bernhauer, 1939) comb. n.

Xantholinus jeanneli - Bernhauer, 1939: 77; Herman, 2001a: 3801

TYPE MATERIAL. The Muséum national d'Histoire naturelle in Paris preserves 2 specimens labelled "*Kenya / Cratére de l'Elgon / Pied du Kottobbos / 4000 m*", "*Musée de Paris / Mission de l'Omo / C. Arambourg/ C. A. Chappuis & R. Jeannel/ 1932-33*", "Xantholinus / Jeanneli / *(sp. n.) Bh.*". They are a male and a female. I choose the first as lectotype of the species and the second as paralectotype. The first bears the label "*Lectotypus* Xantholinus Jeanneli *Bh., Bordoni des. 2006*" and the second the label "*Paralectotypus* Xantholinus Jeanneli *Bh., Bordoni des. 2006*". Both are determined as "Nudobius jeanneli *(Bh.), Bordoni det. 2006*".

EXAMINED MATERIAL. Kenya, Mt Elgon, vers. E, 3800–4000 m, 1 female (MNHNP); Mt Elgon, A. Holm, 1 male (NMW)

DESCRIPTION. Length of body: 13–15 mm; from anterior margin of head to posterior margin of elytra: 5–6 mm. Apterous, shiny. Reddish brown, with darker head. Head rounded, transverse, with rounded sides and brooadly rounded posterior angles. Eyes small and flat. Surface of head with large and dense punctures. Pronotum narrow, shorter and narrower than head, anteriorly dilated, sub-rectilinear sided; dorsal series of 8, 9 punctures and lateral series of 3 punctures. Elytra a little dilated posteriad, very short, shorter than pronotum, as wide as it at obsolete humeral angles. Surface with large, dense, very superficial punctures arranged in numerous series. Abdomen with transverse micro-striation and evident punctation arranged in three transverse series. Male genital segment of characteristic shape with narrow pleura, covered with dense pubescence; tergite trapezoidal (Fig. 232); sternite as in figure 233. Aedeagus large (Fig. 234), 2 mm long, roundish, with median lobe sub-rectangular, wide; parameres arched, symmetrical and very short; inner sac ribbon-like, broad, folded on itself and covered with fine small scales.

DISTRIBUTION. Mt Elgon in Kenya (Fig. 287).

BIONOMICS. "*Prairies alpines, sous les pierres, bord des torrents*" (Bernhauer & Chapman, 1939).

2. ***Nudobius ontulili*** n. sp.

EXAMINED MATERIAL. Holotype female: Kenya, Mt Kenya, Ontulili Dal, 3700 m, V. Dall'Asta, 5.VIII.1975 (MRAC).

DESCRIPTION OF HOLOTYPE. Female. Length of body: 14 mm; from anterior margin of head to posterior margin of elytra: 6 mm. Body very large and robust, reddish brown. This is the largest apterous *Nudobius* from Mt Kenya. Head subquadrate, narrowed anteriorly, with rounded sides and narrowly rounded posterior angles. Eyes very small. Ocular grooves very deep and long. Surface of the head with very large and sparse punctation, finer on the sides. Pronotum as long as head, narrower than head, very dilated anteriorly, with largely rounded anterior angles, scarcely sinuate sides; dorsal series of 2 anterior and 2 posterior punctures; lateral series of 5 irregular punctures. Elytra a little shorter and narrower than pronotum, scarcely dilated posteriad, with obsolete humeral angles; surface rugose, with very fine punctation arranged in a few series. Abdomen with fine and dense, transverse micro-striation and fine, sparse but evident punctation arranged in a few series.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. Mount Kenya (Fig. 286).

REMARKS. Male unknown.

3. ***Nudobius altissimus*** (Bernhauer, 1939) comb. n.

X*antholinus altissimus* - Bernhauer, 1939: 78; Herman, 2001a: 3780

TYPE MATERIAL. The Field Museum of Natural History of Chicago preserves 3 specimens labelled "*Kenya / Cratére de l'Elgon/ Pied du Koitobbos/ 4000 m*", "*Musée de Paris/ Mission de l'Omo / C. Arambourg / C. A. Chappuis & R. Jeannel / 1932-33*", "altissimus / *Brnh. Typ.*", "altissimus / *Bernh. Typus / don. Chapman*" (handwritten by Bernhauer). These are three males. I choose one of these as lectotype of the species and the other two as paralectotypes. The first bears the label "*Lectotypus* Xantholinus altissimus *Bh., Bordoni des. 2006*" and the others the label "*Paralectotypus* Xantholinus

altissimus *Bh., Bordoni des. 2006*". All bear the determination label "Nudobius altissimus *(Bh.), Bordoni det. 2006*".

EXAMINED MATERIAL. Kenya, cratère de l'Elgon, pied du Koitobbos, 4000 m, 7 exx. (MNHNP); Mt Kenya, Met. Station, 4115 m, N. Sanfilippo leg., 24.IX.1976, 1 ex. (MCSNG); Mt. Kenya, Met. Station, 3050 m, N. Sanfilippo leg., 22.IX.1976, 1 ex. (cB); Mt Elgon, Geginat, 9.IX.1989, 1 ex. (cJ); Elgon, SSE cratère, 3840 m, N. Leleup, XII.1953, 1 male, 13 females (MRAC), 3 males, 5 females (cB); Elgon, vers. E, 3750 m, N. Leleup, 12.XII.1953, 1 male, 3 females (MRAC), 1 male, 1 female (cB); Elgon, cratère, 3800-4000 m, N. Leleup, X.1953, 2 males, 4 females (MRAC), 1 male, 2 females (cB); Elgon, cratère, Maji Ya Moto, 3460 m, N. Leleup, XII.1953, 2 males, 2 females (MRAC), 1 male, 1 female (cB).

Uganda, Mt Kenya, Mbale, Magagaj, 3900–4100 m, Geginat 21.XII.1994, 3 exx. (cJ), 3 exx. (cB).

DESCRIPTION. Length of body: 12–12.5 mm; from anterior margin of head to posterior margin of elytra: 6–6.2 mm. Apterous, shiny. Body robust, reddish brown. Similar to *N. arambourgi* but much larger, with dilated head and massive pronotum. Head large, quadrate, dilated, with rounded sides and broadly rounded posterior angles. Eyes very small and flat. Surface of head with fine dense polygonal micro-reticulation and with shallow, dense punctation, apart from a median band. Pronotum massive, longer than head, anteriorly dilated where it is as wide as head, with oblique anterior margins, less marked anterior angles and scarcely sinuate sides. Surface with transverse microstriation; dorsal series of 8, 9 superficial punctures and lateral series of 7, 8 punctures close to the lateral margins of pronotum. Elytra short, shorter and narrower than pronotum, slightly dilated posteriad, with obsolete humeral angles. Surface with fine and dense punctation arranged in numerous series. Abdomen with extremely fine and dense, transverse micro-striation and minute punctation, arranged in 2, 3 transverse series. Pleura of the male genital segment very elongate and narrow, with long and narrow tergite (Fig. 235); sternite as in figure 236. Aedeagus long and narrow (Fig. 237), 1.48 mm long, with narrow median lobe; parameres long and slender; inner sac not visible.

DISTRIBUTION. Mt Kenya and Mt Elgon in Kenya/Uganda (Fig. 286).

BIONOMICS. The specimens were collected in "*prairies à bruyères de la zone alpine*" (Bernhauer & Chapman, 1939); "*Kratterrand alpine zone unter Rinde von toten* Senecio"; "*Afroalpine Gebiebe aus Laub v.* Lobelia *und* Senecio"; "*prairie alpine, pied de* Senecio".

4. ***Nudobius hausbergianus*** n. sp.

EXAMINED MATERIAL. Holotype male: Kenya, Mt. Kenya, Chogoria, Hausberg Val., 4000 m, Hapsberg Tarn, Geginat, 30.XII.1990 (cJ); paratypes: same data, 5 females (cJ), 2 males, 2 females (cB).

DESCRIPTION OF THE HOLOTYPE. Male. Length of body: 11 mm; from anterior margin of head to posterior margin of elytra: 5 mm. Body black, slightly rufescent. Similar to *N. altissimus* but darker; head larger and more dilated than in *N. altissimus*, with sub-rectilinear sides; eyes a little larger; pronotum larger, dilated anteriorly, and sides sinuate, with dorsal and lateral series of a few punctures; elytra a little longer. Tergite and sternite of the male genital segment as in figures 238, 239. Aedeagus 0.88 mm long (Fig. 240), with large asymmetrical parameres; inner sac with some scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality.

DISTRIBUTION. Mount Kenya (Fig. 286).

BIONOMICS. The specimens were collected "*unter steinen*".

5. ***Nudobius janaki*** n. sp.

EXAMINED MATERIAL. Holotype male: Kenya, Mt Kenya, Chogoria, Gorges Val., 3900 m, Geginat, 27.XII.1990 (cJ); paratypes: same data, 1 female (cJ), 1 male (cB); same data, unter Lake Michaelson Ges. aus Blattern, 1 male, 1 ex. without genital segment (cJ), 1 male, 1 female (cB); same data, Naro Moru, Teleki Valley, 4100 m, Geginat, 29.XII.1990, 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 11 mm; from anterior margin of head to posterior margin of elytra: 6 mm. Body dark reddish brown. Very similar to *N. altissimus* but with less narrow head anteriorly, longer and narrower pronotum posteriad, more dilated anteriorly; longer elytra with sub-rectilinear and sub-parallel sides. Head with more superficial punctation; elytra with finer and sparser punctures; abdomen with finer transverse micro-striation. Tergite and sternite of the male genital segment as in figures 241, 242. Aedeagus 1.3 mm long (Fig. 243), with evident distal portion and symmetrical parameres; inner sac not visible.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. Patronymic. Dedicated to my friend Jiri Janak, specialist of Staphylinidae, who provided me with interesting material for study.

DISTRIBUTION. Mount Kenya (Fig. 286).

6. ***Nudobius spinosus*** n. sp.

EXAMINED MATERIAL. Holotype male: Kenya, Mt Kenya, 2800 m, Hovorka, 18.I.1994 (NMW); paratype: same data, 1 female (cB).

DESCRIPTION. Length of body: 12 mm; from anterior margin of head to posterior margin of elytra: 6.5 mm (the paratype smaller). Apterous, shiny, without microsculpture, apart from the abdomen which has fine, transverse micro-striation. Dark reddish brown with darker head and lighter elytra; posterior half of 6th visible abdominal segment and genital segment yellowish; antennae and legs brown. Similar to *N. altissimus* but smaller, and of different colouration. Head very narrow anteriorly and very dilated posteriad. Surface with fine, fairly dense punctures, mixed with some setiferous punctures near the ocular groove, near the eyes and between the eyes and the posterior angles. Pronotum with dorsal series of 2 anterior and 2 posterior punctures, all very superficial, and a lateral oblique series of 2 anterior punctures. Elytra shorter and wider than pronotum, with less rounded humeral angles. Surface with fine but deep, widely spaced punctures arranged in a few series; the median series composed of larger punctures. Tergite and sternite of the male genital segment as in figures 244, 245; pleura of normal shape. Aedeagus large (Fig. 246) , 1.48 mm long, sub-ovoid, with median lobe very short; parameres narrow and long; inner sac broad, covered with small scales in the proximal portion and with two opposed series of spines in the distal portion.

VARIABILITY. The paratype female has no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the Latin *spinosus -a -um* (spiny), referring to the inner sac of the aedeagus.

DISTRIBUTION. The species is only know from the type locality in Kenya (Fig. 286).

7. ***Nudobius naromoru*** n. sp.

EXAMINED MATERIAL. Holotype male: Kenya, Mt Kenya, face W Naro Moru track, 2400 m, G. Coulon, 1–20.XI.1977 (MRAC).

DESCRIPTION. Length of body: 12 mm; from anterior margin of head to posterior margin of elytra: 6.5 mm. Body reddish brown, with darker head and pronotum. Apterous. Head sub-rectangular, scarcely narrowed anteriorly, slightly rounded sides and narrowly rounded posterior angles. Eyes small and flat. Surface with superficial punctation, not large nor sparse, but sparser on the sides, apart a median impunctate band. Pronotum shorter and anteriorly dilated and as wide as head, with broadly rounded anterior angles, scarcely sinuate sides, and irregular dorsal series of 11 punctures and lateral series of 5, 6 punctures. Elytra very short, much shorter and narrower than pronotum, with obsolete humeral angles, and superficial, sparse punctation, arranged in a few series. Tergite and sternite of the male genital segment as in figures 247, 248. Aedeagus ovoid (Fig. 249), 1.1 mm long, with symmetrical short broad parameres; inner sac narrow and short, covered with small spines.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. Mount Kenya, at an intermediate elevation (Fig. 286).

REMARKS. Female unknown.

8. ***Nudobius cavicola*** (Cameron, 1938)

Xantholinus (*Typhlodes*) *cavicola* - Cameron, 1938: 202; Paulian, 1938: 210; 1941: 214
Nudobius cavicola - Jeannel & Jarrige, 1949: 373; Bordoni & Oromì, 1998: 1157; Herman, 2001a: 3723
Xantholinus excelsus - Bernhauer, 1939: 78; Jeannel & Jarrige, 1949: 373 (syn. of *X. cavicola*); Herman, 2001a: 3723

TYPE MATERIAL. *Xantholinus cavicola* was described on the basis of an unknown number of specimens from Kenya, "*Grotte Campbell, prairies alpines du mont Kenya, versant nord-ouest, 3480 m, dans le guano d'Hyrax, Alluaud & Jeannel*". This/these specimen/s should be in the Muséum national d'Histoire naturelle in Paris, but were not found.

The Natural History Museum in London preserves 1 specimen labelled "*Syntype*" (round label with light blue border), "*grotte / Campbell",* "Xantholinus / (Typhlodes) / cavicola *Cam.*". It is a female bearing the determination label "Nudobius cavicola *(Cam.), Bordoni det. 2009*". I choose this specimen as lectotype of the species; it bears the label "*Lectotypus* Xantholinus cavicola *Cam., Bordoni des. 2013*".

The Field Museum of Natural History in Chicago preserves 1 specimen labelled "*Afrique or. anglaise/ Mt. Kenya vers. Ouest/ zone alpine / Alluaud & Jeannel*", "*Prairies alpines / Reg.* Senecio *Arbor. / Fevr. 1912 staz. 45",* "excelsus */ Brnh. type*", "excelsus */ Bernh. Typ. / don. Chapman*" (handwritten by Bernhauer). It is a male that I choose as lectotype of the species. It bears the label "*Lectotypus* Xantholinus excelsus *Bh., Bordoni des. 2006*" and the determination label "Nudobius cavicola *(Cam.), Bordoni det. 2006*".

EXAMINED MATERIAL. Kenya, Mt Kenya, vers. W, 3300–3500 m, Alluaud and Jeannel, I–II.1912, 1 female (MNHNP).

DESCRIPTION. Length of body: 11 mm; from anterior margin of head to posterior margin of elytra: 4.4 mm. Apterous, shiny. Body robust, reddish brown. Similar to *N. altissimus* but smaller. Head dilated posteriad, with slightly rounded sides with narrowly rounded posterior angles. Eyes small and a little protruberent. Surface with fine and dense polygonal micro-reticulation and large, sparse punctation, apart from the disc. Pronotum longer than head, anteriorly dilated and there narrower than head, with oblique anterior margins, broadly rounded anterior angles and sinuate sides. Surface with transverse micro-striation and dorsal series of 9, 10 irregular punctures and lateral series of 3 widely spaced punctures and some punctures near the anterior margins. Elytra very short, much shorter and narrower than pronotum, with obsolete humeral angles. Surface with fine and sparse punctation, arranged in a few widely spaced series. Abdomen with extremely fine and dense transverse micro-striation and fine and sparse punctation on the sides. Tergite and sternite of the male genital segment as in figures 250, 251. Aedeagus sub-rectangular (Fig. 252), 0.85 mm long; median lobe with sub-rectilinear posterior margin; parameres divergent and short; inner sac tube-like short, covered with dense small scales.

DISTRIBUTION. Kenya (Fig. 286).

BIONOMICS. The specimens were collected in "*prairies alpines avec bruyères et* Senecio" (Bernhauer & Chapman, 1939); "*prairies alpines du mont Kenya, versant nord-ouest, alt. 3480 m, dans guano d'Hyrax*" (Cameron, 1938); "*Prairies alpines avec bruyères arbor.*".

REMARKS. I consider plausible the synonymy proposed by Jeannel & Jarrige (1949) who were able to compare the specimens of the two species, described a year apart and collected by one of them. In the description of *X. excelsus* Bernhauer (1939) wrote that the specimen was collected at 4,000–4,100 m above sea level.

9. ***Nudobius micropterus*** (Bernhauer, 1939) comb. n.

Xantholinus micropterus - Bernhauer, 1939: 79; Herman, 2001a: 3812
Xantholinus microphthalmus - Bernhauer, 1939: 79; Herman, 2001a: 3812, syn. n.

TYPE MATERIAL. The Muséum national d'Histoire naturelle in Paris preserves 1 specimen labelled "*Kenya / Mais. Forest Kinangop / Mt. Aberdare vers' Ouest / 2600 m*", "*Musée de Paris / Mission de l'Omo / C. Arambourg / C. A. Chappuis &*

R. Jeannel / 1932-33", "*TYPE*" (printed on red label), "Xantholinus / micropterus */ n. sp. Bernh.*" (handwritten on green label). It is a female that I choose as paralectotype of the species. It now bears the label "*Paralectotypus* Xantholinus micropterus *Bh., Bordoni des. 2006*" and the determination label "Nudobius micropterus *(Bh.), Bordoni det. 2006*".

The Muséum national d'Histoire naturelle in Paris preserves 1 specimen labelled "*Kenya / Mais. Forest Kinangop / Mt Aberdare, vers'Ouest / 2600 m*", "*Musée de Paris / Mission de l'Omo / C. Arambourg / C. A. Chappuis & R. Jeannel*", "*TYPE*" (printed on red label), "Xantholinus / microphthalmus */ (sp. n.) Bernh*". It is a male identical to *N. micropterus* that I chose as lectotype of the species. It now bears the label "*Lectotypus* Xantholinus micropterus *Bh., Bordoni des. 2006*".

The Field Museum of Natural History in Chicago preserves 1 specimen with the same two labels and "microphthalmus */ Brnh. sp. n.*", "microphthalmus */ Brnh. Type / Chapman don.*" (handwritten by Bernhauer). It is a male that I choose as lectotype of the species. It bears the label "*Lectotypus* Xantholinus micropterus *Bh., Bordoni des. 2006*".

The specimens bear the label "Nudobius micropterus *(Bh.), Bordoni det. 2013*".

Description. Length of body: 11 mm; from anterior margin of head to posterior margin of elytra: about 5 mm. Apterous, shiny. Body slender and narrow, reddish brown. Head large, ovoid, elongate, slightly narrowed anteriorly, with slightly rounded sides and broadly rounded posterior angles. Eyes small and flat. Surface of head with fine, dense, transverse micro-striation and fine, sparse punctation, the punctures coarser on the sides. Pronotum very dilated anteriorly where it is as wide as head, as long as it, with very oblique anterior margins, rounded anterior angles and sinuate sides. Surface similar to that of head, with dorsal series of 7–11 fine punctures and lateral series of 3, 4 widely spaced punctures. Elytra dilated pos-teriad, short, shorter and narrower than pronotum, with obsolete humeral angles. Surface rugose, with superficial punctation arranged in a few widely spaced series. Abdomen with very fine and dense transverse micro-striation, sometimes with polygonal micro-reticulation at the base of the segments and with fine and very sparse punctation. Tergite and sternite of the male genital segment as in figures 253, 254. Aedeagus subovoidal (Fig. 255), with very short and robust parameres and inner sac provided with few, sparse scales.

Distribution. The species is so far only known from the type locality in Kenya (Fig. 287).

Remarks. Similar to *N. altissimus* but differing in the following characters: head much narrower, antennae more robust, sparser punctation, narrower pronotum, narrower elytra with much sparser punctation. The size in the description of *N. micropterus* is erroneous and the altitude of 3600 m for *N. microphthalmus* is not the one shown on the label (2600 m).

10. ***Nudobius rossii*** n. sp.

Examined material. Holotype male: Kenya, Mt Kenya, (road from Naru Moru), 3100–4300 m, W. Rossi, 24–25.IX.1976 (cB); paratypes: same data, 3 female (cB); same data, 3400 m, leg. ?, I.1977, 1 female (cB).

Description of Holotype. Male. Length of body: 11.5 mm; from anterior margin of head to posterior margin of elytra: 5 mm. Body dark reddish brown. Similar to *N. janaki* n. sp. but longer, narrower, with head not dilated posteriad, sub-rectilinear and sub-parallel sides, instead of a little rounded. Eyes similar, small and flat. Surface the head with transverse micro-striation instead of polygonal micro-reticulation, with more superficial and finer punctation. Pronotum less dilated anteriorly, with shorter dorsal series of punctures. Elytra shorter, with similar fine and sparse punctation. Tergite and sternite of the male genital segment as in figures 256, 257. Aedeagus 0.77 mm long (Fig. 258), small in relation to the size of the body, with short broad parameres; inner sac not visible.

Variability. The paratypes have no substantial morphological differences with the holotype described.

Etymology. Patronymic. Dedicated to my friend Walter Rossi, a specialist in Laboulbeniales, who has done extensive research in Sierra Leone.

Distribution. Mount Kenya (Fig. 274).

11. ***Nudobius alluaudi*** n. sp.

EXAMINED MATERIAL. Holotype male: Kenya, Mt Kenya, face W , 4000–4100 m, Alluaud & Jeannel, II.1912 (MNHNP); paratypes: same data, Mackinder Val, Na nyuku, 4000-4200 m, Geginat, 1.I.1991, 2 males (cJ); same data, Sirimon Track, 3900 m, U. Dall'Asta, 5.VIII.1975, 2 males (MRAC); same data, 3500 m, 3 females (MRAC); same data, 3345 m, 27.VII.1975, 2 females (cB); same data, 5.VII.1975, 1 female (MRAC), 1 female (cB); same data, 3240 m, 30.VII.1975, 2 females (MRAC); same data, 3150 m, 31.VII.1975, 2 males, 6 females (MRAC), 2 males, 3 females (cB); same data, face W Naro Moru track, 2400 m, G. Coulon, 1-20.IX.1977, 2 males, 3 females (MRAC), 2 females (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 8 mm; from anterior margin of head to posterior margin of elytra: 4 mm. Body reddish brown. Similar to *N. arambourgi*, but darker, more robust, larger. Head more dilated; pronotum much broader and robust; elytra broader. Surface of head with very fine, polygonal micro-reticulation and sparser punctation. Pronotum with dorsal series composed of more numerous and deeper punctures; elytra with deeper punctation; abdomen with finer transverse micro-striation. Tergite and sternite of the male genital segment as in figures 259, 260. Aedeagus ovoid (Fig. 261), small, 0.6 mm long, with short, symmetrical parameres; inner sac short and large, covered with sparse scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. Patronymic. Dedicated to Charles Alluaud (1861–1949), French entomologist; who made many journeys to Africa.

DISTRIBUTION. West slopes of Mount Kenya (Fig. 286).

BIONOMICS. Some specimens were collected "*in der steinen*", "*prairies alpines, reg.*. Senecio *arbor.*".

12. ***Nudobius alpestris*** n. sp.

EXAMINED MATERIAL. Holotype male: Kenya, Mt Kenya, 4100 m, H. Coiffait (cB); paratype: same data, Likey Valley, Na Nyuki, W Abhang umg. Camp 8, 4000 m, Geginat, 1.I.1991, 1 male (cJ).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 8 mm; from anterior margin of head to posterior margin of elytra: 3,5 mm. Body dark reddish brown. Similar to *N. alluaudi* n. sp. but with larger quadrate head, sub-rectilinear and sub-parallel sides. Eyes small but slightly protruberent. Surface with coarser and sparser punctation; pronotum shorter, with less oblique anterior margins; dorsal series of 8 irregular punctures. Tergite and sternite of the male genital segment as in figures 262, 263. Aedeagus ovoid (Fig. 264), small, 0.77 mm long, with large parameres, with acute apex; inner sac with fine, sparse scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet derives from the Latin *alpestris -e* (alpine).

DISTRIBUTION. Mount Kenya (Fig. 286).

BIONOMICS. One specimens was collected in "*Gesiebe aus Laub von* Senecio".

13. ***Nudobius arambourgi*** (Bernhauer, 1939) comb. n.

Xantholinus Arambourgi - Bernhauer, 1939: 80; Herman, 2001a: 3781

TYPE MATERIAL. The Field Museum of Natural History in Chicago preserves 3 specimens; the first is labelled as the first of the specimens in the MNHNP, the second have not the third label and the third have the label "Arambourgi */ (sp. n.) Bh.*" in place of the aforementioned third. They are three males. I chose one of these as lectotypes of the species and the other as paralectotypes. The first bear the label "*Lectotypus* Xantholinus Arambourgi *Bh., Bordoni des. 2006*" and the other "*Paralectotypus* Xantholinus Arambourgi *Bh., Bordoni des. 2006*". All have the determination label "Nudobius arambourgi (Bh.), Bordoni det. 2013".

The Muséum national d'Histoire naturelle in Paris preserves 2 specimens labelled "*Kenya / Camp III de l'Elgon / zone des bruyéres / 3500*

m", "*Musée de Paris / Mission de l'Omo / C. Arambourg / C. A. Chappuis & R. Jeannel / 1932-33*", "Arambourgi */ Brnh. sp. n./*", "Arambourgi */ Brnh. Type / Chapman don.*" (handwritten by Bernhauer). They are one male and one female. The first is also labelled "Xantholinus / Arambourgi */ (sp. n.) Bernh.*". The second bears the first two named labels. I chose these specimens as paralectotypes of the species. They bears the label "*Paralectotypus* Xantholinus Arambourgi *Bh., Bordoni des. 2006*". All have the determination label "Nudobius arambourgi *(Bh.), Bordoni det. 2006*".

EXAMINED MATERIAL. Kenya, Mt Elgon, vers. E, 3500 m, 1 male (MNHNP).

DESCRIPTION. Length of body: 8 mm; from anterior margin of head to posterior margin of elytra: 4.5 mm. Body narrow and slender. Apterous, entirely pale yellowish brown. Head subquadrate, with slightly rounded sides and well rounded posterior angles. Eyes very small and flat. Surface of head with fine and dense, polygonal micro-reticulation and fine and sparse punctation, apart form a median impuctate band. Frontal sulci long and deep; ocular sulci short. Pronotum subrectangular, slightly longer than head, a little dilated anteriorly where it is narrower than head, with less oblique anterior margins, very broadly rounded anterior angles, and less sinuate sides. Surface with more or less transverse microstriation; dorsal series of 11, 12 irregular and superficial punctures and lateral series of 5, 6 similar punctures. Elytra short, much shorter than pronotum and posteriorly as wide as pronotum, with obsolete humeral angles. Surface shiny but not flat, with large and very superficial punctures arranged in a few series. Abdomen with transverse micro-striation and very fine punctation on the sides only. Tergite and sternite of the male genital segment as in figures 265, 266. Aedeagus small and narrow (Fig. 267), 0.66 mm long; parameres asymmetrical, long and thick; inner sac not visible.

DISTRIBUTION. Kenya: Mt Elgon (Fig. 287).

BIONOMICS. "*Prairies à bruyéres de la zone alpine*" (Bernhauer & Chapman, 1939); "*Zone des bruyères*".

14. ***Nudobius kenyanus*** n. sp.

EXAMINED MATERIAL. Holotype male: Kenya, Mt Kenya, 3500 m, H. Coiffait, I.1971 (cB); paratypes: same data, Holm, 11.I.1972, 1 male (ZML); same data, Met. Station, 3050 m, N. Sanfilippo, 22.IX.1976, 1 male, 3 females (MCSNG), 2 males (cB); same data, vers. W, 2400–2800 m, Alluaud and Jeannel, I.1912, 1 male (MNHNP); same data, 3000–3200 m, H. Franz, 1 male, 1 female (NMW), 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 7 mm; from anterior margin of head to posterior margin of elytra: 2.7 mm. Body yellowish orange. Head ovoid, narrowed anteriorly, with slightly rounded sides and broadly rounded posterior angles. Eyes flat, as long as antennomeres 4° and 5° together. Surface with transverse microstriation and fine and very sparse punctation. Pronotum narrow, scarcely longer and anteriorly approx-imately the same width as head, with slightly oblique anterior margins; dorsal series of 6, 7 punctures and lateral series of 4, 5 punctures. Elytra short, shorter than pronotum, posteriorly slightly wider than pronotum, with obsolete humeral angles; surface with fine and dense punctation, arranged in numerous series. Tergite and sternite of the male genital segment as in figures 268, 269. Aedeagus ovoid (Fig. 270), small, 0.5 mm long, narrow, with asymmetric, narrow parameres; inner sac narrow and short, covered with fine scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Kenya.

DISTRIBUTION. Mount Kenya, west slopes (Fig. 286).

15. ***Nudobius tenebrosus*** n. sp.

EXAMINED MATERIAL. Holotype male: Kenya, Mt Kenya, Naro Moru, Teleki Valley, 4100 m, Geginat, 29.XII.1990 (cJ); paratypes: same data, 1 male, 2 females (cJ), 1 male, 2 females (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 7 mm; from anterior margin of head to pos-

terior margin of elytra: 3.2 mm. Body narrow, dark brown with antennae and legs light brown. Head, pronotum and abdomen with transverse microstriation. Head elongate, with sub-rectilinear and sub-parallel sides. Surface with very sparse punctation. Eyes small and slightly protruberent. Pronotum longer than and of the same width as head, scarcely dilated anteriorly, with oblique anterior margins; dorsal series of 6 deep punctures and lateral series of 3 anterior and 2 posterior punctures. Elytra shorter than pronotum, posteriorly the same width as pronotum, with scarcely marked humeral angles. Surface with superficial and sparse punctation. Abdodmen with very fine and sparse punctation. Tergite and sternite of the male genital segment as in figures 271, 272. Aedeagus ovoid (Figs. 273, 274), 0.6 mm long, slightly enlarged, with short and broad parameres; inner sac with some longitudinal scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is derived from the Latin *tenebrosus -a -um* (dark), referring to the colouration of the body.

DISTRIBUTION. Mont Kenya, Naru Moru (Fig. 286).

BIONOMICS. Some specimens were collected "*unter tief eingeetetten steinen*" (= under deeply embedded stones).

16. ***Nudobius cheranganicus*** n. sp. (Fig. 1672)

EXAMINED MATERIAL. Holotype male: Kenya, Cherangani (Hills), Chalelaicelat, 3150 m, T. Leiler, 12.II.1983 (cJ); paratypes: same data, 2 females (cJ), 1 male, 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.6 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Body yellowish orange. Apterous. Head and pronotum with transverse micro-striation. Similar to *N. kenyanus* n. sp. but shorter, much narrower; head with sparser punctation; pronotum more sub-rectangular, less dilated anteriorly, with less sinuate sides; dorsal series of 6 punctures and lateral series of 5 punctures; elytra proportionately narrower and shorter, with coarser and denser punctation. Tergite and sternite of the male genital segment as in figures 275, 276. Aedeagus oval (Fig. 277), 0.6 mm long, with symmetrical parameres; inner sac short and narrow, covered with minute scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality.

DISTRIBUTION. Kenya, Cherangani Hills (Fig. 287).

REMARKS. The Cherangani Hills, in the western part of Kenya on the border of Tanzania are the site of one of Kenya's five main indigenous forests.

17. ***Nudobius apterus*** (Bernhauer, 1939) comb. n.

Xantholinus apterus - Bernhauer, 1939: 81; Herman, 2001a: 3781

TYPE MATERIAL. The Field Museum of Natural History of Chicago preserves 1 specimen "*Kenya / Mt Kinangop / prairies alpines / 3500-3700 m*", "*Musée de Paris / Mission de l'Omo / C. Arambourg / C. A. Chappuis & R. Jeannel / 1932-33*", and "Xantholinus / apterus *Brnh. / sp. n.*", "apterus *Brh. / Typus / Chapman don.*" (in Bernhauer's hand). It is a male that I chose as lectotype of the species; it bears the label "*Lectotypus* Xantholinus apterus *Bh., Bordoni des. 2006*", and the determination label "Nudobius apterus *(Bh.), Bordoni det. 2013*".

The Muséum national d'Histoire naturelle in Paris preserves 1 specimen with the same two first labels and "*TYPE*" (printed on red label), "Xantholinus / apterus / *(sp. n.) Bernh.*". It is a male which I chose as paralectotype of the species; it now bears the label "*Paralectotypus* Xantholinus apterus *Bh., Bordoni des. 2006*" and the determination label "Nudobius apterus *(Bh.), Bordoni det. 2006*".

DESCRIPTION. Length of body: 6.5 mm; from anterior margin of head to posterior margin of

elytra: 2.7 mm. Apterous. Entirely light brown. Head oval, with rounded sides from eyes to the neck. Eyes small and flat. Surface of head with transversal micro-striation and clearly visible, sparse punctation, apart the median band. Pronotum a little dilated forward, with less marked anterior angles, and slightly sinuate sides; surface with transverse micro-striation, dorsal series of 6, 7 punctures and lateral series of 4, 5 punctures. Elytra subquadrate, very short, broader than pronotum, with obsolescent humeral angles; surface shiny, with superficial, sparse punctation, arranged in a few widely spaced series. Abdomen with transverse micro-striation and fine, very sparse punctation on the sides. Tergite and sternite of the male genital segment as in figures 278, 279. Aedeagus very small (Fig. 280), oval, 0.44 mm long, with asymmetrical, small short parameres; inner sac tape-like, wide, with some median scales.

DISTRIBUTION. Kenya: Mt Kinangop in the southern Aberdare Range.

BIONOMICS. "*Prairies alpines, sous débris végétaux*" (Bernhauer & Chapman, 1939).

18. ***Nudobius minutus*** n. sp.

EXAMINED MATERIAL. Holotype male: Kenya, Mts. Aberdare, H. Franz (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 3.3 mm. Body yellowish orange. Head and pronotum with transverse micro-striation. Similar to *N. kenyanus* n. sp. Body narrower than *N. kenyanus* n. sp., head more elongate and narrower, with eyes larger; pronotum proportionately narrower and longer; dorsal series of 7 punctures and lateral series of 3 anterior punctures; elytra shorter, with obsolete humeral angles and coarser, deeper punctation. Tergite and sternite of the male genital segment as in figures 281, 282. Aedeagus ovoid (Fig. 283), very small, 0.37 mm long, with broad asymmetrical, parameres; inner sac short and narrow, with minute and sparse scales.

ETYMOLOGY. The specific epithet is derived from the Latin *minutus -a -um* (minute).

DISTRIBUTION. Kenya, Aberdare Mountains (Fig. 287).

REMARKS. Female unknown. The Aberdare Range is a 160 km long mountain range north of Nairobi, with an average elevation of 3500 m. It is located in west central Kenya and the main ecosystems are rainforest giving way to dense bamboo forests and then moorland.

19. ***Nudobius camerunensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Camerun, Forêt de Bafut, Nguemba, leg. ?, 17.VIII.1965 (MNHNP); paratype: same data, 1 female (MNHNP).

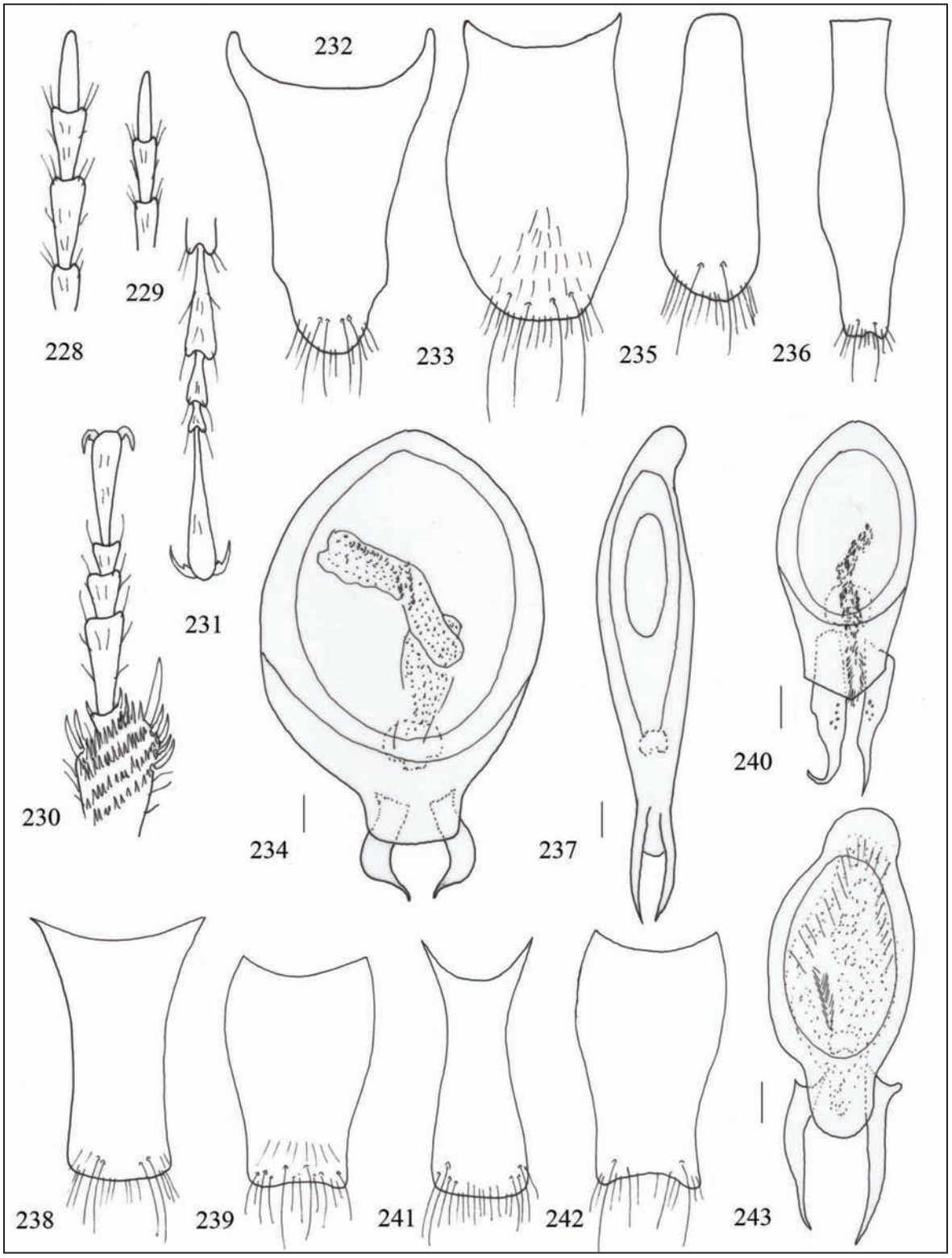
DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.8 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Similar to *N. apterus* in size, colouration and shape, but broader and shorter; head less elongate; pronotum much wider; elytra longer and wider; head without transverse micro-striation and sparser punctation; pronotum without transverse micro-striation and denser punctation; elytra with much finer and denser punctation. Tergite (sternite missing) of the male genital segment as in figure 284. Aedeagus oval (Fig. 285), narrow, 0.74 mm long, with broad symmetrical parameres; inner sac short, covered with opposing short spines, as shown in enlarged detail.

VARIABILITY. The paratype female has no substantial morphological differences with the holotype described.

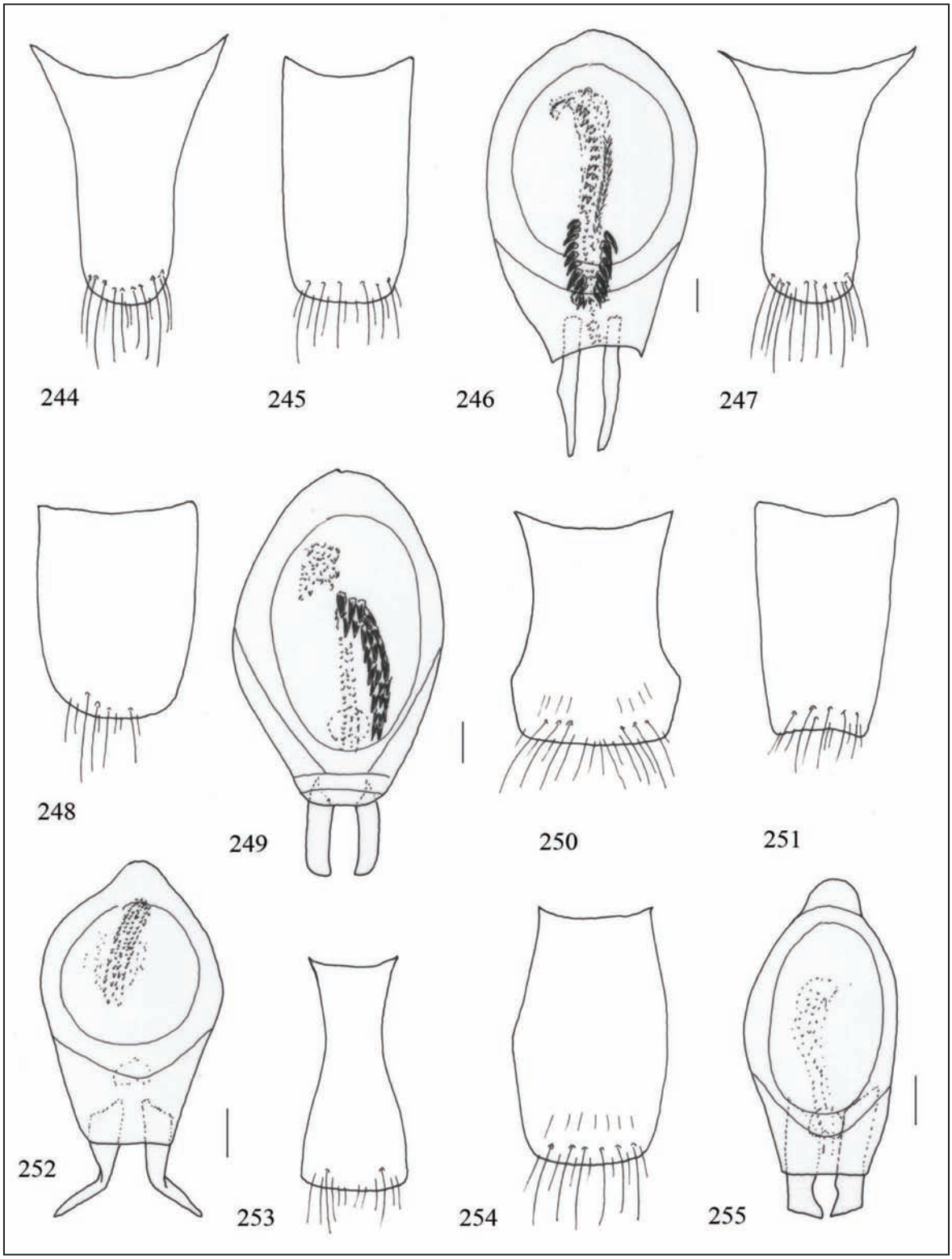
ETYMOLOGY. The specific epithet refers to Cameroon.

DISTRIBUTION. The species is only known from the type locality in Cameroon.

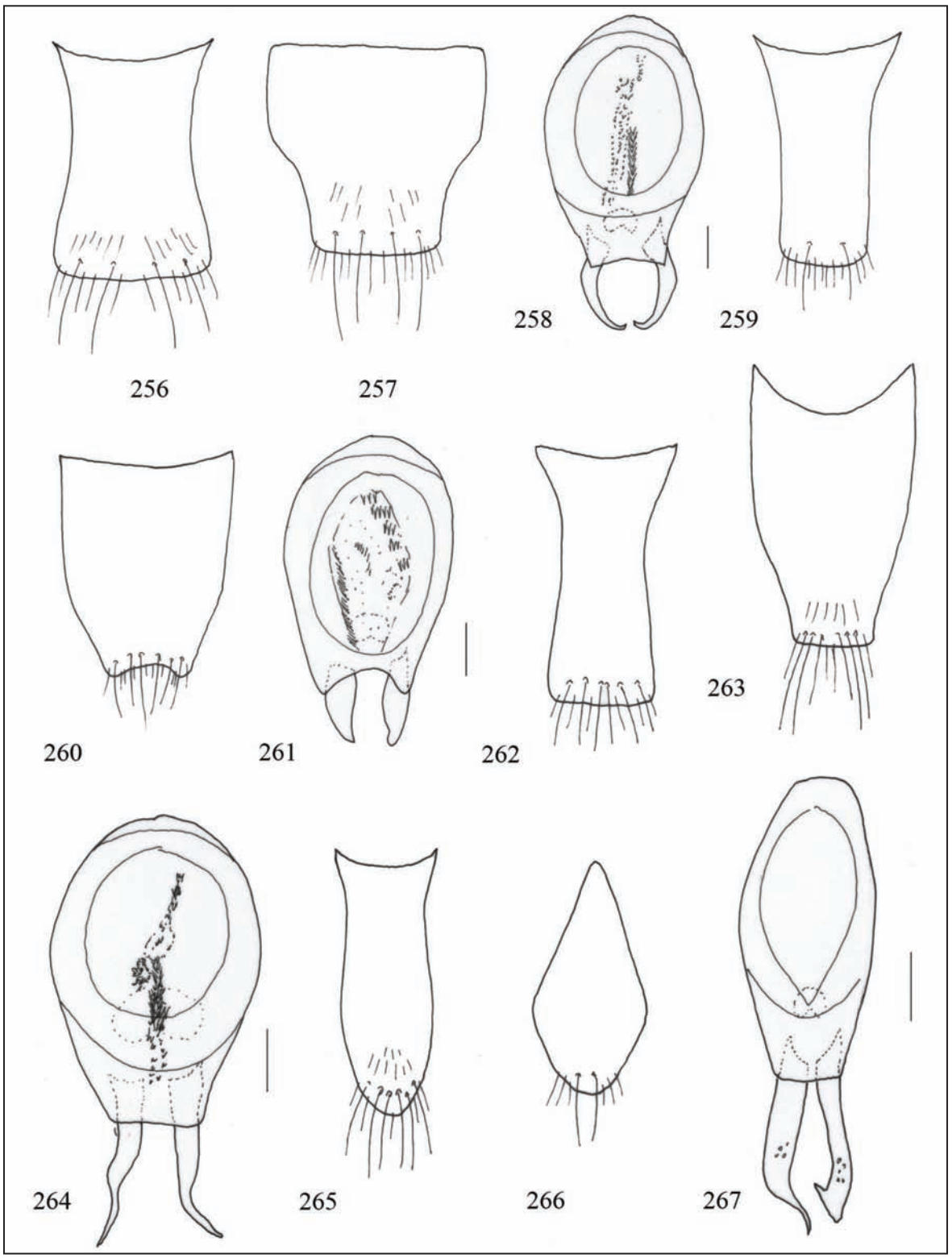
REMARKS. The Forest of Bafut, rich in *Eucalyptus*, is situated in northwestern Cameroon. The specimens were identificated by Jarrige in litteris as "*Nudobius camerounensis*". The series also included 2 specimens from the same locality that however belong to the genus *Metocinus* (cf. *Metocinus bafut* n. sp.), easily distinguishable from *Nudobius* by the dilated anterior tarsi. A new genus of Staphylinidae, *Bafutella* Levasseur, 1968 was also described from this forest.



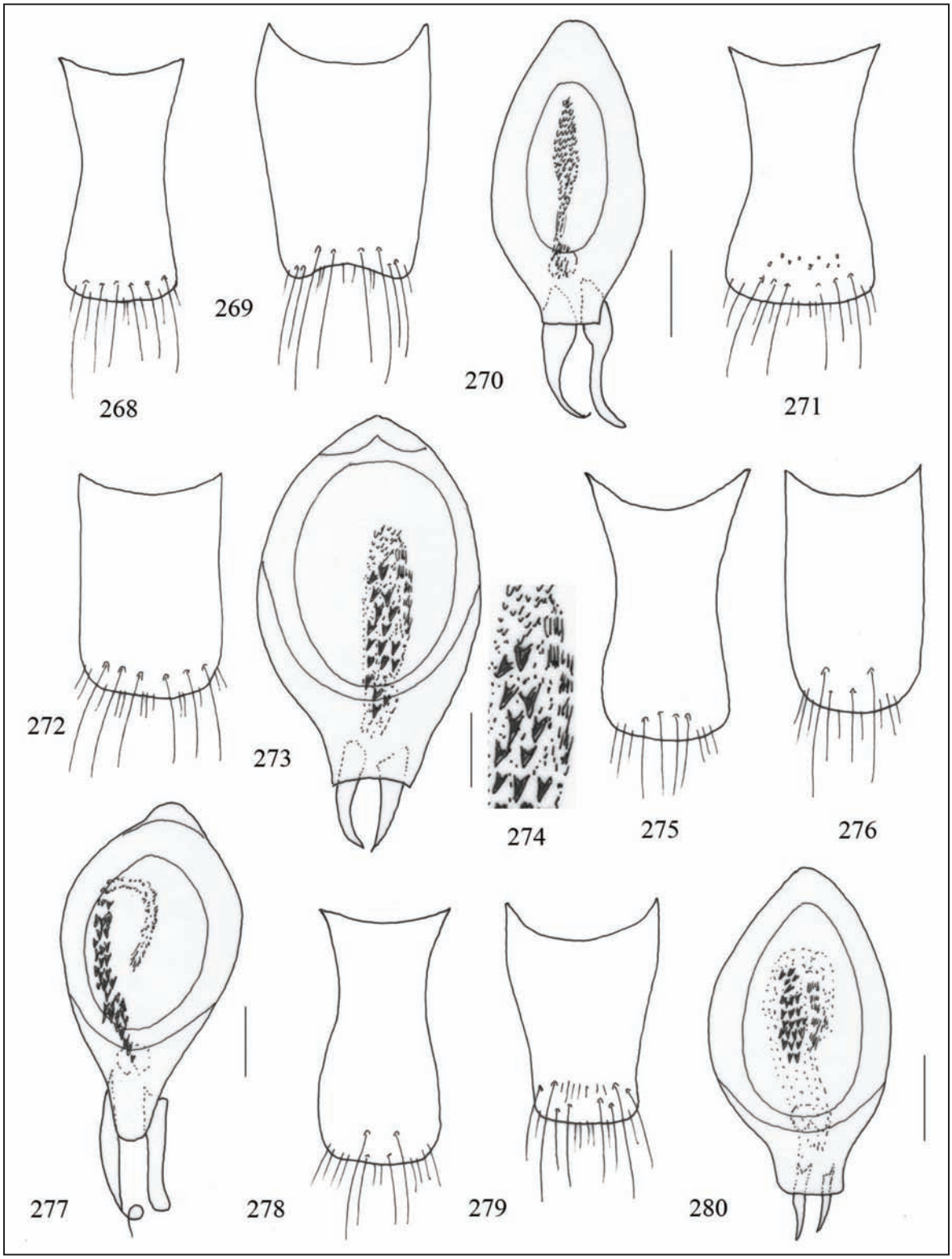
Figures 228–243. *Nudobius* sp.: maxillary and labial palpi (Figs. 228, 229), anterior and posterior tarsi (Figs. 230, 231). Tergite, sternite of the male genital segment and aedeagus of *N. jeanneli*: (Figs. 232–234) and *N. altissimus* (Figs. 235–237) (bar scale: 0.1 mm). Tergite, sternite of the male genital segment and aedeagus of *N. hausbergianus* n. sp. (Figs. 238–240) and *N. janaki* n. sp. (Figs. 241–243) (bar scale: 0.1 mm).



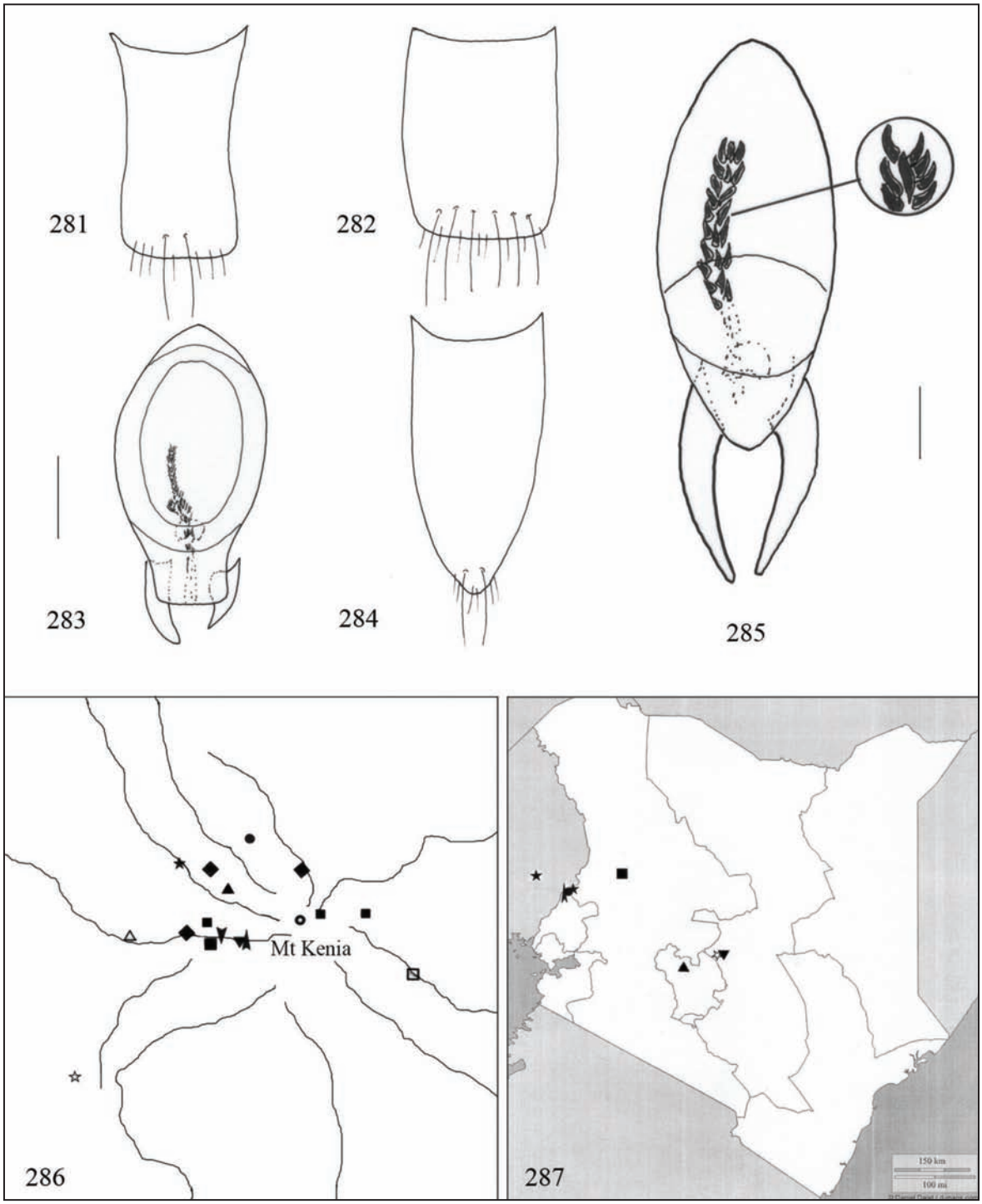
Figures 244–255. Tergite, sternite of the male genital segment and aedeagus of *Nudobius spinosus* n. sp. (Figs. 244–246) and *N. naromoru* n. sp. (Figs. 247–249) (bar scale: 0.1 mm). Tergite, sternite of the male genital segment and aedeagus of *N. cavicola* (Figs. 250–252) and *N. micropterus* (Figs. 253–255) (bar scale: 0.1 mm).



Figures 256–267. Tergite, sternite of the male genital segment and aedeagus of *Nudobius rossii* n. sp. (Figs. 256–258) and *N. alluaudi* n. sp. (Figs. 259–261) (bar scale: 0.1 mm). Tergite, sternite of the male genital segment and aedeagus of *N. alpestris* n. sp. (Figs. 262–264) and *N. arambourgi* (Figs. 265–267) (bar scale: 0.1 mm).



Figures 268–280. Tergite, sternite of the male genital segment and aedeagus of *Nudobius kenyanus* n. sp. (Figs. 268–270) and *N. tenebrosus* n. sp. (Figs. 271–274) (bar scale: 0.1 mm). Tergite, sternite of the male genital segment and aedeagus of *N. cheranganicus* n. sp. (Figs. 275–277) and *N. apterus* n. sp. (278–280) (bar scale: 0.1 mm).



Figures 281–287. Tergite, sternite of the male genital segment and aedeagus of *Nudobius minutus* n. sp. (Figs. 281–283). Tergite of the male genital segment and aedeagus of *N. camerunensis* n. sp. (Figs. 284, 285) (bar scale: 0.1 mm). Fig. 286: distribution of the genus *Nudobius* on Mt Kenya: *N. ontulili* n. sp. (circle), *N. altissimus* (inverted triangle), *N. hausbergianus* n. sp. (open square), *N. janaki* n. sp. (small filled square), *N. spinosus* n. sp. (star), *N. naromoru* n. sp. (open triangle), *N. rossii* n. sp. (big filled square), *N. cavicola* (open star), *N. alluaudi* n. sp. (rhombus), *N. alpestris* n. sp. (filled triangle), *N. kenyanus* n. sp. (arrow), *N. tenebrosus* n. sp. (inverted arrow). Fig. 287: distribution of the genus *Nudobius* in Kenya: *N. jeanneli* (circle), *N. altissimus* (star), *N. micropterus* (filled triangle), *N. arambourgi* (arrow), *N. cheranganicus* n. sp. (filled square), *N. minutus* n. sp. (inverted triangle), *N. apterus* (open star).

2. *Nudobius pictipennis* group

This group is composed of flat, winged species, with bodies more or less dark brown or black with red/yellow elytra and sometimes red pronotum, evident eyes, head large, wide, dilated (but sometime sub-rectangular), with deep, dense punctation, sometimes forming striae, pronotum with strongly sinuate sides. It occurs especially in central Africa but some species lives in Ethiopia and South Africa.

KEY TO SPECIES

1. Body larger, 13–14 mm long.....2
-. Body less than 13 mm long.....3

2. Body brown bluish/violet, with black head, 14 mm long; head with fine, dense punctation, especially in the middle; pronotum as long as but much narrower than head; dorsal pronotal series of 4 punctures. Aedeagus as in figure 289. Kenya.....1. *N. nigrocyaneus*
-. Body brown, with reddish/yellowish elytra, 13 mm long; head with oval, with broad punctures; pronotum much shorter and narrower than head; dorsal series of pronotum of 2 anterior and 2 posterior punctures. Aedeagus as in figure 292. Congo.....2. *N. burgeoni*
-. Body brownish black with 4 yellow patches on the elytra, on humeral angles and broadly on the posterior margins; head with mainly rounded, fine punctures; pronotum shorter and narrower than head; dorsal series of pronotum of 3 anterior and 2 posterior punctures. Aedeagus as in figure 295. Tanzania.....3. *N. euphorbiae* n. sp.

3. Body 9.5–12 mm long.....4
-. Body less than 9.5 mm long.....15

4. Elytra bluish black; body 12 mm long; dorsal series of pronotum of 3 anterior and 2 posterior punctures. Aedeagus as in figure 298. Fernando Poo Isl.....4. *N. schlueteri*
-. Elytra of different colouration.....5

5. Body dark reddish brown, with darker head.....6
-. Body of different colouration.....8

6. Head very broad, dilated posteriad; dorsal series of pronotum of 2 anterior and 2 posterior punctures; body 11.5 mm long. Aedeagus as in figure 301. Tanzania.....5. *N. praecellens*
-. Head narrow and long, sub-rectangular, not dilated posteriad.....7

7. Head more broader, larger, with sparser punctation; dorsal series of pronotum of 2 anterior and 2 posterior punctures; elytra broader, longer; body larger, 11 mm long. Aedeagus as in figure 304. Ethiopia, Rwanda.....6. *N. abessinus*
-. Head narrower, smaller, with denser punctation; dorsal series of pronotum of 2 anterior and 2 posterior punctures; elytra smaller, shorter; body smaller, 10 mm long. Aedeagus as in figure 307. Ethiopia.....7. *N. proximus*

8. Elytra more or less yellowish; body 9.5–10.5 mm long.....9
-. Elytra of different colouration.....11

9. Pronotum red; head black, abdomen dark reddish brown, with the last 3 segments red; dorsal series of pronotum of 2 anterior and 1 posterior punctures; body 10.5 mm long. Male unknown. Ethiopia.....8. *N. coloriventris*
-. Pronotum dark brown or black.....10

10. Pronotum and head reddish brown very dark; abdomen brown dark with last 3 segments lighter; dorsal series of pronotum of 2 anterior and 1 posterior punctures; body about 10 mm long. Aedeagus as in figures 311, 312. Congo, Uganda.....9. *N. africanus*
-. Pronotum and head black; abdomen reddish brown; elytra with scutellum, partially humeral angles and suture black; dorsal series of pronotum of 2 anterior and 2 posterior punctures; body about 10 mm long. Male unknown. Kenya.....10. *N. elytratus* n. sp.
-. Pronotum brown dark; scutellum yellow; abdomen brown yellowish; dorsal series of pronotum of 2 anterior and 2 posterior punctures; body 9.5 mm long. Aedeagus as in figure 315. Congo.....11. *N. subcorticalis* n. sp.

11. Body brownish black, with black head.....12
-. Body dark reddish brown with genital segment yellowish; dorsal series of pronotum of 2 anterior and 2 posterior punctures; body 9.5 mm long. Aedeagus as in figure 319. Zimbabwe, South Africa.....12. *N. rhodesianus* n. sp.

12. Humeral angles and posterior margins of elytra yellowish; head subquadrate; dorsal series of pronotum of 3 anterior and 2 posterior punctures; body 9.5 mm long. Aedeagus (Fig. 322). South Africa.....13. *N. mbotyianus* n. sp.
-. Humeral angles and posterior margins of elytra not yellowish.....13

13. Head very dilated, broad, with deep punctation forming striae; dorsal series of pronotum of 2 anterior and 2 posterior punctures; body 10.5 mm long. Aedeagus as in figure 326. Tanzania.....14. *N. bartolozzii* n. sp.
-. Head sub-rectangular.....14

14. Last 3 abdominal segments reddish; median and posterior femora yellowish; dorsal series of pronotum of 3 anterior and 2 posterior punctures; body 10.5 mm long. Aedeagus (Fig. 330). Congo.....15. *N. congoensis*
-. Last abdominal segments brown dark; median and posterior femora brown; dorsal series of pronotum of 2 anterior and 2 posterior punctures; body 9 mm long. Male unknown. Rep. Congo, Congo, Rwanda, Kenya..... .....16. *N. quadriceps*

15. Elytra yellow/testaceous, sometime partially infuscate.....16
-. Elytra of different colouration.....17

16. Elytra testaceous; head black, pronotum and abdomen brown; dorsal series of pronotum of 2 anterior and 2 posterior punctures; body 7.5 mm long. Aedeagus as in figure 333. Tanzania.....17. *N. tanzanicus* n. sp.
-. Elytra yellowish, almost entirely infuscate; head reddish black, pronotum red, abdomen brown with darker last segments; dorsal series of pronotum of 3 anterior and 2 posterior punctures; body 7 mm long. Aedeagus as in figure 336. Kenya.....18. *N. bipustulatus*

17. Elytra brown, with posterior margins usually yellowish; body brown with black head; dorsal series of pronotum of 2 anterior and 2 posterior punctures; body 6–8 mm long. Aedeagus as in figures 339, 340. Tanzania, Burundi, Rwanda, Congo.....19. *N. pictipennis*
-. Elytra entirely more or less dark brown.....18

18. Head sub-rectangular, long; body light brown, with humeral angles and posterior margins of elytra yellowish; dorsal series of pronotum of 3 anterior and 2 posterior punctures; body narrow, 6 mm long. Male unknown. Congo.....20. *N. schedli*
-. Head subquadrate, black.....19

19. Body light reddish brown; dorsal series of pronotum of 3 anterior and 2 posterior punctures; body 6 mm long. Male unknown. Congo.....21. *N. kikyo* n. sp.
-. Body dark reddish brown; dorsal series of pronotum of 2 anterior and 2 posterior punctures.....20

20. Head quadrate, with rectilinear and parallel sides and narrowly rounded posterior angles; pronotum shorter and less dilated anteriorly; elytra narrower; body 7.4 mm long. Aedeagus as in figure 343. Congo.....22. *N. asymetricus* n. sp.
-. Head less quadrate, with slightly rounded sides and more broadly rounded posterior angles; pronotum longer and more dilated anteriorly; elytra wider; body 8.5 mm long. Aedeagus as in figure 346. Congo.....23. *N. magrinii* n. sp.

1. ***Nudobius nigrocyaneus*** Chapman, 1939

Nudobius (*Pedinolinus) nigrocyaneus* - Chapman, 1939: 62; Scheerpeltz, 1956b: 15; Herman, 2001a: 3728
Nudobius magnus - Cameron, 1951a: 399; Herman, 2001a: 3728, syn. n.

TYPE MATERIAL. The Muséum national d'Histoire naturelle in Paris preserves 2 specimens, the first labelled "*Kenya / Marakwet / Elgeyo Escapment / 2500 m*", "*Muséum de Paris / Mission de l'Omo / C. Arambourg / P. A. Chappuis & E. Jeannel / 1932-33*", "*Type*" (printed on purple label), "Nudobius / nigrocyaneus / *Type W. Chap.*" and the second "*Afrique or. anglaise / Mt. Kenya vers' ouest / zone de forêts / Alluaud & Jeannel*", "*Forêts infer. res. / (*Podocarpus*) / 2400 m / Jan.-Fév. 1912 st. 39*", "*Type*" (printed on purple label), "Nudobius / nigrocyaneus / *Type W. Chap.*". The first is a male that I choose as lectotype of the species. It bears the label "*Lectotypus* Nudobius nigrocyaneus *Chapm., Bor-*

doni des. 2006". The second is a female that I choose as paralectotype of the species. It bears the label "*Paralectotypus* Nudobius nigrocyaneus *Chapm., Bordoni des. 2006*".

The Natural History Museum in London preserves 1 specimen labelled "*Type*" (on round label with red border), "*N. W. Mau / 8-10.000 ft / Jan. Feb. 1946*", "Nudobius / magnus / *type Cam.*", "*Presby / Com Inst Ent / B. M. 1962-595*". It is a female identical to *N. nigrocyaneus* that I choose as lectotype of the species. It bears the label "*Lectotypus* Nudobius magnus *Cam., Bordoni des. 2006*" and the determination label "Nudobius nigrocyaneus *Chapm., Bordoni det. 2006*".

Description. Length of body: 14 mm; from anterior margin of head to posterior margin of elytra: 8 mm. Winged and shiny. Body very large and robust. Head black, pronotum, elytra, abdomen, antennae and legs reddish brown bluish or violaceous; 6th visible abdominal segment and genital segment lighter. Head very broad, dilated, a little narrowed anteriorly, with slightly rounded sides and broadly rounded posterior angles. Eyes small and not protruberent. Surface of head with more or less transverse micro-striation and with fine, dense punctation, especially on disc. There are some larger punctures, one in the short ocular grooves, two median, one behind the other, one lateral between the former, one near the posterior angles. Pronotum about as long as head, anteriorly dilated where it is narrower than head, with strongly sinuate sides in the middle, and with well marked anterior angles. Surface similar to that of head; dorsal series of 4 widely spaced punctures and lateral series of 2 anterior puntures; on the anterior margin, between the anterior angles and the neck, is a deep longitudinal notch. Elytra large, much longer and wider than pronotum, dilated posteriad, with marked humeral angles. Surface with fine and sparse punctation arranged in a few regular series. Abdomen with very fine and dense, transverse micro-striation and fine and very sparse punctation on the sides. Tergite and sternite of the male genital segment as in figure 288; pleurae of normal shape. Aedeagus large (Fig. 289), 2 mm long, oval, with median lobe narrow; parameres fairly symmetrical and short; inner sac tubular, covered with scales, these denser on the median portion.

Distribution. Kenya (Fig. 347).

Remarks. In the description of *N. magnus*, Cameron (1951a) cited the locality "*Katamayu, 1942*" that differs from the locality on the label.

2. ***Nudobius burgeoni*** Bernhauer, 1934

Nudobius Burgeoni - Bernhauer, 1934: 234
*Nudobius burgeon*i - Scheerlpeltz, 1956a: 12; Herman, 2001a: 3723
Nudobius pulcher - Tottenham, 1956: 247; Herman, 2001a: 3728, syn. n.

Type material. The Musée Royal de l'Afrique centrale of Tervuren preserves 2 specimens labelled "*Musée du Congo / Kivu: Mt Nyamukubi / 2600 m 3-10.XI.1932 / L. Burgeon*", "Nudobius / Burgeoni / *Brnh.*" (handwritten by Bernhauer). They are males without "*Type*" or "*Paratype*" labels. I choose one of these as lectotype of the species and the other as paralectotype. The first bears the label "*Lectotypus* Nudobius Burgeoni *Bh., Bordoni des. 2006*" and the other "*Paralectotypus* Nudobius Burgeoni *Bh., Bordoni des. 2006*".

The Natural History Museum in London preserves 1 specimen labelled "*Ruanda: Rotovu, for. du / Rugege, 2350 m / P. Basilewsky 20/23.53*", "*Holotype*" (printed on round label with red border), "Nudobius / pulcher / *Tottenham/ TYPE*". This specimen is identical to *N. burgeoni*.

The Musée Royal de l'Afrique centrale, Tervuren preserves 1 specimen labelled "*paratype*" (printed on orange label), "*Coll. Mus. Congo / Rugege: Tshuruyaga for. / Rugege 2400 m / P. Basilewsky 22.I.1953*", "Nudobius / pulcher / *Tottenham / Paratype*". It is a female identical to *N. burgeoni*.

All these specimens bear the determination label "Nudobius burgeoni *Bh., Bordoni det. 2006*".

Examined material. Rwanda, Musisi, Kivu, P. Pierlot 1955, 2 exx. (MRAC), 1 ex. (cB); Nyokabuya, H. Mühle, 25–30.IV.1984, 1 ex. (NMB).

Congo belge, Kivu, contr. S. Kahuzi, 2200 m, P. Basilewsky, 27.III.1953, 8 exx. (MRAC), 3 exx. (cB); Kivu, Terr. Lubero, 2200 m, N. Leleup, 27.XI.1951, 1 male (cB); PNA, Massif Ruwenzori, Kalonge, Riv. Katauleko, affl. Buthau, 2060 m, P. Vanschuytbroeck and J. Kekenbosch, 2.X.1952, 3 female (MRAC), 1 male (cB); PNA, Massif Ruwenzori, Kalonge, Riv. Nyamwamba, affl. Buthau, 2100 m, P. Vanschuytbroeck and J. Kekenbosch, 8.VIII.1952, 1 male, 1 female (MRAC), 2 males, 1 female (cB); PNA, Massif Ruwenzori, Kalonge, Riv.

Kiondo, affl. Buthau, 2130 m, P. Vanschuytbroeck and J. Kekenbosch, 30.VII.1952, 1 female (MRAC); PNA, Massif Ruwenzori, Kalonge, Riv. Kamahoroi, aff. Butahu, 2210 m, P. Vanschuytbroeck and J. Kekenbosch, 27.VIII.1952, 1 male (MRAC).

Congo (Zaire), P. N. Virunga, Volcan Mikeno, 2310 m, Piste Rweru-Kibumba, R.P.M.J. Celis, 25.VI.1964, 1 female (MRAC).

DESCRIPTION. Length of body: 13 mm; from anterior margin of head to posterior margin of elytra: 6.5 mm. Fully winged, shiny, a little flat. Similar to *N. coloriventris* in shape and punctation, but different in colour: head, pronotum and scutellum dark brown to black, elytra light yellow to reddish brown, abdomen brown with 6th visible segment and genital segment lighter. Head wider, less narrowed anteriorly; sides of pronotum more strongly sinuate; elytra with more obsolescent humeral angles. Male genital segment with long and very narrow pleura; tergite and sternite of the same as in figures 290, 291. Aedeagus 1.3 mm long (Fig. 292), translucent, elongated and narrow; parameres of characteristic shape; inner sac long and very narrow, covered with very fine, small scales.

DISTRIBUTION. Congo, Rwanda (Fig. 347).

BIONOMICS. "*Humus bambou*".

3. ***Nudobius euphorbiae*** n. sp.

EXAMINED MATERIAL. Holotype male: SW Tanganyka, Mt Mbize, 12 miles NE Sumbawanga, 2600 m, N. Leleup, VI.1960 (MRAC); paratypes: same data, 1 male (MRAC), 2 males (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 13 mm; from anterior margin of head to posterior margin of elytra: 6.5 mm. Similar to *N. burgeoni* in proportions but smaller and narrower, of different colouration. Easily recognizable by the four yellow maculae on the anterior and posterior angles of elytra. Head and pronotum black, elytra light brown with a yellow spot on the humeral angles and to the posterior margins; abdomen brown. Head not dilated, sub-rectangular, with subrectilinear and sub-parallel sides. Eyes small. Surface of the head with deep, sometimes elongated punctation, often forming striae near the sides of the eyes. Pronotum much shorter and narrower than elytra, anteriorly dilated, with strongly sinuate sides; dorsal series of 2 anterior and 2 posterior punctures and lateral series of 4, 5 punctures. Elytra much longer and wider than pronotum, with marked humeral angles; surface with very fine and superficial punctation arranged in numerous series between the juxta-sutural series and lateral series, furnished with long dark setae. Abdomen with very fine and deep transverse micro-striation and very fine and sparse punctation. Tergite (apparently without setae) and sternite of the male genital segment as in figures 293, 294. Aedeagus large (Fig. 295), dilated, with narrow distal portion, 1.37 mm long, with large asymmetrical parameres; inner sac broad, partially covered with fine and small spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to *Euphorbia* plant.

DISTRIBUTION. The species is at present only known from the type locality in Tanzania (Fig. 347).

BIONOMICS. The specimens were collected in "*réserve forestière, dans Euphorbes géants mortes*".

4. ***Nudobius schlueteri*** Scheerpeltz, 1956 (Fig. 1673)

Nudobius (*Pedinolinus*) *Schlüteri* - Scheerpeltz, 1956a: 15
Nudobius schlueteri - Herman, 2001a: 3730

The Naturhistorisches Museum of Wien preserves 4 specimens; the1st and 2nd are labelled "*Fernando Poo / Spanish-Guinea / 3.II.1940*", "*Schlüter / legit 240*", "*Fundort Nr./ 240*", one with the label "*Typus /* Pedinolinus / Schlüteri */ O. Scheerpeltz*", the other with "*Cotypus /* Pedinolinus / Schlüteri */ O. Scheerpeltz*" (on red label); the 3rd and 4th are labelled "*Fernando Poo / Spanish-Guinea / 1940*", "*Dr. Eidmann / legit*", "*Fundort Nr. 236*" and "*237*", one "*Typus /* Pedinolinus / Schlüteri */ O. Scheerrpeltz*", the other "*Cotypus /* Pedinolinus / Schlüteri */ O. Scheerpeltz*" (on red label). I choose the first as lectotype of the species and all the other three as paralectotypes of the species. The first bears the label "*Lectotypus* Nudobius Schlüteri *Scheerp., Bordoni des. 2007*", the other "*Paralectotupus* Nudobius Schlüteri *Scheerp., Bordoni des. 2007*". All bear the determination label "Nudobius schlueteri *Scheerp., Bordoni det. 2007*".

DESCRIPTION. Length of body: 12 mm; from

anterior margin of head to posterior margin of elytra: 6 mm. Body almost flat, fully winged, dark reddish brown with black head. Head dilated. Similar to *N. nigrocyaneus* but shorter, with dark brown abdomen devoid of violaceous reflex. Head with sub-rectilinear sides, more narrowly rounded posterior angles and without longitudinal lateral carina. Surface with denser punctation; pronotum with dorsal series of 3 anterior and 2 posterior punctures; elytra with coarser and more irregular punctation. Tergite and sternite of the male genital segment as in figures 296, 297; pleura lobe-shaped. Aedeagus smaller than that of *N. nigrocyaneus* (Fig. 298), 1.18 mm long; parameres asymmetrical and inner sac translucent.

DISTRIBUTION. Equatorial Guinea: Fernando Poo Isl (Fig. 347).

REMARKS. The species was only cited in the key to the genus *Nudobius* proposed by Scheerpeltz (1956a), without a formal description. The author also wrote "*Typen (augefunden von Prof. Dr. Eidmann und Dr. Schlüter) in meiner Sammlung*", so I decided to designate a lectotype and paralectotypes of the species. Moreover in the MNW there are two labels "*Typus*" and two "*Cotypus*".

5. ***Nudobius praecellens*** Bernhauer, 1915

Nudobius praecellens - Bernhauer, 1915: 134; Scheerpeltz, 1933: 1306; 1956a: 15; Herman, 2001a: 3729

TYPE MATERIAL. The Field Museum of Natural History of Chicago preserves 2 specimens, one labelled "*D. Ostafrika / Methner/ 15-1700 m. II.09*", "praecellens / *Brh. Cotype*" and the other "*D. Ostafrika/ Methner / W. Kilimand/ schars/ 16-1700 m. II.09*", "Pedinolinus / praecellens / *Brh. Typus*". I choose the first, a male, as lectotype of the species and the second as paralectotype of the species. The first bears the label "*Lectotypus* Nudobius praecellens *Bh., Bordoni des. 2006*" and the second "*Paralectotypus* Nudobius praecellens *Bh., Bordoni des. 2006*".

DESCRIPTION. Length of body: 11.5 mm; from anterior margin of head to posterior margin of elytra: 6.5 mm. Body moderately flat, fully winged, dark reddish brown with almost black head, pronotum and last two abdominal segment reddish, elytra with bluish or violaceous reflex; antennae and legs brown dark. Similar to *N. abessinus* in dimensions and shape. Head squared, dilated posteriad, narrowed anteriorly, with sub-rectilinear sides and less narrowly rounded posterior angles than that of abessinus. Eyes small and slightly protruberent. Surface of head with transverse micro-striation and denser, elongated, sometimes confluent punctation. Pronotum longer, anteriorly dilated, with sinuate sides. Surface with fine and dense, transverse micro-striation; dorsal series of 2 anterior and 2 posterior punctures and lateral series of 3 anterior punctures. Elytra broad, dilated posteriad, with marked humeral angles. Surface shiny, with fine and very dense punctation arranged in numerous series. Abdomen with fine and dense, transverse micro-striation and fine and very sparse punctation on the sides. Tergite and sternite of the male genital segment as in figures 299, 300; pleura of normal shape. Aedeagus larger than that of *N. abessinus* (Fig. 301), 1.3 mm long; parameres asymmetrical; inner sac short and broad, with two areas covered with fine and dense scales.

DISTRIBUTION. Tanzania (Fig. 347).

6. ***Nudobius abessinus*** Bernhauer, 1915

Nudobius abessinus - Bernhauer, 1915: 134; 1931d: 582; Scheerpeltz, 1933: 1305; 1956a: 13; Herman, 2001a: 3722

Nudobius opacinus - Tottenham, 1956: 249; Herman, 2001a: 3728, syn. n.

TYPE MATERIAL. The Field Museum of Natural History of Chicago preserves 2 specimens labelled "*Abess. Boroda / Kristensen*", one with the label "abessinus / *Brnh. Typus*" and the other with the label "abessinus / *Brnh. Cotypus*". I choose the second, male, as lectotype of the species and the other as paralectotype of the species. The first have the label "*Lectotypus* Nudobius abessinus *Bh., Bordoni des. 2006*"; the second, female, have the label "*Paralectotypus* Nudobius abessinus Bh*., Bordoni des. 2006*".

The Musée Royal de l'Afrique centrale of Tervuren preserves 1 specimen labelled "Holotype" (printed on orange label), "*Coll. Mus. Congo / Rugege: Rutovu for. du / Rugege 2350 m / P. Basilewsky 20-23.I.53*", "Nudobius / opacinus / *Tottenham/ Type*". It is a female that have the determination "Nudobius abessinus *Bh., Bordoni det. 2006*".

DESCRIPTION. Length of body: 11 mm; from anterior margin of head to posterior margin of elytra: 6 mm. Body moderately flat, fully winged. Dark

reddish brown with a head little darker and three last abdominal segments paler, antennae dark brown; legs light brown. Similar to *N. coloriventris* in size and shape. Head narrower and more elongate than that of *N. coloriventris*, with finer, not confluent punctation, sparser posteriorly. Pronotum with more sinuate sides; dorsal series of 2 anterior and 2 posterior punctures and lateral series of 3 smaller punctures. Elytra proportionately longer, with larger and sparser punctation arranged in fewer series. Abdomen with transverse micro-striation and denser punctation, furnished with long pubescence and arranged in some series. Tergite and sternite of the male genital segment as in figures 302, 303; pleura of normal shape. Aedeagus 1.48 mm long (Figs. 304, 1751), for a long gradually narrowed to the distal portion; parameres asymmetrical; inner sac ribbon-like, with a more evident series of fine scales.

DISTRIBUTION. Ethiopia, Rwanda (Fig. 347).

BIONOMICS. Some specimens were collected in "*dead branches of tree* Euphorbia abyssinica *Rusch*" (Scott, 1931).

7. ***Nudobius proximus*** Bernhauer, 1915

Nudobius proximus - Bernhauer, 1915: 134; Scheerpeltz, 1933: 1306; 1956a: 13; Herman, 2001a: 3729

TYPE MATERIAL. The Field Museum of Natural History of Chicago preserves 1 specimen labelled "*Abessinien / Kristensen*", "proximus / *Bernh. Typus*". It is a male that I choose as lectotype of the species. It have the label "*Lectotypus* Nudobius proximus *Bh., Bordoni des. 2006*".

DESCRIPTION. Length of body: 10 mm; from anterior margin of head to posterior margin of elytra: 5 mm. Body not particularly flat, fully winged, shiny. Similar to *N. praecellens* in colouration, but much smaller, more slender, narrow. Reddish brown with darker head and last three abdominal segments yellowish. Head narrow and long, sub-rectangular, sub-rectilinear and sub-parallel sided, with narrowly rounded posterior angles. Eyes small and less protruberent. Surface of head with traces of transverse micro-striation and deep, sometime oval and confluent punctures, sparser posteriad. Pronotum as long as head, narrower, dilated anteriorly, with oblique anterior margins, narrowly rounded anterior angles and less sinuate sides. Surface with transverse micro-striation; dorsal series of 2 anterior and 3 posterior punctures and lateral series of 2 anterior punctures; some punctures near the anterior angles. Elytra narrow, a little longer and wider than pronotum, slightly dilated posteriad, with marked humeral angles. Surface with fine punctation arranged in numerous series and with a median series of larger punctures. Abdomen with transverse micro-striation and fine and sparse punctation arranged in few series. Tergite and sternite of the male genital segment as in figures 305, 306; pleura of normal shape. Aedeagus 1 mm long (Fig. 307), oval, gradually narrowed to the distal portion; parameres asymmetrical; inner sac ribbon-like, covered with fine and sparse scales.

DISTRIBUTION. Ethiopia (Fig. 347).

8. ***Nudobius coloriventris*** Bernhauer, 1915

Nudobius coloriventris - Bernhauer, 1915: 133; 1931d: 582; Scheerpeltz, 1933: 1306; 1956a: 12; Herman, 2001a: 3725

TYPE MATERIAL. The Field Museum of Natural History of Chicago preserves 1 specimen labelled "*Abess. Boroda/ Kristensen*", "coloriventris / *Bernh. Typus*". It is a female.

CITED MATERIAL (not examined). Abyssinia: Jem Jem Forest (Bernhauer, 1931).

DESCRIPTION. Length of body: 10.5 mm; from anterior margin of head to posterior margin of elytra: 6.5 mm. Body not particularly flat, fully winged, shiny. Head black, pronotum red, elytra brownish yellow, abdomen amarant dark reddish brown with visible genital segments 5 and 6 red; antennae dark brown; legs brown. Head broad, subrectangular, with narrowly rounded posterior angles. Eyes small and slightly protruberent. Surface with traces of transverse micro-striation and large, deep, sometimes confluent punctures, sparser on clypeus and near the posterior angles. Ventral surface of head separated from the tempora by a carina and covered with deep punctation. Pronotum about as long as head, anteriorly dilated, where it is narrower than head, with slightly oblique anterior margins, narrowly rounded anterior angles and sinuate sides. Surface with dorsal series of 2 large anterior and 1 small posterior puncture and lateral

series of 2 anterior punctures. Elytra large, longer and wider than pronotum, with marked humeral angles. Surface with deep, dense punctation arranged in numerous series. Abdomen with transverse micro-striation and fine and sparse punctation on the sides. Male unknown.

DISTRIBUTION. Ethiopia (Fig. 347).

9. ***Nudobius africanus*** Bernhauer, 1912

Nudobius (*Pedinolinus*) *africanus* - Bernhauer, 1912a: 479; Bernhauer & Schubert, 1914: 299; Scheerpeltz, 1956a: 14; Herman, 2001a: 3722

TYPE MATERIAL. The Museum für Naturkunde of Berlin preserves 1 specimen labelled "*Nord. V. Alb. Edw. / See/ Ruwenzori Fuss. / Westseite 2.09*", "*Exped.: Herzog/ Adolf Friedrich/ z. Meoklenburg*","*Bernhauer det.*", "*Type*" (printed on orange label), "102784", "Nudobius / africanus / *Brh*" (handwritten by Bernhauer), "*Holotype /* Nudobius africanus */ Bernhauer 1912 / labelled by MNHUB 2006*" (printed on red label).

DESCRIPTION. Length of body: 11 mm; from anterior margin of head to posterior margin of elytra: 7 mm. Body almost flat, fully winged, shiny. Head and pronotum brownish black with reddish margins, elytra yellow testaceous, abdomen dark brown with visible abdominal segments 5 and 6 and genital segments partially lighter; antennae brown; legs light brown. Head large (Fig. 308), quadrate, subrectilinear sided, with narrowly rounded posterior angles. Eyes medium-sized and a little protruberent. Surface of head with traces of transverse microstriation and large, deep dense umbilicate punctures arranged in more or less evident striae and not confluent, apart from the clypeus and the posterior margin. Pronotum a little longer and narrower than head, with punctation as in figure 308. Elytra large, much longer and wider than pronotum, dilated posteriad, with marked humeral angles. Surface with fine, very dense, a slightly superficial punctures arranged in numerous series. Abdomen with transverse micro-striation and fine punctation on the sides. Tergite and sternite of the male genital segment as in figures 309, 310; pleurae much elongated and narrow, lobe-like. Aedeagus 1.18 mm long (Figs. 311, 312), oval, elongate; parameres asymmetrical, not dilated; inner sac not visible.

DISTRIBUTION. Congo, Uganda (Fig. 348).

10. ***Nudobius elytratus*** n. sp.

EXAMINED MATERIAL. Holotype female: Kenya, Loitokitok, Hovorka, 9.XII.1993 (NMW).

DESCRIPTION OF HOLOTYPE. Female. Length of body: 10 mm; from anterior margin of head to posterior margin of elytra: 6 mm. Head and pronotum black, elytra yellow with scutellum, surrounding areas and suture dark brown; abdomen, antennae and legs reddish brown. Head sub-rectangular, with sub-rectilinear and sub-parallel sides, very marked posterior angles. Eyes small and protruberent. Surface of head with transverse micro-striation and deep, dense punctation, more large under the eyes, sparser on the lateral portions of head. Pronotum as long as head, anteriorly scarcely narrower than head, and sinuate sides. Surface with transverse micro-striation, dorsal series of 2 anterior and 2 posterior punctures and lateral series of 2 anterior, smaller punctures. Elytra sub-rectangular, long, much longer and wider than pronotum, with scarcely marked humeral angles. Surface with very superficial, fine and dense punctation. Abdomen with very fine transverse micro-striation and very fine and sparse punctures.

ETYMOLOGY. The specific epithet refers to the Latin *elytratus -a -um* (with large elytra).

DISTRIBUTION. The species is actually known only from the type locality, in Kenya (Fig. 347).

REMARKS. Male unknown. The locality (Olitokitok) is situated near Mount Kilimanjaro in southern Kenya, on the border of Tanzania.

11. ***Nudobius subcorticalis*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Massif Ruwenzori, Kikyo, près Kalonge, 2180 m, P. Vanschuytbroeck and J. Kekenbosch, 2.IX.1952, (MRAC); paratypes: same data, 1 male (cB); same data, Kalonge, 2210 m, 1 female (MRAC); same data, Kalonge, Kiondo affl. Butaho, 2130 m, P. Vanschuytbroeck and J. Kekenbosch, 2.VIII.1952, 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 9.5 mm; from anterior margin of head to posterior margin of elytra: 5.5 mm. Head black, pronotum very dark reddish brown, elytra yellowish, abdomen reddish yellow, antennae brown, legs yel-

lowish brown. Head dilated, subquadrate, with sub-rectilinear and sub-parallel sides. Eyes large and protruberent. Surface of head shiny, with traces of transverse micro-striation and deep, elongated, dense punctures. Pronotum shorter and narrower than head, whit strongly sinuate sides. Surface with fine, shallow transverse micro-striation, dorsal series of 2 anterior and 2 posterior punctures and lateral series of 2 anterior punctures. Elytra very large, very long, much longer and wider than pronotum, with very fine and dense punctation. Abdomen shiny, with traces of transverse micro-striation and very fine and sparse punctation. Tergite and sternite of the male genital segment as in figures 313, 314. Aedeagus oval (Fig. 315), 1 mm long, with asymmetrical parameres; inner sac large, covered with minute scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the Latin *sub- corticalis -e* (under bark).

DISTRIBUTION. The Ruwenzori is a mountain range of central Africa, located on the borders of Uganda and Congo (Fig. 348).

BIONOMICS. The specimens were collected "*sous écorces*".

12. ***Nudobius rhodesianus*** n. sp.

EXAMINED MATERIAL. Holotype male: Zimbabwe, Mt Selinda, G. van Son 1–17.IV.1956 (TMSA); paratypes: same data, 2 males, 3 females (TMSA), 3 males (cB); S-Rhodesia, Mt Selinda, fort de Chirinda, 1300 m, N. Leleup, VII.1960 (MRAC), 1 male, 4 females (MRAC), 2 males, 1 female (cB); Rhodesia, Mt Selinda, J. Clover, A. Kistner and R. Bouton, 13.IV.1970, 1 male (FMNH); E Zimabwe, Mt Selinda, Gungunyana for., M. Snizek, 25.XII.1998, 1 male (cJ); Transvaal, Uitsoek, Grootkloof ind. for., 25.15S, 30.33E, Endrödy-Younga, 6.II.1987, 1 ex. (TMSA).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 9.5 mm; from anterior margin of head to posterior margin of elytra: 5 mm. Head and pronotum black, elytra and abdomen reddish brown; antennae and legs dark brown. Head massive, dilated, with sub-rectilinear sides and broadly rounded posterior angles. Eyes scarcely protruding. Surface of head shiny, with deep, dense punctation, forming striae under the eyes. Pronotum (Fig. 316) shorter and narrower than head, with very fine and superficial transverse micro-striation, dorsal series of 2 anterior and 2 posterior punctures and lateral series of 3, 4 irregular oblique series. Elytra very long, slightly dilated posteriad, with marked humeral angles and superficial punctation, arranged in some series. Tergite and sternite of the male genital segment as in figures 317, 318. Aedeagus oval (Fig. 319), 1.2 mm long, with characteristically asymmetrical parameres; inner sac narrow, covered with fine, pale scales arranged in two convergent series.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Rhodesia (Zimbabwe).

DISTRIBUTION. Zimbabwe; South Africa: Transvaal (Fig. 348).

BIONOMICS. The specimen was collected "*Caught flying*", "Cussonia *logs*", "*under bark*".

REMARKS. Mount Selinda is situated in the Southeast corner of Zimbabwe, in the Chiranda rainforest.

13. ***Nudobius mbotyianus*** n. sp.

EXAMINED MATERIAL. Holotype male: South Africa, E Cape, Transkei, Mbotyi Coast and Forest, W. Schawaller, 29.XI-3.XII.2003 (SMNS); paratypes: same data, 1 female (SMNS), 1 female (cB); South Africa, Transkei, Ntsubane For. St., 31.27S, 29.44E, Endrödy-Younga, 6.XII.1985, 1 male (cB); Natal, Durban, Mortensen, VIII.1929, 1 male (cB), 1 female (ZMUC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 9.5 mm; from anterior margin of head to posterior margin of elytra: 5 mm. Body almost flat, fully winged. Head dilated. Head black, pronotum, elytra and abdomen dark reddish brown, posterior margin of elytra narrowly yellowish; genital segment light brown; antennae with first three segments reddish and subsequent ones light brown; legs brown with lighter tarsi. Similar to *N. schlueteri* but much smaller; head narrower, with proportionally smaller eyes; pronotum shorter and

narrower; elytra with fine punctation arranged in more numerous series. Tergite and sternite of the male genital segment as in figures 320, 321; pleurae almost lobe-like. Aedeagus smaller (Fig. 322) than that of *N. schlueteri*, 0.9 mm long, of similar shape; parameres asymmetrical and different in shape from those of *N. schlueteri*; inner sac similar, with more evident little series of scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality.

DISTRIBUTION. South Africa: Natal, Transkei. (Fig. 348).

BIONOMICS. "*Fungous log*".

REMARKS. This species differs from *N. rhodesianus* n. sp. in the smaller body, narrower head, yellowish posterior margin of elytra, smaller aedeagus with inner sac covered with denser, fine spinules all pointing left, not arranged on two convergent series.

14. ***Nudobius bartolozzii*** n. sp.

EXAMINED MATERIAL. Holotype male: Tanzania, border Iringa-Morogoro prov., Udzungwa scarp, forest near Masisiwe, 1700–1800 m, 08°23'32"S, 35°58'03"E, A. Sforzi and L. Bartolozzi, 12–15. VII.2004 (MZF).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 10.5 mm; from anterior margin of head to posterior margin of elytra: 6 mm. Body brownish black. Head very dilated, with scarcely rounded sides and broadly rounded posterior angles. Eyes small and slightly protruberent. Surface of head shiny, with deep punctation forming numerous striae, apart the median band; punctation very sparse on the lateral portions of the head. Pronotum massive (Fig. 323), as long as head, anteriorly narrower than head, of characteristic shape; surface with very fine and dense punctation and with punctures as in figure 323. Elytra very long, much longer and wider than pronotum, with marked humeral angles. Surface with fine and deep punctures. Abdomen with fine and deep transverse micro-striation and fine and sparse punctures. Tergite and sternite of the male genital segment as in figures 324, 325. Aedeagus 1.1 mm long (Fig. 326), oval but with narrow distal portion; asymmetrical, large parameres; inner sac narrow, covered with minute spinules.

ETYMOLOGY. Patronymic. Dedicated to the friend and colleague Luca Bartolozzi, curator of Entomology (Museo Zoologico "La Specola", Firenze, Italy).

DISTRIBUTION. The species is at present only known from the type locality in Tanzania (Fig. 348).

REMARKS. Female unknown. The locality is situated in the Eastern Arc Mountains, a chain of mountains in Kenya and Tanzania, which have been covered with forests. These mountains are recognized as important "*hot spot*" for forest biodiversity.

15. ***Nudobius congoensis*** Scheerpeltz, 1956

Nudobius congoensis - Scheerpeltz, 1956a: 13, 16; 195a: 484; Schedl, 1961: 162; Herman, 2001a: 3726

TYPE MATERIAL. The Musée royal de l'Afrique centrale of Tervuren preserves 1 specimen labelled "*Holotype*" (printed on orange label), "*Burgerama / 1.51*", "*A. A. Ignoul*", "*R. 2342/ -23*", "*Coll. Mus. Congo / Don R. Mayné*", "*Dr. O. Scheerpeltz / det. 1961*", "*Typus /* Nudobius / congoensis */ O. Scheerpeltz*". It is a female.

EXAMINED MATERIAL. Rwanda, Cyangugu, Nyakabuye, H. Mühle, 15.XII.1985, 1 ex. (NMB).

Congo, Massif Ruwenzori, Kikyo, près Kalonge, 2180 m, F. Vanschuytbroek and J. Kekenbosch, 8.VIII.1952, 2 males, 1 female (MRAC), 1 male (cB); Kalonge, Riv. Nyamwamba, aff. Butaho, 2100 m, F. Vanschuytbroek and J. Kekenbosch, 8.VIII.1952, 2 females (MRAC); 1 female (cB); Kalonge, Riv. Kiondo, aff. Butahu, 1130 m, F. Vanschuytbroek and J. Kekenbosch, 6.VIII.1952, 1 female (MRAC), 3 males (cB); Kalonge, Riv. Kamahoro, aff. Butahu, 2210 m, F. Vanschuytbroek and J. Kekenbosch, 8.VIII.1952, 1 female (MRAC); Kalonge, 2050 m, L. Burgeon, 16.VIII.1932, 1 female (MRAC); Kivu region, Kahuzi env., 2300 m, W. Rossi, 15.III.1984, 1 male (cB).

DESCRIPTION. Length of body; 10 mm; from anterior margin of head to posterior margin of elytra: 6 mm. Body (Fig. 327) not flat and head not dilated. Fully winged and shiny. Similar to *N. proximus* but

more robust, more convex, with broader and more elongate head and smaller eyes. Head black, pronotum, elytra and abdomen dark reddish brown; last three abdominal segments reddish; antennae and legs brown; coxae yellowish. Head large, sub-rectangular, not dilated anteriorly, with largely rounded posterior angles, and with very small and flat eyes. Surface with large, dense and deep punctures. Pronotum short, much shorter and narrower than head, well dilated anteriorly, with very oblique anterior margins, very largely rounded anterior angles and sinuate sides; dorsal series of 3 anterior and 2 posterior punctures and lateral series of 3, 4 small punctures. Elytra very large, much longer and wider than pronotum, dilated posteriad, with less marked humeral angles. Surface with very fine punctation arranged in three series, one near the suture, one median and one lateral. Abdomen with transverse micro-striation and fine and very sparse punctation on the sides. Tergite and sternite of the male genital segment as in figures 328, 329. Aedeagus roundish (Figs. 330, 1750), 1.7 mm long; parameres symmetrical and convergent; inner sac ribbon-like, folded once on itself and covered with large, oblong scales.

DISTRIBUTION. Congo, Rwanda (Fig. 348).

16. ***Nudobius quadriceps*** Cameron, 1929

Nudobius quadriceps - Cameron, 1929: 60; Scheerpeltz, 1933: 1306; 1956: 484; Schedl, 1961: 162; Herman, 2001a: 3729
Nudobius concinnus - Tottenham, 1956: 251; Herman, 2001a: 3726, syn. n.
Nudobius meruensis - Cameron, 1951: 398; Herman, 2001a: 3728, syn. n.
Nudobius cinctipennis - Scheerpeltz, 1956a: 18; 1956: 484; Herman, 2001a: 3724, syn. n.

TYPE MATERIAL. The Musée Royal de l'Afrique centrale of Tervuren preserves 2 specimens labelled "*Musée du Congo / Kivu: Kibati / 5.XI.1925 / Dr. H. Schouteden*", "Nudobius / quadriceps / *Type Cam.*", one with the orange label "Holotype" and other "Paratype" (printed).

The museum also preserves 1 specimen labelled "Holotype" (printed on orange label), "*Coll. Mus. Congo / Ruanda: Yanina / terr. Kybuye 2800 m / 12.II.53 / P. Basilewsky*", "Nudobius / concinnus / *Tottenham / Type*". It is a female, identical with *N. quadriceps*.

The museum moreover preserves 1 specimen labelled "*Holotype*" (printed on orange label), "*Congo Belge / Yangambi / Dr. Schedl 52*", "*Coll. Mus. Congo / Don. R. Mynè*", "*Dr. O. Scheerpeltz / det. 1961*", "*Typus* / Nudobius / cinctipennis / *O. Scheerpletz*" (on red label). It is a female identical with *N. quadriceps*.

The Naturhistorisches Museum in Wien preserves 1 specimen labelled "*Franz Kongo / Umg. Brazzaville / J. Perroud leg.*", "*ex coll. Scheerpeltz*", "*Typus* / Nudobius / cinctipennis / *O. Scheerpeltz*" (on red label). It is a female.

The Natural History Museum in London preserves 1 specimen labelled "*Van Someren / Meru, 7/43*", "*Type*" (printed on round label with red edge), "Nudobius / meruensis *Cam. / TYPE*". It is a female identical with *N. quadriceps*.

All these specimens bear the determination label "Nudobius quadriceps *Cam., Bordoni det. 2006*".

EXAMINED MATERIAL. Congo (Zaire), Elisabetville (Lubumbashi), C. Seydel, 1 ex. (NMW); Yangambi, Dr. Schedl 52, 2 exx. (MRAC), 1 ex. (NMW); (Zaire), Hembe-Bitale, Dr. Schedl, II–VIII.52, 1 ex. (MRAC), 1 ex. (cB); Kivu, Terr. Masisi, Lac Lokulu, 1800 m, N. Leleup, VI.1959, 1 ex. (MRAC), 1 ex. (cB); Bitali, Kivu, R. Pierlot, 1955, 1 ex. (MRAC).

DESCRIPTION. Male unknown. Female: length of body 9 mm; from anterior margin of head to posterior margin of elytra: 4 mm. Body almost flat, fully winged, brownish black to black, with antennae and legs brown and yellowish tarsi. Similar to *N. proximus* but darker and with last abdominal segments black and not reddish. Body flatter, head larger, with finer punctation, sometimes forming lateral striae; pronotum smaller and shorter that that of *N. proximus*; elytra shorter and narrower, with more marked humeral angles and much finer and sparser punctation.

DISTRIBUTION. Rwanda, Rep. Congo, Congo, Kenya (Fig. 348).

BIONOMICS. On *Celtis soyauxii*, *Acacia pennata*, *Lovoa trichiloides*, *Anisophyllea* sp., *Millettia* sp. (Schedl, 1961); *humus* in forest.

REMARKS. It is probable that *N. morosus* (Tottenham, 1939: 223), see also Herman (2001a:: 3728) from Zimbabwe should be placed near this species. It is preserved in the Natural Hitory Museum in London and labelled "*Paratype*" (round label with yellow border), "V*umba Mt. / Rhodesia /*

10.1926", "Nudobius / morosus */ Tottenham / Paratype*". It is a female similar to *N. quadriceps*: body brown, about 10 mm long, less flat, more robust and broader, paler, the head larger and wider, with smaller punctures and wider pronotum. The holotype should be in the Rhodesian Museum of Zimbabwe but was not found (Ms Madamba, pers. comun.). Only the examination of a male may indicate its systematic position.

17. ***Nudobius tanzanicus*** n. sp.

Examined material. Holotype male: Tanzania, Usumbara, Derem, leg. ?, 7–28.VIII.1891 (MNB).

Description of Holotype. Male. Length of body: 7.5 mm; from anterior margin of head to posterior margin of elytra: 4.5 mm. Head black, pronotum brownish black, elytra light testaceous, darkened around the scutellum, abdomen brown with 6th visible abdominal segment and genital segment light brown; antennae and legs dark brown. Similar to *N. subcorticalis* n. sp. but smaller and darker. Head larger and narrower than that in *N. subcorticalis* n. sp.; eyes larger but flatter. Surface with larger and more oval punctation. Pronotum more dilated anteriorly, with more sinuate sides. Elytra shorter, with more marked humeral angles and larger punctation. Tergite and sternite of the male genital segment as in figures 331, 332. Aedeagus oval (Fig. 333), narrow, 0.88 mm long, with asymmetrical parameres; inner sac long and very narrow, covered with sparse scales.

Etymology. The specific epithet refers to Tanzania.

Distribution. The species is at present only known from the type locality in Tanzania (Fig. 348).

Remarks. Female unknown.

18. ***Nudobius bipustulatus*** Bernhauer, 1937

Nudobius bipustulatus - Bernhauer, 1937: 297; Scheerpeltz, 1956: 484; 1956a: 12; Schedl, 1961: 162; Herman, 2001a: 3722

Type material. The Field Museum of Natural History in Chicago preserves 2 specimens, one labelled "*Ngong K. C. / Apr. 1936/ A. F. Gedye*", "Nudobius / bipustulatus */ Bernh. Typ.*", "*Ostafrika / Brit. Mus. / Don. Marshall*", "bipustulatus */ Brnh. Typus/ unic.* Nudobius" (handwritten by Bernhauer) and the other "*Escarpment / Kenya*", "*III.21 / A.F. 1.6*", "*Escarpment / Kenya colony*", "Nudobius / maculipennis */ Brnh. Cotyp*.", "bipustulatus */ Brnh. Cotypus /* Nudobius". They are male and female. I choose the male as lectotype and the female as paralectotype of the species. The first bears the label "*Lectotypus* Nudobius bipustulatus *Bh., Bordoni des. 2006*" and the second "*Paralectotypus* Nudobius bipustulatus *Bh., Bordoni des. 2006*".

The Natural History Museum in London preserves 1 specimen labelled "*Type*" (on round label with red border), "*Ngong K. C. / Apr. 1936/ A. F. Gedye*", "Nudobius / bipustulatus */ Brnh. Type*". It is a female that I choose as paralectotype of the species; it now bears the label "*Paralectotypus* Nudobius bipustulatus *Bh., Bordoni des. 2009*".

Cited material (not examined). Congo: Hembe Bitale (Scheerpeltz, 1956a; Schedl, 1961).

Description. Length of body: 7 mm; from anterior margin of head to posterior margin of elytra: 3.5 mm. Body almost flat, fully winged and shiny; head black, pronotum reddish brown, elytra yellowish with dark posterior half, sometimes with a yellow, sub-circular, anterior spot on each elytron; abdomen light brown with darker 6th visible abdominal segment and genital segment; antennae brown; legs brownish yellow. Head subquadrate, sub-rectilinear and sub-parallel sided, with snarowly rounded posterior angles. Eyes small and slightly protruberent. Surface of head with deep, dense punctation, confluent on the sides; ventral surface with similar punctation. Pronotum about as long as head, anteriorly dilated where it is narrower than head, with narrowly rounded and protruberent anterior angles, and sinuate sides. Surface with dorsal series of 5 small widely spaced punctures and lateral oblique series of 3 punctures. Elytra longer and wider than pronotum, dilated posteriad, with marked humeral angles. Surface with fine, superficial and dense punctation arranged in numerous series. Abdomen with fine and dense, transverse microstriation and fine and very sparse punctation on the sides. Tergite and sternite of the male genital segment as in figures 334, 335; pleurae of normal shape. Aedeagus small (Fig. 336), 0.8 mm long, oval; parameres asymmetrical; inner sac dilated and covered with fine and sparse small scales.

Distribution. Kenya, Congo (Fig. 348).

19. ***Nudobius pictipennis*** (Fauvel, 1904)

Xantholinus (*Nudobius*) *pictipennis* - Fauvel, 1904: 289
Nudobius pictipennis - Bernhauer & Schubert, 1914: 299; Scheerpeltz, 1956a: 14; Herman, 2001a: 3728
Xantholinus pictipennis v. *quadrimaculatus* - Eichelbaum, 1910: 86
Nudobius pictipennis v. *quadrimaculatus* - Bernhauer & Schubert, 1914: 299
Nudobius quadrimaculatus - Scheerpeltz, 1956a: 14; Herman, 2001a: 3729
Pedinolinus subviridipennis - Bernhauer, 1912: 203; Herman, 2001a: 3730, syn. n.
Nudobius subviridipennis - Bernhauer & Schubert, 1914: 299; Scheerpeltz, 1956a: 15; Herman, 2001a: 3730

TYPE MATERIAL. The Museum für Naturkunde in Berlin preserves 3 specimens labelled "*Usumbara / Derem 850 m / December 91 / Conradt S.*". I choose one of these, a male, as lectotype of the species and the other as paralectotype. The first bears the label "*Lectotypus* Xantholinus pictipennis *Fvl., Bordoni des. 2006*" and the other "*Paralectotypus* Xantholinus pictipennis *Fvl., Bordoni des. 2006*".

The Institut royal des Sciences naturelles de Bruxelles preserves 1 specimen "*ex typis*" with the same locality label. The specimen is lacking the abdomen. I choose it as paralectotype. It is labelled "*Paralectotypus* Xantholinus pictipennis *Fvl., Bordoni des. 2014*" and "Nudobius pictipennis *(Fvl.), Bordoni det. 2014*".

The Field Museum of Natural History in Chicago preserves 1 specimen labelled "*Usambara*", "Pedinolinus / subviridipennis / *Bernh Typus*". I choose this specimen, a male, as lectotype of the species. It have affixed the label "*Lectotypus* Pedinolinus subviridipennis *Bh., Bordoni des. 2006*".

The Deutschs Entomologische Institut in Müncheberg preserves 2 specimens labelled "*Usambara*", "*Syntypus*" (printed on red label), "subviridipennis / *Brnh. sp. n.*", that I choose as para-lectotypes of the species. These specimens bear the label "*Paralectotypus* Pedinolinus subviridipennis *Bh., Bordoni des. 2006*".

All the three last specimens bear the determination label "Nudobius pictipennis *(Fvl.), Bordoni det. 2006*".

EXAMINED MATERIAL. Tanzania, Usambara, Derem, 850 m, S. Conradt leg., 25.X–21.XI.1892, 5 exx. (MNB), 2 exx. (cB); P. Weise, 1 ex. (MNB); Mts Uluguru, Kinola, 1500–1750 m, L. Berger, N. Leleup and J. Debecker, V–VIII.1971, 1 ex. (MRAC), 1 ex. (cB); Tanganjika, Kilimanjaro, Gebirgswald ob. Marangu, H. Franz, 1 ex. (NMW), 1 ex. (cB).

S. Ost. Afrika, Msassa-Tanga, S. Conradt leg., 14.VII–6.VIII.1891, 1 ex. (MNB).

Burundi, Ngozi, J. Decelle, 22.II.1979, 1 ex. (MRAC).

Rwanda, Nyakabuye, H. Mühle, 15–24.IV.1984, 1 ex. (MNB); Cyangugu, Nyakabuye, H. Mühle, 1–30.XII.1982, 1 ex. (MNB); Cyangugu Prov., Nyakabuye, H. Mühle, 13–17.XII.1985, 1 ex. (cB).

Congo, Rutschuru, J. Ghesquière, II.1938, 1 ex. (MRAC); Massif Ruwenzori, Kikyo near Kalonge, 2180 m, P. Vanschuytbroeck and J. Kekenbosch, 2.IX.1952, 3 females (MRAC), 1 female (cB).

CITED MATERIAL (not examined). (Tanzania), Usumbara, Derema (Fauvel, 1904); (Tanzania), Kilimandjaro, Meru (Eichelbaum, 1910, sub *Xantholinus*).

DESCRIPTION. Length of body: 6–10 mm; from anterior margin of head to posterior margin of elytra: 4.5–5 mm. Body very variable in size, fully winged. More or less dark brown, with black head and yellowish posterior margin of elytra, sometimes with reddish visible segments 5 and 6 and genital segment; antennae and legs brown. Similar to *N. africanus* in the flat body and shape of head, but different in the slender and narrow body, in colouration, smaller and narrower head, with smaller and sparser punctures, in the more anteriorly dilated and posteriorly narrow pronotum, with more marked anterior angles and more sinuate sides. Dorsal series of 2, 3 anterior and 2 posterior punctures and lateral series of 2, 3 puntures. Elytra with deep, dense punctation arranged in three series, one near the suture, one median and one lateral; and some surrounding punctures. Tergite and sternite of the male genital segment as in figures 337, 338; pleura more or less similar to those of *N. africanus*. Aedeagus 1 mm long (Figs. 339, 340), oval elongate; parameres asymmetrical and dilated; inner sac sub-rectilinear, tubuliform, covered with fine and sparse, small scales.

DISTRIBUTION. Tanzania, Burundi, Rwanda, Congo (Fig. 349).

BIONOMICS. "*Sous écorce*", "*steppe an den Natroseen*".

REMARKS. *Xantholinus pictipennis* v. *quadrimaculatus* Eichelbaum, 1910: the type of this variety was not studied because unfortunately it does not exist anymore. The Eichelbaum collection of 15,500 specimens came to the collections of the Zoologisches Museum of Hamburg in 1919, but "*I checked our collection, the file-cards and the publications by Weidner (1976, Mitt. Hamburg Zool. Mus. Inst., 73: 87-264; 1979, 76: 395-468) and the species is nowhere mentioned in the type lists. The type was most likely destroyed in the bombings of 1943 together with thousands of others*" (F. Wieland, personal communication.).

The same remark should be made as regards to *Xantholinus eichelbaumi* Steel, 1949 (nom. nov. for *Xantholinus puncticeps* Eichelbaum, 1913 nom. preoc.), from Tanzania.

The IRSNB preserves 1 "*ex typis*" specimens of *N. pictipennnis* labelled "*Natal, Dr. Martin*", "*varieté*". It is a female that I do not attribute to this species.

20. ***Nudobius schedli*** Scheerpeltz, 1956

Nudobius Schedli - Scheerpeltz, 1956a: 12, 15; 1956: 484
Nudobius schedli - Schedl, 1961: 162; Herman, 2001a: 3730

TYPE MATERIAL. The Musée Royal de l'Afrique centrale of Tervuren preserves 1 specimen labelled "*Holotype*" (printed on orange label), "*Congo Belge / Hembe-Bitali / 12.VIII.1952 / Dr. Schedl*", "*K. Schedl / 5.614*", "*Typus /* Nudobius / Schedli / *O. Scheerpeltz*" (on purple label), "*Coll. Mus. Congo / Don. R. Mayné*", "*Type der / Zeichnung*" (on green label), "*Dr. O. Scheerpeltz/ det. 1961*", "Nudobius / Schedli *sp. n./ bei* bipustulatus *Bh.*". It is a female.

The Naturhistorisches Museum of Wien preserves 1 specimen labelled "*Franz Kongo / Umg. Brazzaville / J. Perroud leg.*", "*Typus /* Nudobius / Schedli / *O. Scheerpeltz*" (on purple label). It is a female.

DESCRIPTION. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 3.5 mm. Body (Fig. 350) not flat, fully winged and shiny. Characterised by sub-cylindrical, narrow and elongate head. Reddish brown with darker head, lighter elytra, yellowish on the humeral angles and on the posterior margin; antennae brown; legs yellowish brown. Similar to *N. congoensis* in general shape but much smaller. Head large, a little dilated anteriorly, with protruberent eyes and deep, dense punctation, apart from the surface near the posterior angles. Pronotum shorter and narrower than head, anteriorly dilated, with broadly rounded anterior angles; dorsal series of 3 anterior and 2 posterior punctures and lateral series of 3, 4 punctures. Elytra flat, very broad and long, much longer and wider than pronotum, with marked humeral angles. Surface with very fine punctation, arranged in numerous, regular series. Abdomen with very fine and superficial, transverse micro-striation and very fine and sparse punctation. Male unknown.

BIONOMICS. "*In Brutgängen von Ctonoxylon flavescens var. usambericum Egg*." (Schedl, 1961).

DISTRIBUTION. Rep. Congo, Congo (Fig. 349).

21. ***Nudobius kikyo*** n. sp.

EXAMINED MATERIAL. Holotype female: Congo, Massif Ruwenzori, Kikyo près Kalonge, 2180 m, P. Vanschuytbroeck and J. Kekenbosch, 2.XI.1952 (MRAC); paratype: same data, 1 female (cB).

DESCRIPTION OF HOLOTYPE. Female. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 2.5 mm. Body fully winged, flat, dark reddish brown with black head; antennae and legs brown. Head subquaadrate, a little longer than wide, with sub-rectilinear and sub-parallel sides and narrowly rounded posterior angles. Eyes medium-sized, a little protruberent. Surface of head shiny, without micro-sculpture, with very evident, deep and oblong punctation, often confluent, forming a lateral groove behind the eyes; near the median impunctate band the punctures are round and smaller. Pronotum a little longer than head, dilated anteriorly where it is wide as head, with oblique anterior margins, rounded anterior angles, and sinuate sides. Surface with traces of superficial, transverse micro-striation; dorsal series of 3 anterior and 2 posterior punctures, and lateral, oblique series of 2 anterior punctures. Elytra longer and wider than pronotum, dilated posteriad, with rounded hu-

meral angles. Surface with very fine, sparse punctation, arranged in a few series. Abdomen with transverse micro-striation and fine, sparse punctation.

VARIABILITY. The paratype female has no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 349).

BIONOMICS. The specimens were collected "*sous écorces*".

REMARKS. Male unknown. This species occurs in the same locality as *N. congoensis* and *N. subcorticalis* n. sp. from which differ in size, colouration and punctation. It is one of the smallest species of *Nudobius* in Africa.

22. ***Nudobius asymetricus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Massif Ruwenzori, Kalonge, Kiondo, affl. Butahu, 2130 m, P. Vansechuytbroeck and J. Kekenbosch, 2.VIII.1952 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 7.4 mm; from anterior margin of head to posterior margin of elytra: 4 mm. Body flat and shiny, brown with head and abdomen black; antennae and legs brownish black. Head large, subquadrate, subrectilinear and sub-parallel sides and narrowly rounded posterior angles. Eyes small and scarcely protruberent. Surface with large, deep and dense punctures, apart from between the frontal grooves, sparser on the sides. Pronotum shorter and narrower than head, anteriorly dilated, with slightly sinuate sides; dorsal series of 3 anterior and 2 posterior punctures; lateral series of 2 anterior punctures. Elytra large, longer and wider than pronotum, dilatated posterial, with rounded humeral angles; surface with fine punctation, arranged in a few series. Tergite and sternite of the male genital segment as in figures 341, 342 Aedeagus oval (Fig. 343), narrow, 0.9 mm long, with asymmetrical narrow parameres; inner sac not visible.

ETYMOLOGY. The specific epithet refers to the Latin *asymetricus -a -um* (asymmetrical), in reference to the parameres.

DISTRIBUTION. Congo: Ruwenzori (Fig. 349).

REMARKS. Female unknown.

23. ***Nudobius magrinii*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Mt Kabobo, terr. Albertville, Hte Kiymbi, 1800 m, N. Leleup, X.1958 (MRAC); paratypes: same data, 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 8.5 mm; from anterior margin of head to posterior margin of elytra: 4 mm. Body shiny, dark reddish brown, with black head; antennae and legs brown. Head slightly dilated, with sub-rectilinear and sub-parallel sides: Eyes protruberent. Entire surface of head with deep, dense punctation. Pronotum strongly dilated anteriorly, as long as head and anteriorly as wide as head, with sinuate sides. Surface with traces of transverse micro-striature, dorsal series of 2 anterior and 3 posterior punctures and lateral series of 4 widely spaced punctures. Elytra large, much longer and wider than pronotum, with marked humeral angles. Surface with fine and dense punctation arranged in numerous series. Abdomen with very fine and superficial transverse micro-striation and very fine and sparse punctation. Tergite and sternite of the male genital segment as in figures 344, 345. Aedeagus oval (Fig. 346), 0.96 mm long, with asymmetrical parameres; inner sac of characteristic shape, covered with scales.

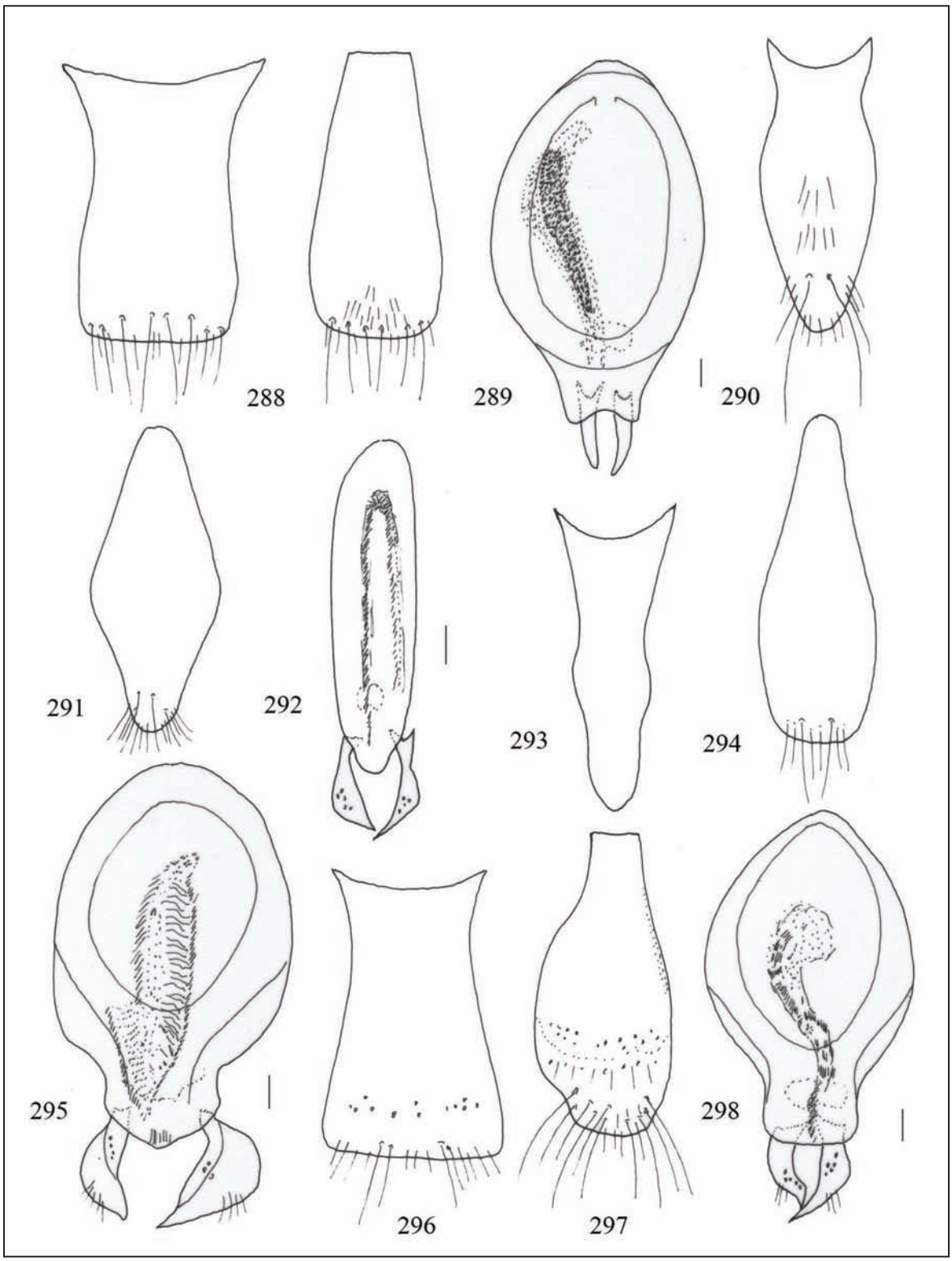
VARIABILITY. The paratype female has no substantial morphological differences with the holotype described.

ETYMOLOGY. Patronymic. Dedicated to my friend and colleague Paolo Magrini (Firenze, Italy), author of some photos.

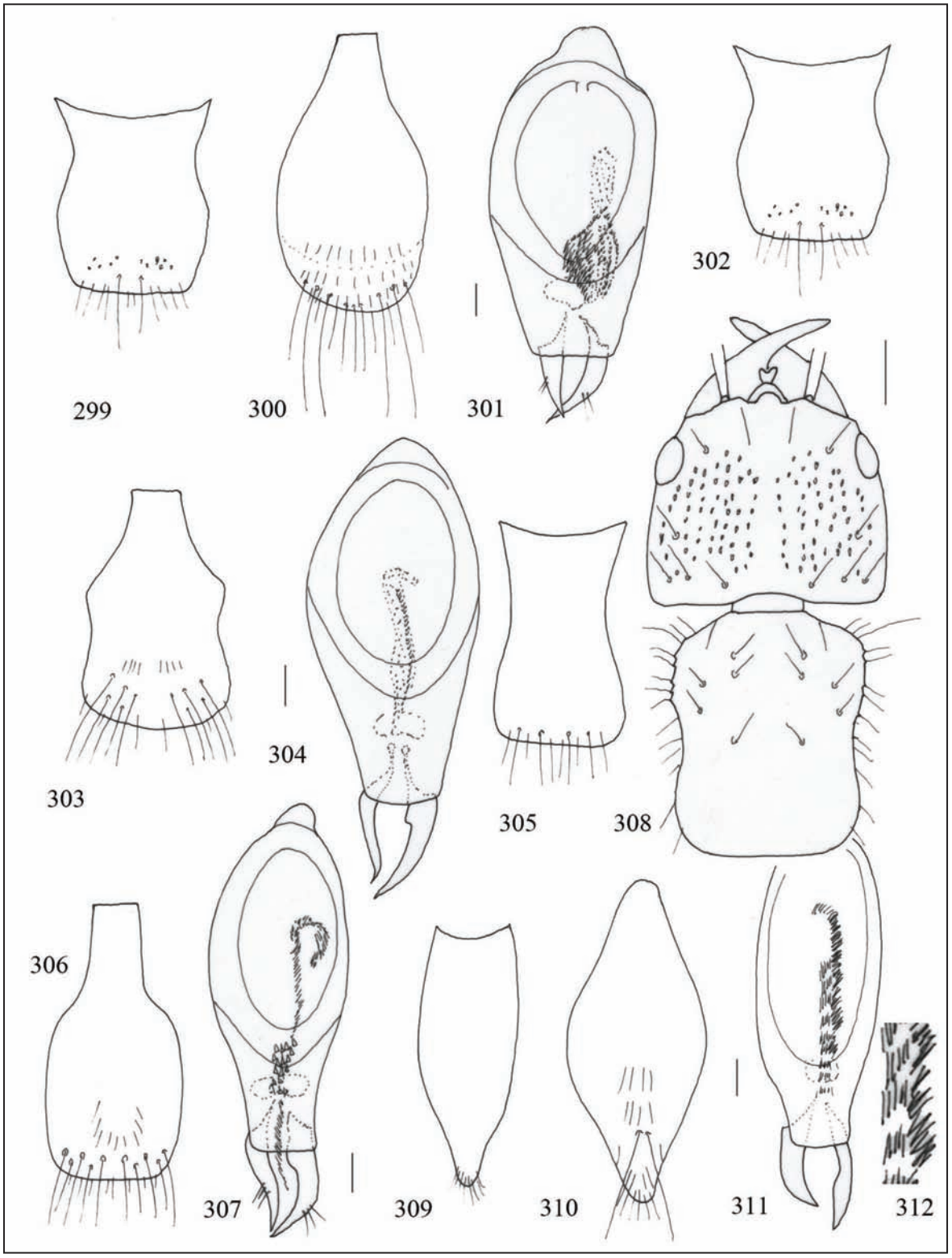
DISTRIBUTION. The species is known at present only from the type locality in Congo (Fig. 349).

BIONOMICS. The specimens were collected under "*écorces d'arbres morts*".

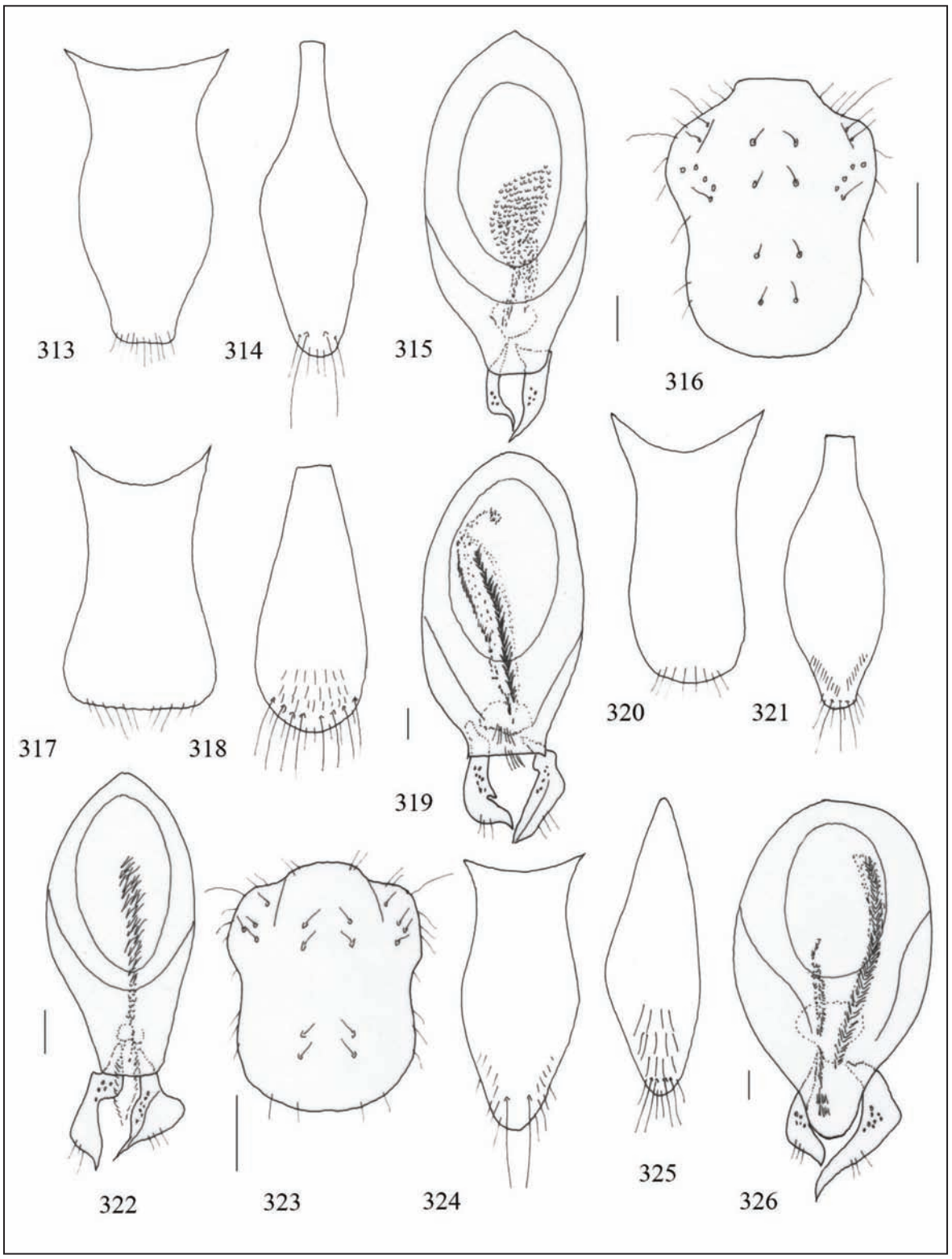
REMARKS. This species is similar to *N. pictipennis*, but differs in the shape of the aedeagus. Mount Kabobo is part of the mountain range, 150 km in length, to the west of the northern half of Lake Tanganyika in eastern DR Congo; it contains virtually all the montane forest in the area.



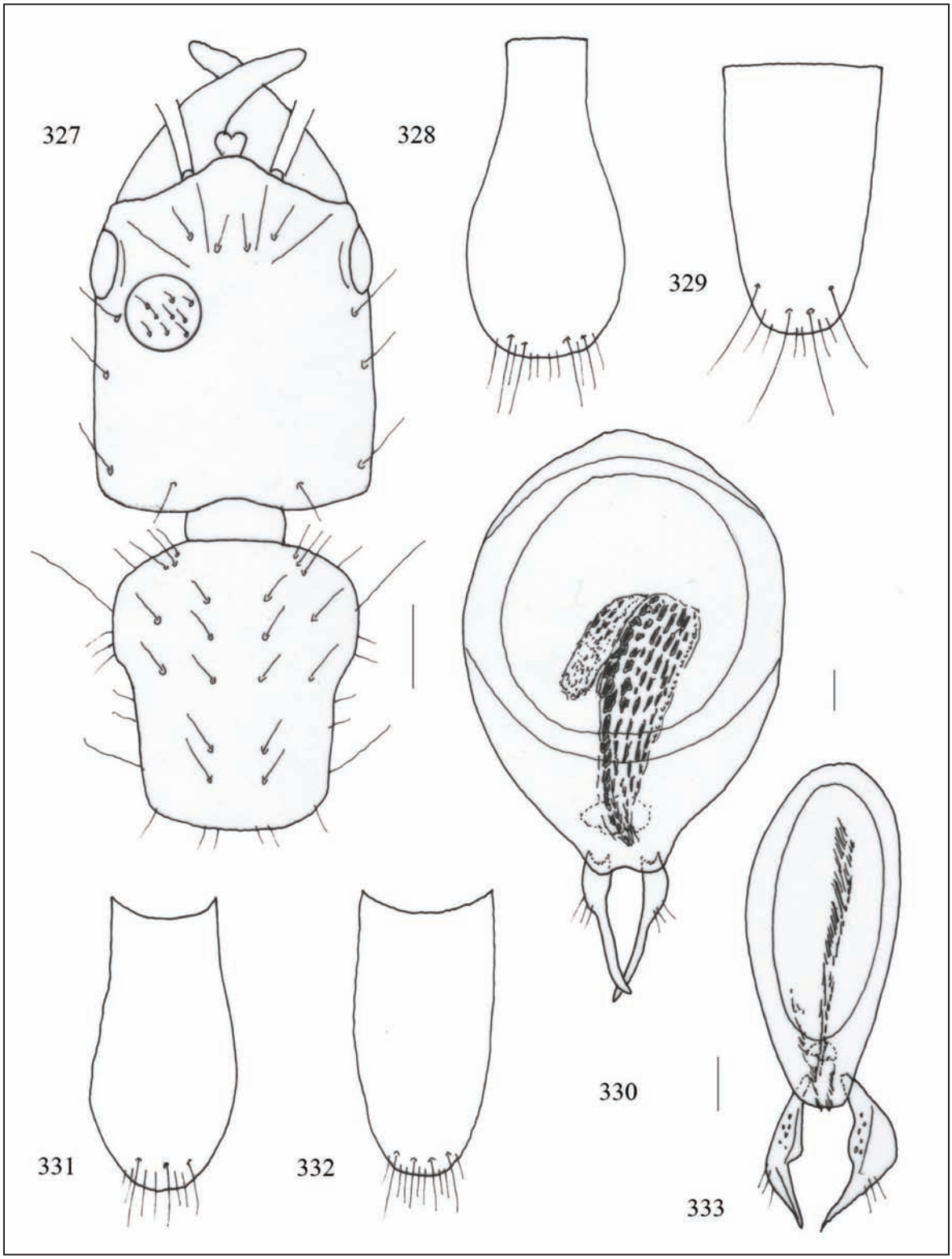
Figures 288–298. Tergite, sternite of the male genital segment and aedeagus of *Nudobius nigrocyaneus* (Figs. 288–289) and *N. burgeoni* (Figs. 290–292) (bar scale 0.1 mm). Tergite, sternite of the male genital segment and aedeagus of *N. euphorbiae* n. sp. (293–295) and *N. schlueteri* (Figs. 296–298) (bar scale: 0.1 mm).



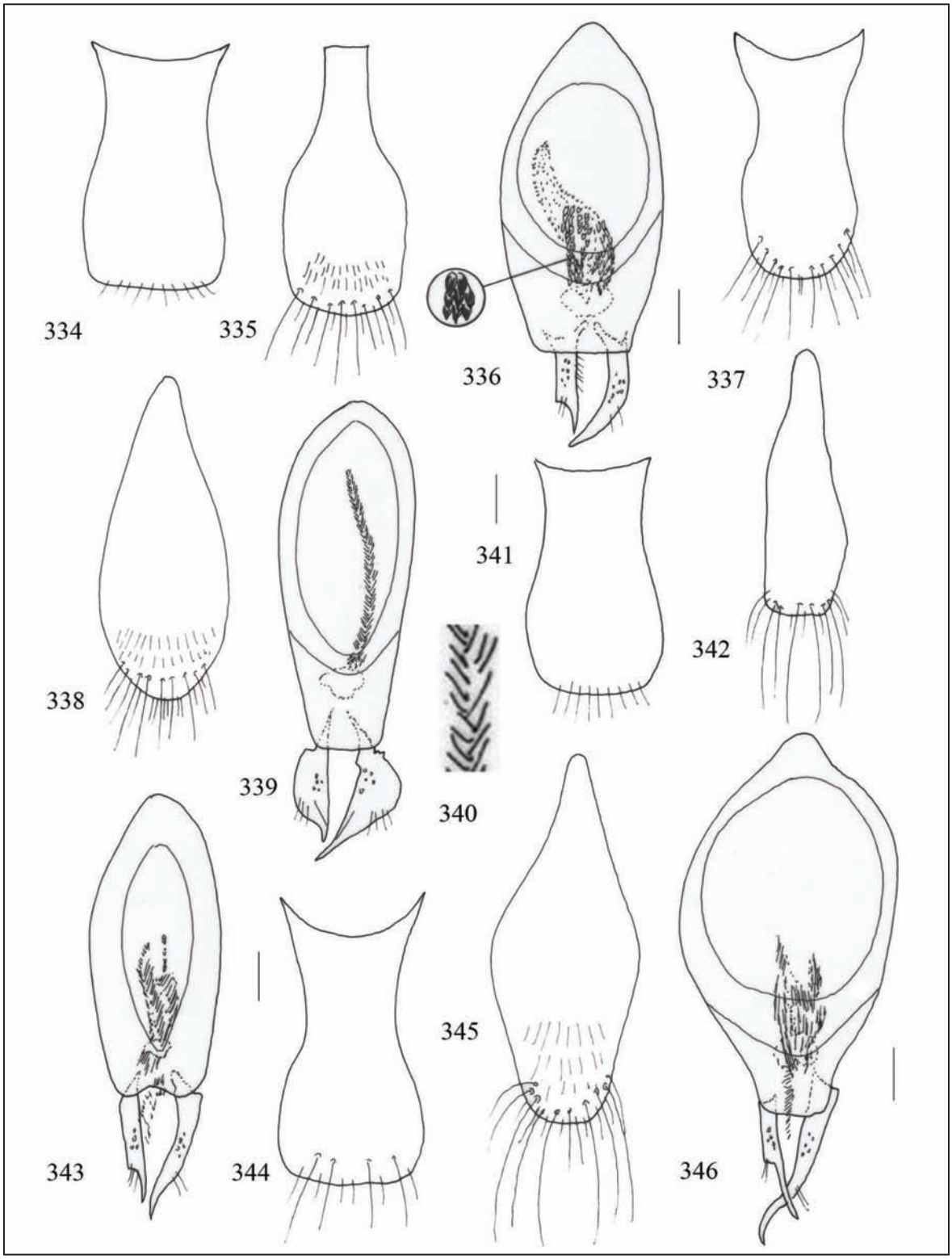
Figures 299–312. Tergite, sternite of the male genital segment and aedeagus of *Nudobius praecellens* (Figs. 299–301), *N. abessinus* (Figs. 302-304) (bar scale: 0.1 mm), and *N. proximus* (Figs. 305–307) (bar scale: 0.1 mm). *Nudobius africanus*: head and pronotum (bar scale: 0.5 mm) (Fig. 308), tergite, sternite of the male genital segment and aedeagus (Figs. 309–312) (bar scale: 0.1 mm).



Figures 313–326. Tergite, sternite of the male genital segment and aedeagus of *Nudobius subcorticalis* n. sp. (bar scale: 0.1 mm) (Figs. 313–315), and *N. rhodesianus* n. sp. (Figs. 317–319) (bar scale: 0.1 mm). Fig. 316: pronotum of *N. rhodesianus* n. sp. (bar scale: 0.5 mm). Tergite, sternite of the male genital segment and aedeagus of *N. mbotyanus* n. sp. (bar scale: 0.1 mm) (Figs. 320–323), and *N. bartolozzii* n. sp. (bar scale: 0.1 mm) (Figs. 324–326). Fig. 323: pronotum of *N. bartolozzii* n. sp. (bar scale: 0.5 mm).



Figures 327–333. *Nudobius congoensis*: head and pronotum (bar scale: 0.5 mm) (Fig. 327), tergite, sternite of the male genital segment and aedeagus (Figs. 328–330). *Nudobius tanzanicus* n. sp.: tergite, sternite of the male genital segment and aedeagus (bar scale: 0.1 mm) (Figs. 331–333).



Figures 334–346. Tergite, sternite of the male genital segment and aedeagus of *Nudobius bipustulatus* (Figs. 334–336) and *N. pictipennis* (Figs. 337–340) (bar scale: 0.1 mm). Tergite, sternite of the male genital segment and aedeagus of *Nudobius asymetricus* n. sp. (Figs. 341–343) and *N. magrinii* n. sp. (Figs. 344–346) (bar scale: 0.1 mm).

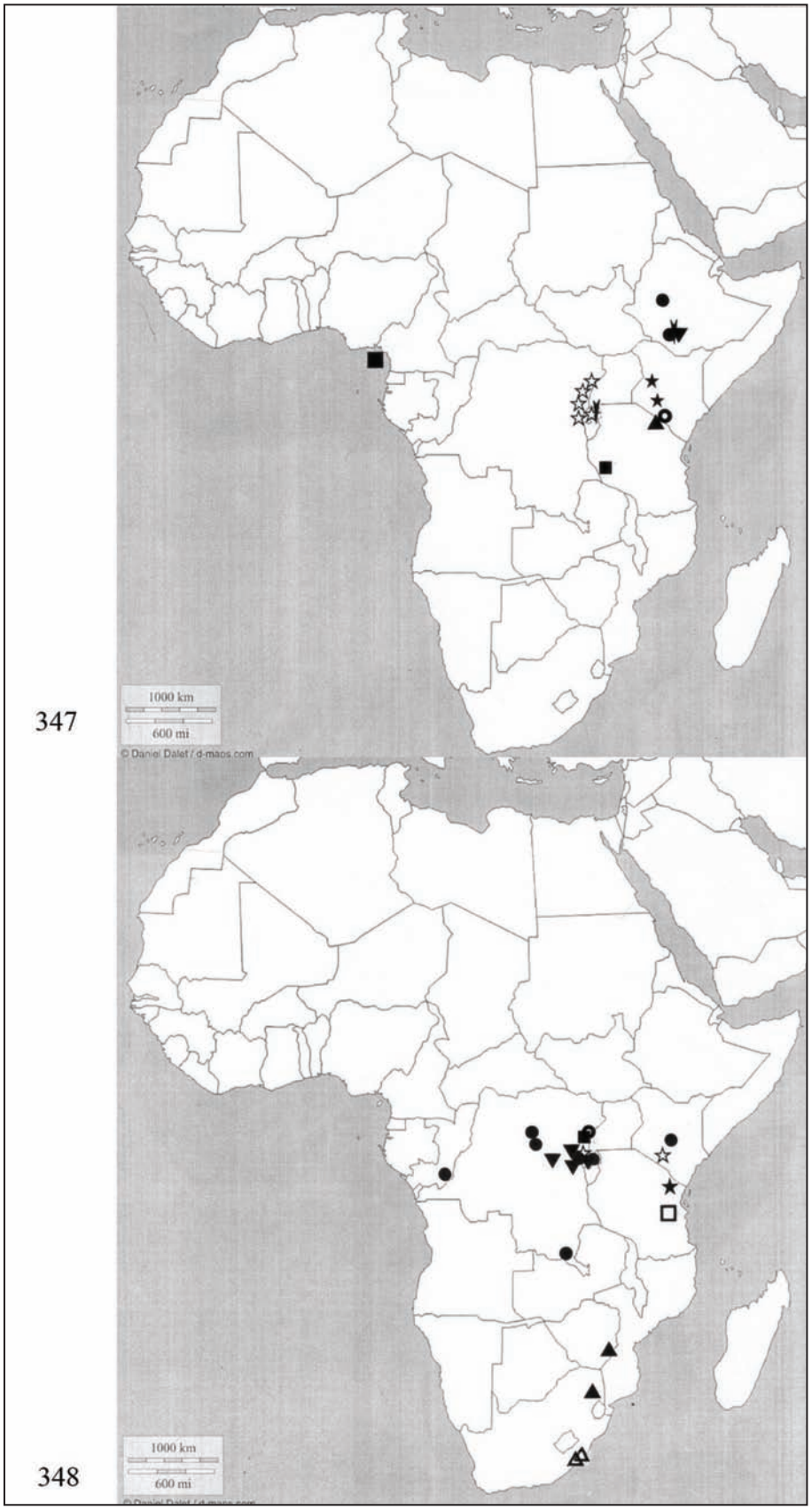


Figure 347. Distribution of the genus *Nudobius*: *N. nigrocyaneus* (star), *N. burgeoni* (open star), *N. euphorbiae* n. sp. (small square), *N. schlueteri* (big square), *N. praecellens* (small triangle), *N. abessinus* (inverted arrow), *N. proximus* (inverted triangle), *N. coloriventris* (circle), *N. elytratus* n. sp. (open circle).

Figure 348. Distribution of the genus *Nudobius*: *N. africanus* (small square), *N. subcorticalis* n. sp. (open circle), *N. rhodesianus* n. sp. (filled triangle), *N. mbotyanus* n. sp. (open triangle), *N. bartolozzii* n. sp. (open square), *N. congoensis* (inverted triangle), *N. quadriceps* (circle), *N. tanzanicus* n. sp. (star), *N. bipustulatus* (open star).

Figure 349. Distribution of the genus *Nudobius*: *N. pictipennis* (circle), *N. kikyo* n. sp. (filled square), *N. schedli* (star), *N. asymetricus* n. sp. (open square), *N. magrinii* n. sp. (open triangle).

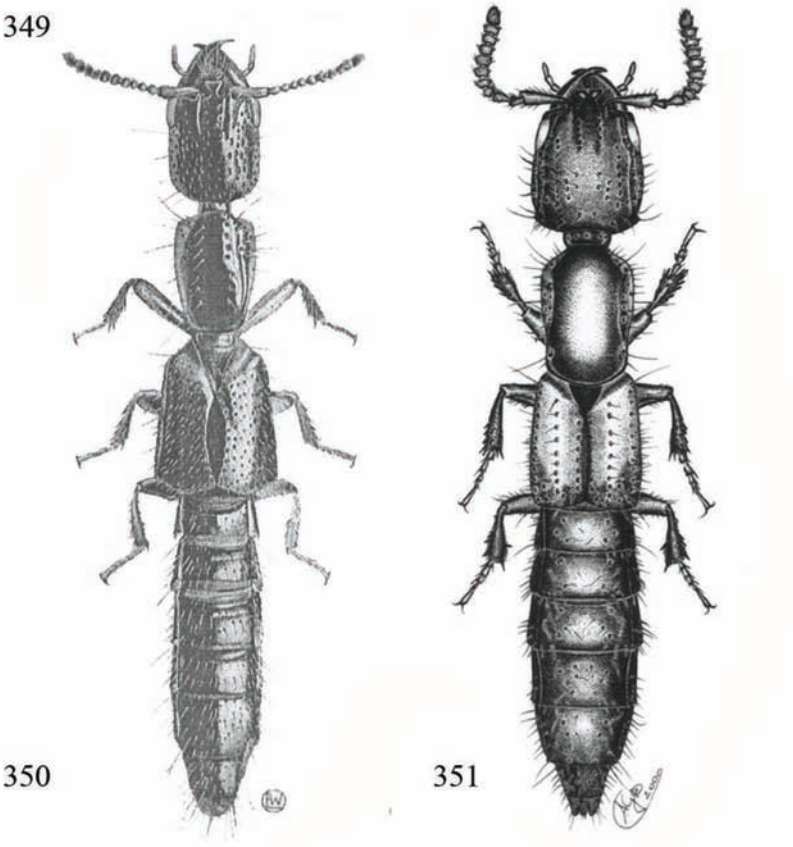


Figure 350. Habitus of *Nudobius schedli* (ex Schedl, 1961).

Figure 351. Habitus of *Gauropterus* sp. (ex Bordoni, 2002).

10. Genus ***Gauropterus*** Thomson, 1860 (Figs. 351–385, 300)

Gauropterus - Thomson, 1860: 187; Coiffait, 1956: 57; 1972: 164; Smetana, 1958: 115; 1982: 71; Székessy, 1963: 50; Palm, 1963: 53; Lohse, 1964: 160; Coiffait & Saiz, 1964: 511; Kirchenblat, 1965: 117; Bordoni, 1982: 164; 2002: 184; Shibata, 1983: 68; Downie & Arnett, 1996: 398; Herman, 2001a: 3629

TYPE SPECIES. *Staphylinus fulgidus* Fabricius, 1787, fixed by Thomson for monotypy (Smetana, 1979: 49)

DESCRIPTION. Body (Fig. 351) of medium to large size (6–16 mm long), fully winged. Characterized by head sub-rectangular, sub-parallel sided, with numerous coarse punctures forming sub-impressed longitudinal lateral rows; frontal grooves distinct, ocular grooves absolete; eyes small; tempora limited usually by sub-impressed longitudinal series of coarse punctures and posteriorly by punctate groove with a small denticle; mandibles robust, devoid of deep lateral groove but with a feeble basal impression; epistome sub-rectangular protruding, with flat back; gular sutures fused; pronotum without dorsal series of punctures and lateral series situated in impressed grooves; upper epipleural line joining lower line just in front of procoxal cavities; antesternal plate divided; anterior tarsi not dilated; metatibiae with apical ctenidium only (for all these characters cf. Bordoni, 2002). Sternite of the male genital segment asymmetrical (Figs. 361–368); aedeagus normally small, with symmetrical parameres (Figs. 355–369); inner sac long tube-like, sometimes folded on itself, diaphanous or with little scales. Female genital segment (Bordoni, 2002: figs. 63, 64).

DISTRIBUTION. This genus seems occurs all over the world except Australia, but in North America (Smetana, 1982) it is represented only by the type species, probably introduced from Europe. In Africa it occurs especially in central regions but also in Ethiopia and South Africa (Fig. 399).

BIONOMICS. All species of this genus live in various kinds of decaying organic matter. The biology, and in particular the larva of *G. fulgidus* was studied for example by Rey (1886: 149) and Xambeu (1911: 78).

REMARKS. Species of *Gauropterus* seem to be uncommon, probably owing to insufficient research. The study of these taxa is not easy: the external characters are similar and the species have a certain range of variability.

KEY TO THE SPECIES

1. Epistoma narrow, long and very protruberent upward; head, pronotum and scutellum black; abdomen brown with last segments reddish; elytra red.....2
-. Epistoma broad, short, flat, with rounded anterior margin; body of similar colouration.....4

2. Body about 16 mm long; head sub-rectangular, with punctation forming anterior striae; pronotum with a few punctures near the anterior angles. Male unknown. Zimbabwe.....1. *G. abactus*
-. Body 12–13 mm long.....3

3. Body broader; head dilated posteriad, with some striae; eyes larger; pronotum more dilated anteriorly, with few punctures near the anterior angles, body 13 mm long. Aedeagus (Fig. 355). Ethiopia.....2. *G. abessinus* n. sp.
-. Body narrower; head not dilated posteriad, with some striae; eyes smaller; pronotum less dilated anteriorly, with evident lateral groove formed by a few confluent punctures; body 12 mm long. Aedeagus (Fig. 358). Congo.....3. *G. nasutus*

4. Body 14–15 mm long.....5
-. Body 11.5 mm long; head sub-rectangular, a little longer than wide, with evident posterior apophyses; indistinct lateral groove before lateral surface, covered with very numerous, fine punctures; pronotum sub-rectangular, a little dilated anteriorly, with some punctures near the anterior angles but not forming a groove; elytra a little dilated posteriod. Aedeagus (Fig. 373). Congo.....4. *G. evansi*
-. Body less than 10 mm long.....6

5. Head a little dilated posteriad, with evident posterior apophyses and only one lateral stria composed of confluent punctures; pronotum massive, with some deep punctures near the anterior angles; body 14–15 mm long. Aedeagus (Fig. 362) . Zimbabwe.....5. *G. zimbabwae* n. sp.

-. Head subquadrate, with marked posterior angles, with one indistinct lateral groove and sparser punctation; pronotum broad, more strongly dilated anteriorly and with 2 large and very deep punctures near the anterior angles; elytra sub-rectangular, narrow; body 14 mm long. Aedeagus (Fig. 366). Zambia.....6. *G. zambianus* n. sp.
-. Head sub-rectangular, with less marked posterior angles, more evident lateral groove and denser punctation; pronotum narrow, less dilated anteriorly, with punctation near the anterior angles forming a groove; elytra broad, dilated posteriad; body 14 mm long. Aedeagus (Fig. 369). Tanzania.....7. *G. hauseri*

6. Body 9 mm long, brown with darker head and abdomen; head sub-quadrate, with lateral groove and a groove behind eyes; pronotum massive, with a few punctures near the anterior angles. Aedeagus with large, rounded median lobe (Fig. 377). Uganda.....8. *G. gedyei*
-. Body smaller and narrow.....7

7. Body reddish brown, with black head and yellowish elytra, laterally and posteriorly infuscate; head with 2 evident grooves on each side; pronotum dilated anteriorly, with a long lateral groove; elytra sub-rectangular, narrow, with brown scutellum; body 6–8 mm long. Aedeagus smaller, narrow, with characteristic parameres (Fig. 381). Sierra Leone, Centrafrican Rep., Gambia, Nigeria.....9. *G. pustulatus*
-. Body reddish black, with red elytra, infuscate posteriad; head with 3 grooves on each side; pronotum with longer lateral groove; elytra wide, dilated posteriad, and black scutellum; body 6.3 mm long. Aedeagus longer, with different parameres (Fig. 385). Central African Rep.....10. *G. africanus* n. sp.

1. ***Gauropterus abactus*** Tottenham, 1939

Gauropterus abactus - Tottenham, 1939: 221; Herman, 2001a: 3631

Type material. The Natural History Museum in London preserves 1 specimen labelled "Holotype" (on round label with red edge), "*Mt Selinda / S. Rhodesia / Nov. Dec. 1930 / R. H. R. Stevenson*", "Gauropterus / abactus / *Tottenham / TYPE*" (on yellow label). It is a female.

Examined Material. Zimbabwe, Kyle Recr. Park at Lake Mutirikwi, 20.13S, 31.00E, M. Uhlig, 1–5.XII.1993, 1 ex. (NMB)

Description. Male unknown. Female: length of body 16 mm; from anterior margin of head to posterior margin of elytra: 6.7 mm. Body long, narrow; fully winged and shiny. Head and pronotum black, elytra red, scutellum black, abdomen brownish black; 6th visible abdominal segment and genital segment reddish; antennae and legs brown. Head sub-rectangular, sub-rectilinear sided, with broadly rounded posterior angles. Eyes small and flat. Surface of head with deep striae on the anterior half and with oblong punctures on median and posterior half, larger under the eyes; lateral surface with fine, small punctures. Epistoma produced over the labrum; labrum as in figure 352. Pronotum longer than head, anteriorly dilated where it is a little wider than head, with less oblique anterior margins and narrowly rounded anterior angles. Surface without lateral grooves, with some punctures near the anterior angles. Elytra narrow, longer and broader than pronotum, dilated posteriad, with obsolete humeral angles. Surface with punctures arranged in three series, one juxtasutural, one median and one lateral. Abdomen with fine and dense, transverse micro-striation and fine punctation.

Distribution. Zimbabwe (Fig. 399).

Remarks. This species is similar to *G. nasutus* but differs in its larger size, shorter striae on the head, finer punctation on tempora, shape of labrum and by the absence of grooves on pronotum. Tottenham (1939) must have just used the first adjective in his Latin dictionary as the meaning of *abactus -a -um* (cast) makes little sense (see also *Byziniella abacta*).

2. ***Gauropterus abessinus*** n. sp.

Examined material. Holotype male: Abyssinia (NMW).

Description of Holotype. Male. Length of body: 13 mm; from anterior margin of head to posterior margin of elytra: 7 mm. Head and pronotum black, elytra red, scutellum and abdomen brownish black, last two abdominal segments reddish. Similar to *G. abactus* in colour and the narrow body, but

smaller, labrum with wider epistoma (Fig. 353), head narrow anteriorly, with almost right posterior angles; head with longer striae; pronotum anteriorly as wide as head, with largely rounded anterior angles and a grove near the anterior angles with three big punctures. Tergite and sternite of the male genital segment as in figure 354. Aedeagus 1.1 mm long (Fig. 355), larger than that in *G. nasutus*, with distal portion and parameres differently shaped; inner sac very long.

ETYMOLOGY. The specific epithet refers to Abyssinia, which includes both the present states of Ethiopia and Eritrea.

DISTRIBUTION. The species is actually known only from the type locality, not included in the map.

REMARKS. Female unknown.

3. ***Gauropterus nasutus*** (Harold, 1879)

Xantholinus nasutus - Harold, 1879: 27
Gauropterus nasutus - Bernhauer & Schubert, 1914: 310; Herman, 2001a: 3635
Gauropterus methneri - Bernhauer, 1908: 107; Bernhauer & Schubert, 1914: 310; Herman, 2001a: 3635, syn. n.

TYPE MATERIAL. The Zoologische Museum in Berlin preserves 2 specimens, one labelled "*Pogge*", "nasutus / *Harold / Rean. Lunda*" (on green labels), "*Lectotypus* / Xantholinus / nasutus *Harold / J. Janak des. 1991*", "Gauropterus / nasutus *(Harold) / J. Janak det. 1991*" (handwritten on red label), and the other "*Sansibar./ Hildebrandt*", "*60589"*, "nasutus / *Harold", "Paralectotypus* / Xantholinus / nasutus *Harold / J. Janak des. 1991*" (handwritten on red label), "Gauropterus / nasutus *(Harold) / J. Janak det. 1991*". They are two females now bearing the determination label "Gauropterus nasutus *(Harold), Bordoni det. 2006*".

The Field Museum of Natural History of Chicago preserves 1 specimen labelled "*D. Ostafrika / Methner/ Usaromo/ Mantinfärhre*", "*Methner*...[illegible] / *typ. XI.06 unter dürrenr Laub*", "Methneri / *Bernh. / Typus un.*" (handwritten by Bernhauer). It is a male, identical to *G. nasutus*, with the determination label "Gauropterus nasutus *(Harold), Bordoni det. 2006*".

EXAMINED MATERIAL. Tanzania, Mts Uluguru, Morogoro Campus Fac. Agr., 600 m, L. Berger, N. Leleup and J. Debecker, V–VIII.1971, 1 ex. (MRAC).

Botswana, Kasane, M. Snizek, 29.XII.1996–7.I.1997, 1 ex. (cB); Maun, Island Safari, M. Snizek, 15-29.I.1997, 1 ex. (cJ).

Namibia, East Caprivi, Katima Mulilo Zambesi, 950 m, R. Kmeco, 19–25.I.1999, 1 ex. (cJ), 1 ex. (cB).

DESCRIPTION. Length of body: 11.5–12 mm; from anterior margin of head to posterior margin of elytra: 6–6.5 mm. Fully winged and shiny. Black with red elytra, black scutellum and last three abdominal segments red; antennae and legs brownish black; tarsi red. Head sub-rectangular elongate, slightly dilated posteriad, sub-rectilinear and subparallel sided, with narrowly rounded posterior angles. Eyes small and flat. Antennae with transverse segments, gradually wider distally. Epistoma large, long, produced over the labrum. Labrum as in figure 356. Surface of head with deep longitudinal striae; some punctures are present in the striae and near the posterior margin; tempora with numerous not confluent punctures. Pronotum as long as head, a little narrower, with almost rectilinear anterior margins, very narrowly rounded anterior angles, and sinuate sides. Surface with a deep, longitudinal groove on the anterior margins, between the anterior angles and the neck, occupying 1/3 of the pronotum; some punctures on the sides. Elytra long, dilated posteriad, longer and wider than pronotum, with less marked humeral angles. Surface with punctures arranged in three series, one juxtasutural, one median and one lateral. Abdomen with traces of transverse micro-striation and large, deep and dense punctures. Tergite and sternite of the male genital segment as in figure 357. Aedeagus narrow (Fig. 358), 1 mm long, with dilated median lobe; parameres arched; inner sac long and narrow, tubular.

DISTRIBUTION. Tanzania, Congo, Senegal, Botswana, Namibia (Fig. 399).

4. ***Gauropterus evansi*** Bernhauer, 1937

Gauropterus Evansi - Bernhauer, 1937: 298; Herman, 2001a: 3631

TYPE MATERIAL. The Field Museum of Natural History in Chicago preserves 1 specimen labelled "*Belgian Congo / 18 m S.W. / Elisabethville / 1927/*

Dr. H. S. Evans", "Gauropterus / Evansi *Bh. / Cotypus", "Evansi Type /* Gauropterus". It is a male that I choose as lectotype of the species. It now bears the labels "*Lectotypus* Gauropterus Evansi *Bh., Bordoni des. 2006*" and "Gauropterus evansi *Bh., Bordoni det. 2006*".

The Natural History Museum in London preserves 1 specimen labelled "*Type*" (on round label with red border), "*Belgian Congo / 18 m SW of / Elizabeth ville / 1927 / Dr. H. S. Evans*", "Gauropterus / Evansi *Brnh./ Typus*". It is a male that I choose as paralectotype of the species. It have the labels "*Paralectotypus* Gauropterus evansi *Bh., Bordoni des. 2009*" and "Gauropterus evansi *Bh., Bordoni det. 2009*".

EXAMINED MATERIAL. Tanzania, 30 km W Songea, K. Werner, 8.XII.1994, 1 ex. (NMB), 1 ex. (cJ), 1 ex. (cB).

Congo, Katanga, Mission Kanzeze, N. Leleup, 1. XII.1948, 1 ex. (MRAC).

South Africa, Transvaal, Shilouvari, H.A. Junod, 1906–7, 1 ex. (cB).

DESCRIPTION. Length of body: 11.5 mm; from anterior margin of head to posterior margin of elytra: 7.5 mm. Fully winged and shiny. Body very robust, broad, cylindrical. Head, pronotum and abdomen black, elytra and last two abdominal segments reddish yellow; scutellum brownish black; antennae and legs dark brown; tarsi yellowish brown. Head massive, cylindrical, proportionately squat, subrectilinear and sub-parallel sided, with narrowly rounded posterior angles and with the usual posterolateral denticle. Eyes proportionately small and flat; antennae with 2nd segment very short and thick, much shorter than 3rd. Labrum of peculiar shape (Fig. 370). Surface of head with micro-punctation, and with large oval, not very deep and dense punctures, concentrated on a median strip; some punctures with long setae are present: one in the frontal grooves, one at the anterior margin of eyes, one under the preceding, one near the posterior angles. Between the eyes and the posterior angles there is an arcuate groove formed by confluent elongate punctures; tempora with numerous smaller punctures. Pronotum a little longer than head, anteriorly dilated, where it is narrower than head, with not oblique anterior margins, prominent right-angled anterior angles, and slightly sinuate sides. Surface with some deep notches on the anterior margins, between the anterior angles and the neck and with some punctures on the lateral margins. Elytra narrow, longer and wider than pronotum, with less marked humeral angles. Surface with fine punctation arranged in two series near the suture, one oblique median series composed of larger punctures, and one lateral. Abdomen with transverse micro-striationa and large, deep, dense punctation. Tergite and sternite of the male genital segment as in figures 371, 372. Aedeagus large (Fig. 373), 1.85 mm long, broad, with shortly narrowed median lobe; parameres short and thick; inner sac ribbon-like, covered with very fine small scales.

DISTRIBUTION. Congo, Tanzania, South Africa: Transvaal (Fig. 399).

5. ***Gauropterus zimbabwae*** n. sp.

EXAMINED MATERIAL. Holotype male: Zimbabwe, Nembudziya, Hovorka, X.1994 (NMW); paratype: South Africa, Transvaal, Lekgalameetse Nat. Res., 24.05S, 30.15E, F. Koch, 21.XII.1995, 1 female (NMB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 14 mm; from anterior margin of head to posterior margin of elytra: 7 mm. Fully winged. Head and pronotum, scutellum and abdomen, apart the last two segments, black; elytra and last two abdominal segments reddish orange; antennae and legs brown, infuscate. Similar to *G. abactus*, but smaller and broader. Head a little dilated posteriad, with marked posterior angles, furnished with a denticle. Eyes similar to those of *G. abactus*. Surface of head shiny, with a single lateral groove formed by 5 oblong punctures; a few other punctures anteriorly, apart from a wide median area. Lateral surface of head with minute, dense punctures. Epistoma with rounded anterior margin and labrum as in figure 359. Neck very wide. Pronotum very longer than head, anteriorly dilated and here as wide as head. Surface shiny, with 3 lateral punctures, one behind the other. Elytra as long as pronotum, a little dilated posteriad, with rounded humeral angles. Surface with fine and superficial punctures, arranged in a few widely spaced series. Abdomen as in *G. abactus*. Tergite and sternite of the male genital segment as in figures 360, 361. Aedeagus very large (Fig. 362), 1.7 mm long, sub-spherical, with sub-triangular median lobe and characteristic parameres; inner sac tubular, folded on itself a few times and covered with minute scales.

VARIABILITY. The paratype female has no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Zimbabwe.

DISTRIBUTION. The species is known from the Zimbabwe and Transvaal (Fig. 399).

6. ***Gauropterus zambianus*** n. sp.

EXAMINED MATERIAL. Holotype male: NW Zambia, 90 km Solwesi, E of Chisasa, M. Snizeck, 9.XI.2005 (cB); paratypes: same data, 1 male (cB); Zambia, Northern Prov., 15 km E Luwingu, 1400 m, A. Kudrna, 3–4.XII.2007, 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 14 mm; from anterior margin of head to posterior margin of elytra: 7 mm. Fully winged. Similar to *G. hauseri* but more robust, larger and broader; head larger and broader, with more evident posterolateral denticles. Surface with sparser punctation. Labrum of different shape (Fig. 363). Pronotum more massive; surface with confluent punctures forming a short groove near the anterior angles. Elytra dark red, longer and narrower than that of hauseri, sub-rectangular, with more marked humeral angles. Surface with sparser punctation. Abdomen darker, blackish, with narrowly reddish posterior margins and reddish yellow genital segment. Legs brownish black with red tarsi. Tergite and sternite of the male genital segment as in figures 364, 365. Aedeagus large (Fig. 366), 1.88 mm long, similar in the general shape to that of *G. evansi*, with narrower parameres and inner sac much longer.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Zambia.

DISTRIBUTION. Zambia (Fig. 399).

7. ***Gauropterus hauseri*** Bernhauer, 1937

Gauropterus hauseri - Bernhauer, 1937: 609; Herman, 2001a: 3634
Gauropterus adjacens - Tottenham, 1939: 222; Herman, 2001a: 3631, syn. n.

TYPE MATERIAL. The Field Museum of Natural History in Chicago preserves 1 specimen labelled "*D. O. Afrika / Dr. Holtz / Pugu/ 10.12.08*", "Gauropterus / puguensis *Brh. / Typus unic.*", "*don. Dr. Hauser*", "Hauseri / *Brnh. Typus / unic.* Gauropterus". It is a male. The Natural History Museum in London pre-serves 1 specimen labelled "*Holotype*" (on round label with red border), "*Sanyati Valley / S. Rhodesia / Sept. Oct. 1925 / R. H. R. Stevenson*", "Gauropterus / adjacens / *Tottenham/ TYPE*" (on yellow label), identical to *G. hauseri*. It is a male.

DESCRIPTION. Length of body: 14 mm; from anterior margin of head to posterior margin of elytra: 7 mm. Fully winged. Head and pronotum black, elytra red, scutellum brown, abdomen brown with last three segments red. Similar to *G. methneri* but more robust, large and long. Head of similar shape, with protruberent posterior angles in a denticle; epistoma larger and less salient. Eyes larger. Surface of head with a single groove for part of the length, composed of more punctures between the eyes and the posterior margin; on the disc are some elongated punctures, some others are at the posterior margin; a group of minute punctures on the tempora, under the eyes. Labrum with 4 protrusions. Pronotum more massive, more dilated anteriorly, with more protruberent anterior angles. Surface with a lateral, oblique groove, composed of some punctures, extending to half of pronotum. Elytra longer, dilated posteriad, with fine punctation, arranged in more series. Tergite and sternite of the male genital segment as in figures 367, 368. Aedeagus much larger than that of *G. methneri* (Fig. 369), 1.66 mm long, more dilated, with narrower median lobe and sub-acute apex; parameres bent almost at right angle; inner sac broad, covered with sparse, little scales.

DISTRIBUTION. Tanzania, Zimbabwe (Fig. 399).

REMARKS. In the description of *G. adjacens*, Tottenham (1939) wrote that his collection, now in NHML, also contains a female from "*Penkridge, R. H. R. Stevenson 1.II.1938*".

8. ***Gauropterus gedyei*** Cameron, 1951

Gauropterus gedyei - Cameron, 1951a: 400; Herman, 2001a: 3634

TYPE MATERIAL. The Natural History Museum of London preserves 1 specimen labelled "*Type*" (on round label with red edge), "*Budongo For. / OCT 36 / A. F. J. Geyde*", "Gauropterus / gedyei / *Type (in red) Cam.*", "*Pres by / Com Inst Ent / B M 1952 5Y5*". It is a male.

DESCRIPTION. Length of body: 9 mm; from anterior margin of head to posterior margin of elytra: 5 mm. Fully winged and shiny. Body brown with head and abdomen a little darker. Head subquadrate, sub-parallel sided. Eyes large and slightly protruberent. Surface of head with some punctures under the eyes forming a groove, a lateral groove and the usual postero-lateral denticle. Labrum as in figure 374. Pronotum massive, longer than or as long as head, with broadly rounded anterior angles, a little dilated anteriorly, without grooves or punctation, apart from a feeble puncture near the anterior angles. Elytra large, longer and wider than pronotum, dilated posteriad, with rounded humeral angles. Surface with punctures arranged in three series, one juxtasutural, one median and one lateral; each series composed of 3, 4 large and very shallow punctures. Abdomen with very fine and dense, polygonal micro-reticulation and sparse punctation. Tergite and sternite of the male genital segment as in figures 375, 376. Aedeagus medium-sized (Fig. 377), 1.33 mm long, with median lobe of characteristic shape and arcuate parameres; inner sac tubular, covered with small scales.

DISTRIBUTION. Uganda (Fig. 399).

REMARKS. This species is characterised by the palpi with last segment longer than the preceding one and pronotum without grooves.

9. ***Gauropterus pustulatus*** Bernhauer, 1937

Gauropterus pustulatus - Bernhauer, 1937: 299; Herman, 2001a: 3635

TYPE MATERIAL. The Field Museum of Natural History in Chicago preserves 1 specimen labelled "*Sierra Leone / Pokuma / 3.II.25 / River bank / E. Hargreaves*", "pustulatus / *Brh. Cotype*", "pustulatus / *Brnh. Type /* Gauropterus" (handwritten by Bernhauer). It is a male that I choose as lectotype of the species. It bears the labels "*Lectotypus* Gauropterus pustulatus *Bh., Bordoni des. 2006*" and "Gauropterus pustulatus *Bh., Bordoni det. 2006*". The Natural History Museum in London preserves 1 specimen labelled "*Type*" (on round label with red border), "*Pokuma / Sierra Leone / Rugibauk / E. Hagreaves / Date 3.2.1935*". It is a female that I choose as paralectotype of the species. It now bears the labels "*Paralectotypus* Gauropterus pustulatus *Bh., Bordoni des. 2009*" and "Gauropterus pustulatus *Bh., Bordoni det. 2009*".

EXAMINED MATERIAL. Sierra Leone, Northern Prov., Sinikoro, Kondi Mbaia, W. Rossi leg., 3.XII.1984, 1 ex. (cB); Western Area, Sugar Loaf Mt., W. Rossi leg., 6.I.1997, 1 ex. (cB).

Rep. Centrafricaine, Bambari, G. Perrard, III.1966, 2 exx. (MRAC), 2 exx. (cB).

Gambia, Bathurst, T.E. Leiler, 21.I.1968, 1 ex. (cJ), 1 ex. (cB); T. Palm, I.1968, 2 exx. (ZML), 2 exx. (cB).

Nigeria, Umg. Jos/Vom, V. Assing, 5.XI–2.XII.1964, 4 exx. (cA), 3 exx. (cB).

DESCRIPTION. Length of body: 6–8 mm; from anterior margin of head to posterior margin of elytra: 3.3–3.5 mm. Fully winged and shiny. Head black, pronotum brown to black, elytra reddish more or less infuscate posteriad, scutellum brownish black; antennae with first segment brown and following segments yellowish brown; legs brown with lighter tarsi. Head sub-rectangular elongate, slightly dilated posteriad, sub-rectilinear sided, with narrowly rounded posterior angles, with the usual postero-lateral denticle. Eyes medium-sized. Surface of head with three series of punctures on each side; the punctures confluent forming striae, one near the median axis, one extensing from the internal margin of eyes, one near the tempora; some oblong punctures on the disc; clypeus impuctate. Frontal grooves long and rectilinear. Labrum as in figure 378. Pronotum longer than head, anteriorly dilated and there as wide as head, with less oblique anterior margins, well rounded anterior angles, and sinuate sides. Surface with a lateral, slightly arcuate groove and some sparse punctures. Elytra narrow, sub-rectangular, as long and wide as pronotum, with marked humeral angles. Surface with fine punctation arranged in two series, one juxtasutural, one median and one lateral. Abdomen with deep, dense, small punctures bearing long pubescence. Tergite and sternite of the male genital segment as in figures 379, 380. Aedeagus small (Fig. 381), 0.74 mm long, narrow, a little dilated in the middle; parameres of characteristic shape; inner sac filiform and short.

DISTRIBUTION. Sierra Leone, Gambia, Nigeria, Central African Rep. (Fig. 399).

10. ***Gauropterus africanus*** n. sp.

EXAMINED MATERIAL. Holotype male: Central African Republic, (Ouaka Oref.), Bambari, G. Pierrard, III.1966 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.3 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Body fully winged and shiny. Black with reddish elytra, infuscate around the scutellum and on the posterior margin. Head sub-rectangular, with sub-rectilinear and sub-parallel sides. Eyes small and scarcely protruberent. Surface of head incised by three grooves on each side bearing setiferous punctures, and other punctures in the middle of head. Frontal grooves long, sub-parallel. Labrum as in figure 382. Pronotum a little shorter than head, anteriorly dilated and there as wide as head, with very oblique anterior margins and sinuate sides. A long groove with punctures from the anterior angles to the lateral margins. Elytra as long as pronotum, dilated posteriad and there a little wider than pronotum, with scarcely marked humeral angles. Surface with very fine punctation arranged in three series, one juxtasutural, one median and one lateral. Tergite and sternite of the male genital segment as in figures 383, 384. Aedeagus 1 mm long (Fig. 385), very narrow; inner sac not visible.

ETYMOLOGY. The specific epithet refers to Africa.

DISTRIBUTION. The species is so far only known from the type locality (Fig. 399).

11. Genus ***Afrus*** Janak et Bordoni, 2015 (Figs. 386–400)

Afrus - Janak et Bordoni, 2015: 6

This genus contains two species with the following characters: small body (6.5–10 mm); head with a large fossa behind the eyes and tempora bounded by an evident and long protrusion; metatibia without supplementary ctenidium that continues along the lateral margin; discal setiferous puncture on head missing, two postocular setiferous punctures in one depression, labrum lobate, colour in general black on head and pronotum, elytra with spots. Female genital segment (Figs. 392, 398).

KEY TO THE SPECIES

1. Body smaller, 6.5–7 mm long; head black, pronotum and abdomen reddish brown, elytra yellow. Aedeagus (Fig. 391). Eastern and central Africa.....1. *A. spegazzinii*

-. Body larger, about 10 mm long, reddish brown with black head and a little lighter elytra. Aedeagus as in figure 397. D.R. Congo, Congo, Rwanda, Kenya, Natal.....2. *A. collarti*

1. ***Afrus spegazzinii*** (Bernhauer, 1915) (Figs. 1676, 1679–1681)

Eulissus spegazzinii - Bernhauer, 1915: 299; Scheerpeltz, 1933: 1317; Coiffait, 1968: 156; Herman, 2001a: 3767

Afrus spegazzinii - Janak & Bordoni, 2015: 10

TYPE MATERIAL. The Field Museum of Natural History of Chicago preserves 2 specimens, one labelled "*Senegal Dakkar / XII.913* Spegazzini", "Spegazzinii / *Brnh. Typus*" and the other labelled "*Dakkar, Senegal/ XII.913* Spegazzini", "Spegazzinii / *Brnh. Cotypus*". They are chosed respectively as lectotype and paralectotype of the species; they have respectively the label "*Lectotypus* Thyreocephalus spegazzinii *Bh., Bordoni & Janak des. 2012*" and "*Paralectotypus* Thyreocephalus spegazzinii *Bh., Bordoni & Janak des. 2012*". Both have the determination "Afrus spegazzinii *(Bh.), Bordoni & Janak det. 2014*".

EXAMINED MATERIAL. Ghana, Northern Prov., Banda-Nkwanta, 150 m, 8.22N, 2.08W, S. Endrödy-Younga, 10.VIII.1965, 1 ex. (MTM).

Gambia, Bathurst Palm, I.68, 10 exx., (ZM, cJ); Bakau, T. Palm, 6–26.XI.1984, 11 exx. (ZML, cJ); oil palm and mangrove veg. close to the beach about 5 km SSW Gunjur, 18.45N, 20.30W, Lund Univ. Syst. Dept. Sweden-Gambia/Senegal, Nov. 1977,Cederholm-Danielsson-Hammarstedt-Hedquist-Samuelsson, 13.XI.1977, 1 ex. (ZML).

Sudan, Shambat, P. Štys, X.1966, 1 ex. (cJ).

Cameroon, Metet, A. I. Good C. M. Acc. 6641, 1 ex. (NMPC); Joko, Heyne, 1 ex. (MNB).

Burundi, plaine de la Ruzizi, N'Dani S., 17.II.1966, 2 exx. (MRAC).

Tanzania, Morogoro Prov., Doma, 06°56'35"S, 37°16'05"E, L. Bartolozzi and A. Sforzi, 21.VII.2004, 1 ex. (MZF).

Kenya, Victoria Nyanza, Arcipelago di Sesse, Bogala, E. Bayon 1908, 2 exx. (MCSNG), 1 ex. (cB); Malindi, L. Bartolozzi, 30.IX.1992, 1 ex. (MZF); Lamu, Manda Island, N. Sanfilippo 20.IX–2.X.1976, 2 exx. (MCSNG), 1 ex. (cB); Kitale env.,

Kapenguria, Smrz, 16.XII.1995, 1 ex. (MNW); Kenya or., Muhoroni, Welks, 1 ex. (TMSA).

Uganda, Kawanda, leg. ?, 24.IX.1963, 2 exx. (MM), 1 ex. (cB).

Congo, Libenge, R. Cremer and M. Neuman, 8.I.1948, 1 male (IRSNB).

Angola, Unterer Umba, Methner, 1 ex. (MNB).

CITED MATERIAL (not examined). Gabon, Makokou; Senegal: Thiès (Coiffait, 1968).

DESCRIPTION. Body 6.5–7 mm long; length from the anterior margin of the head to the posterior margin of elytra: 3.5–3.7 mm. Head black, pronotum and abdomen reddish brown, elytra yellow light, brown light around the scutellum, scutellum, antennae and legs brown light. Labrum as in figure 388. Head and pronotum with micro-punctation. Head and pronotum and related punctation as in figure 386, 387. Elytra membranous, longer and wider than pronotum, with marked humeral angles. Surface with fine and dense punctation, arranged in numerous series, among which are setiferous the series near the suture, and the median and lateral series. Abdomen shiny with traces of transverse micro-striation and fine, dense punctation, provided by long pubescence. Tergite and sternite of the male genital segment as in figures 389, 390. Aedeagus proportionally large (Fig. 391), 1.25 mm long; median lobe protruding, with rounded apex; inner sac narrow, folded on itself, covered with evident scales.

DISTRIBUTION. Ghana, Gabon, Gambia, Cameroon, Sudan, Kenya, Congo, Tanzania, Angola (Fig. 400).

2. ***Afrus collarti*** (Cameron, 1932) (Figs. 1675, 1677, 1678)

Eulissus collarti - Cameron, 1932: 133; Scheerpeltz, 1933: 1317; Herman, 2001a: 3626.
Eulissus proximalis - Tottenham, 1956: 255; Herman, 2001a: 3628 (syn. of *A. collarti*)
Afrus collarti - Janak & Bordoni, 2015: 12.

TYPE MATERIAL. The Musée de l'Afrique centrale of Tervuren preserves 1 specimen labelled "*Musée du Congo / Ituri: Blukwa: / Nisi 18-XII-1928 / A. Collart*", "*Paratype*" (on orange label), "*R. DET. / O / 2558*", "Eulissus / collarti *Cam.*", "Afrus collarti *(Cam.), J. Janak det. 2006*". It is a female chosed as lectotype of the species; it have the label "*Lectotypus* Eulissus collarti *(Cam.), Bordoni & Janak, 2012*" and the determinaton "Afrus collarti *(Cam.), Bordoni & Janak, 2012*".

The Institut royal des Sciences naturelles of Bruxelles preserves 1 specimen labelled "*Coll. Mus. Congo / Ruanda: Gitarama, / 1800 m terr. Nyanza, / P. Basilewsky II.1958*", "*Holotypus*" (on orange label), "Eulissus/ proximalis / *Tottenham* [printed] / *TYPE*", "Afrus collarti *(Cam.), J. Janak det. 2006*" and the determination "Afrus collarti *(Cam.), Bordoni & Janak, 2014*". It is a female identical to *A. collarti*.

EXAMINED MATERIAL. Rep. Congo, Brazzaville, Lefinie reservation, Nambouli river, S. Endrödy-Younga, 7–12.I.1964, 1 male (MTM), 2 males (cB).

Congo, Nizi, Blukwa, A. Collart, 15.I.1929, 1 ex. (IRSNB, not paratype); Kisangani), Stanleyville, A. Collart, 4.XII.1929, 1 ex. (IRSNB); Boma-Motenge, R. Cremer and M. Neuman, 8.I.1948, 3 exx. (MRAC, cJ).

Kenya, Shimba For., T. Palm 17.III.1970, 4 ex. (ZML, cJ); Coast Prov., Mrima Hill, B. Verdcourt, 9.I.1957, 1 ex. (cB).

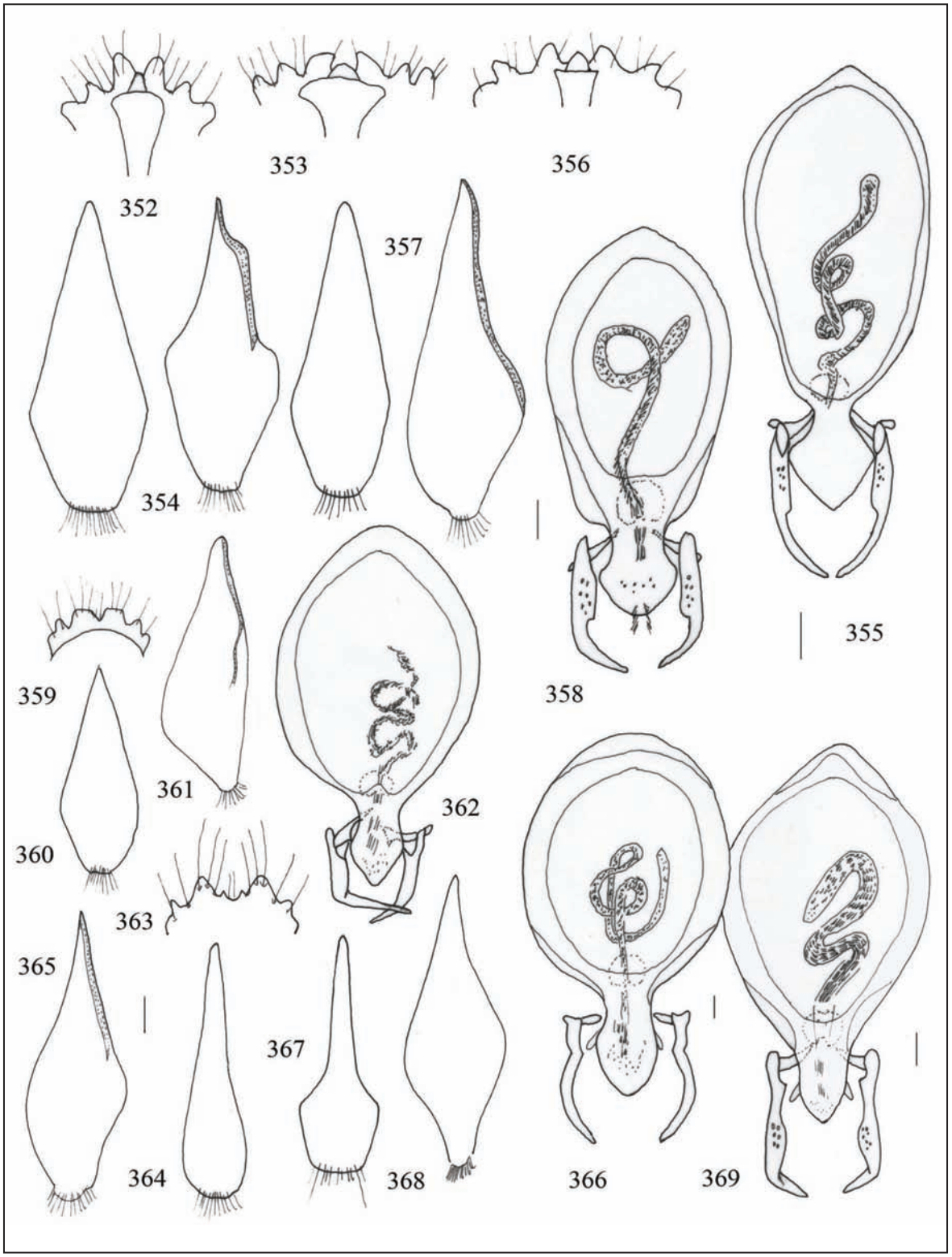
Uganda. Kawanda, 24.IX.1963, 1 ex. (MM).

South Africa, Natal, Huluhluwe G. R., 28°01'S-32°13'E, R. Fencl, 1–7.XI.2001, 1 ex. (cJ).

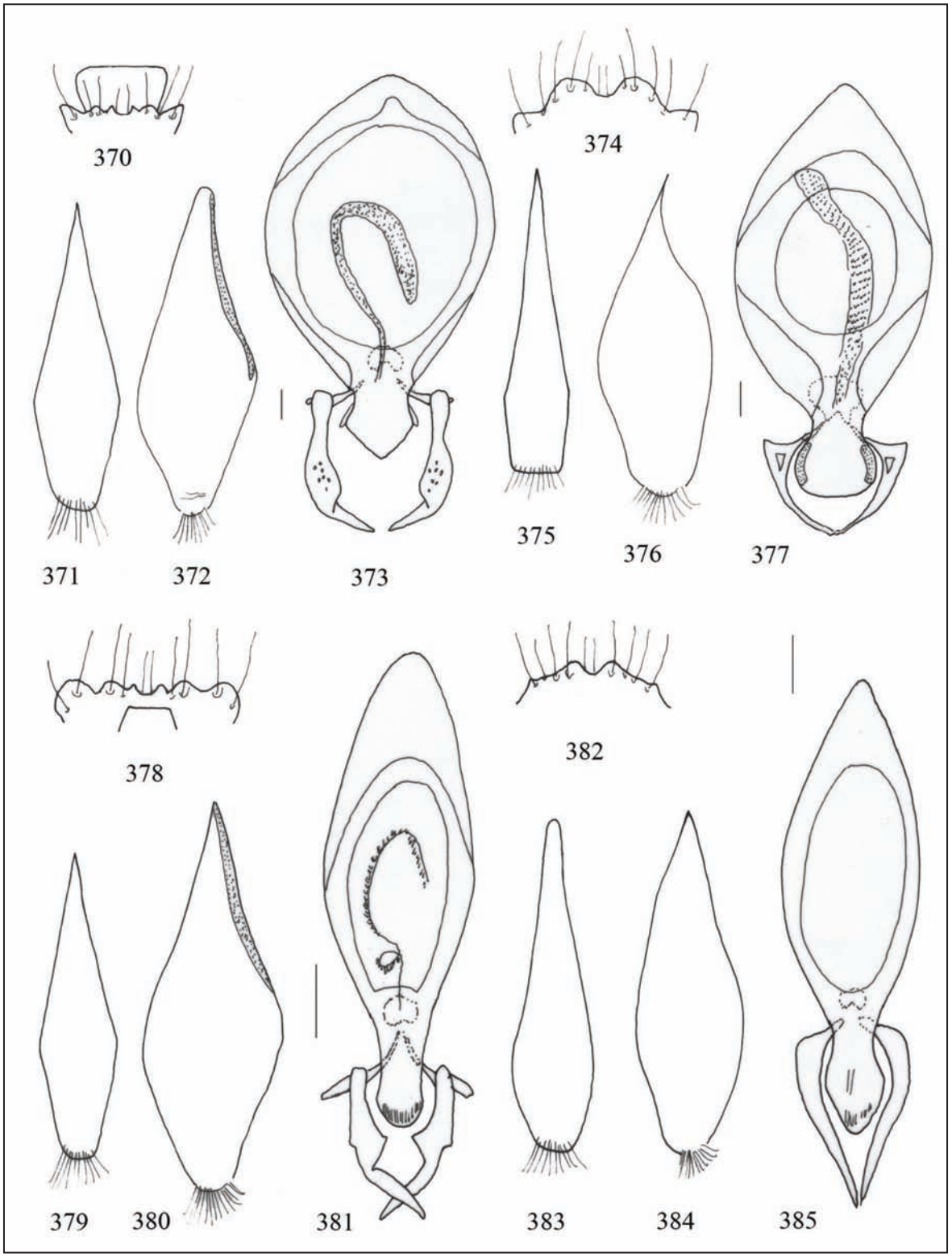
DESCRIPTION. Body about 10 mm long; length from the anterior margin of the head to the posterior margin of elytra: 5 mm. Similar to *T. spegazzinii* but larger. Reddish brown dark with black head and a little lighter elytra; antennae and legs brown; sometimes elytra yellowish on the margins and at the suture. Head, pronotum and elytra with micro-punctation. Labrum as in figure 394. Head and pronotum and related punctation as in figure 393. Elytra as long as pronotum, a little dilated posteriad and there wider than pronotum. Surface with very fine and sparse punctation, arranged in three series, one near the suture, one median and one lateral; the first with long setae. Tergite and sternite of the male genital segment as in figures 395, 396. Aedeagus (Fig. 397), almost round, 1.1 mm long, characteristic for the short, rounded median lobe; inner sac moderately wide, very short, covered with scales.

DISTRIBUTION. Congo, D.R. Congo, Rwanda, Kenya, South Africa (Fig. 400).

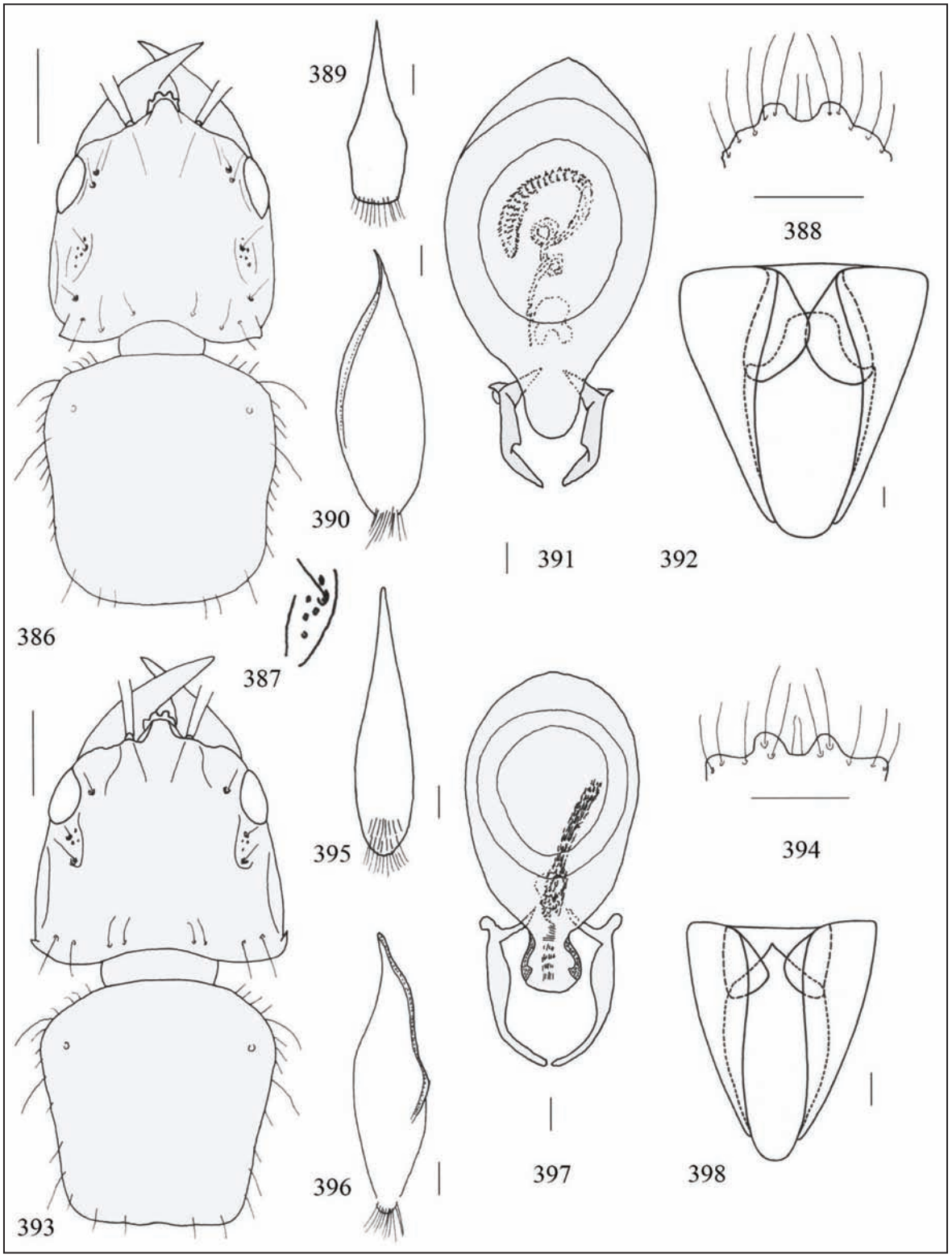
REMARKS. The date of collection indicated in the description of *Eulissus collarti* is 19.XII.28 and not 18.XII.28, as indicated on the label.



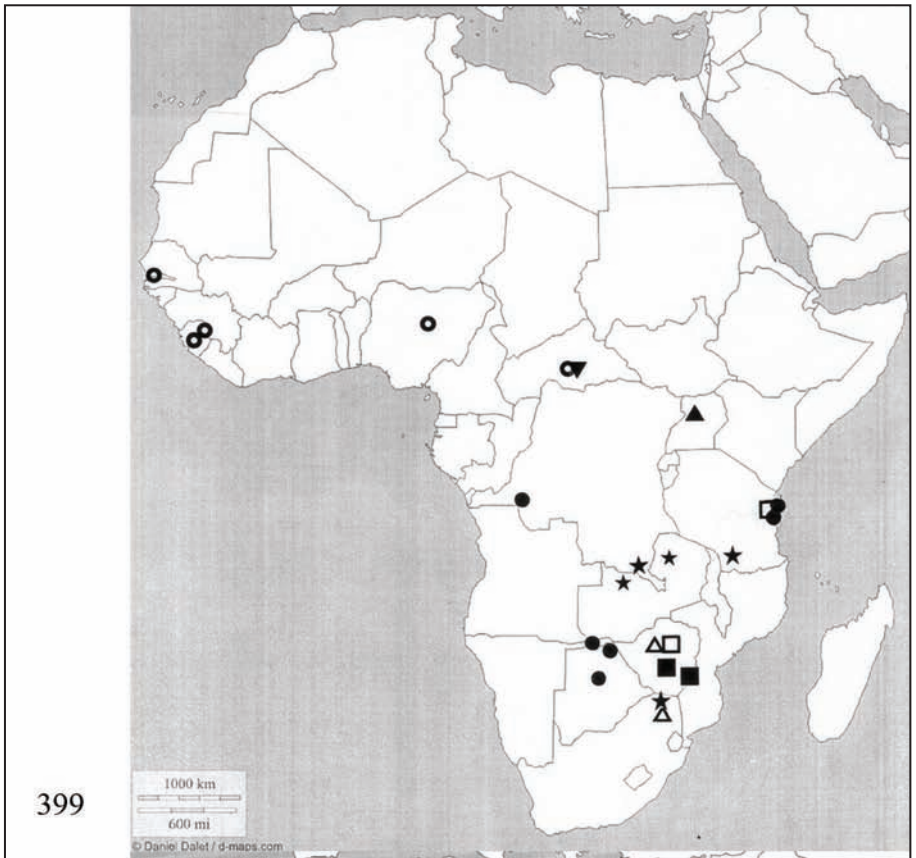
Figures 352–369. *Gauropterus abactus*: labrum (Fig. 352). Labrum, tergite and sternite of the male genital segment and aedeagus of *G. abessinus* n. sp. (Figs. 353–355), *G. nasutus* (Figs. 356–358) (bar scale: 0.1 mm). *G. zimbabwe* n. sp. (Figs. 359–362), and *G. zambianus* n. sp. (Figs. 363–366). Tergite and sternite of the male genital segment and aedeagus of *G. hauseri* (Figs. 367–369) (bar scale: 0.1 mm).



Figures 370–385. Labrum, tergite and sternite of the male genital segment and aedeagus of *Gauropterus evansi* (Figs. 370–373) and *G. gedyei* (Figs. 374–377). Labrum, tergite and sternite of the male genital segment and aedeagus of *G. pustulatus* (Figs. 378–381) and *G. africanus* n. sp. (Figs. 382–385) (bar scale: 0.1 mm).

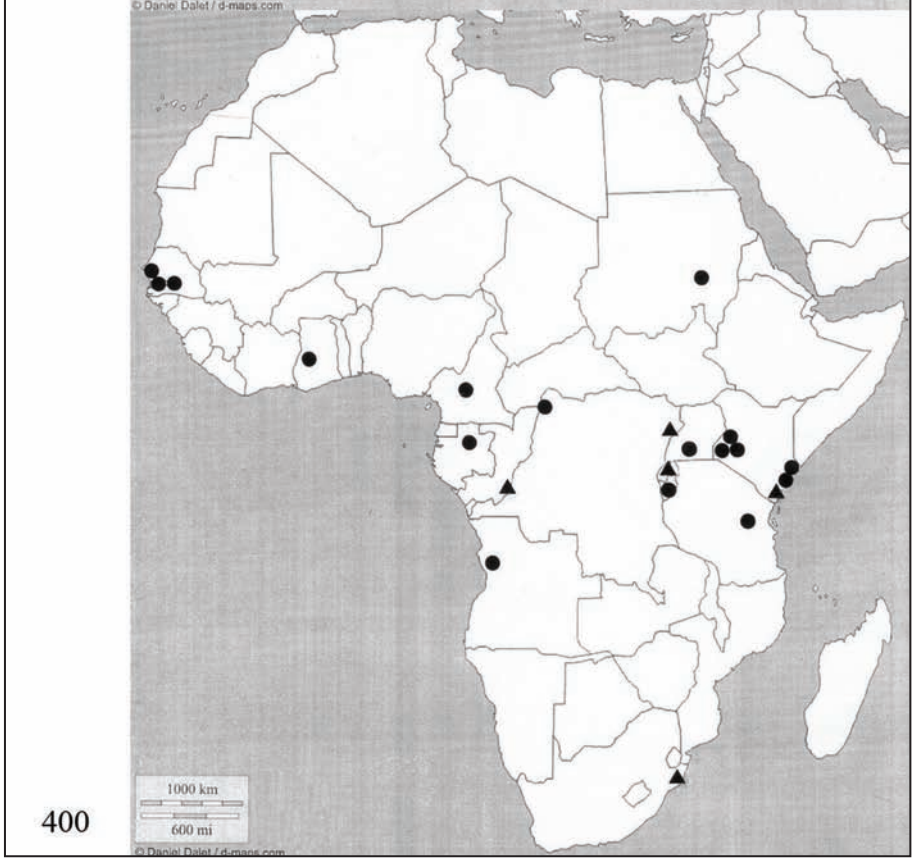


Figures 386–398. *Afrus spegazzinii*: head and pronotum (bar scale: 0.5 mm) (Figs. 386, 387); labrum, tergite and sternite of the male genital segment, aedeagus (bar scale: 0.1 mm), and female genital segment (Figs. 388–392). *Afrus collarti*: head and pronotum (bar scale: 0.5 mm) (Fig. 393); labrum, tergite and sternite of the male genital segment, aedeagus (bar scale: 0.1 mm), and female genital segment (Figs. 394–398).



399

Figure 399. Distribution of the genus *Gauropterus*: *G. abactus* (filled square), *G. nasutus* (circle), *G. zimbabwe* n. sp. (open triangle), *G. zambianus* n. sp. (small star), *G. hauseri* (open square), *G. evansi* (big star), *G. gedyei* (filled triangle), *G. pustulatus* (oper circle), *G. africanus* n. sp. (inverted triangle).



400

Figure 400. Distribution of the genus *Afrus*: *A. spegazzinii* (circle), *A. collarti* (triangle).

12. Genus ***Thyreocephalus*** Guérin-Méneville, 1844 (Figs. 401–626)

Thyreocephalus - Guérin-Méneville, 1844: 10; Sharp, 1885: 498; Cameron, 1921: 354; Steel, 1938: 55; Blackwelder, 1943: 490; 1952: 390; Coiffait, 1968: 128 and 152; Smetana, 1977: 348; 1982: 66; Moore & Legner, 1979: 76, Bordoni, 2002: 210; 2005: 478; 2005a: 354; 2010: 318; Janak, 2010: 130; Janak & Bordoni, 2015: 14

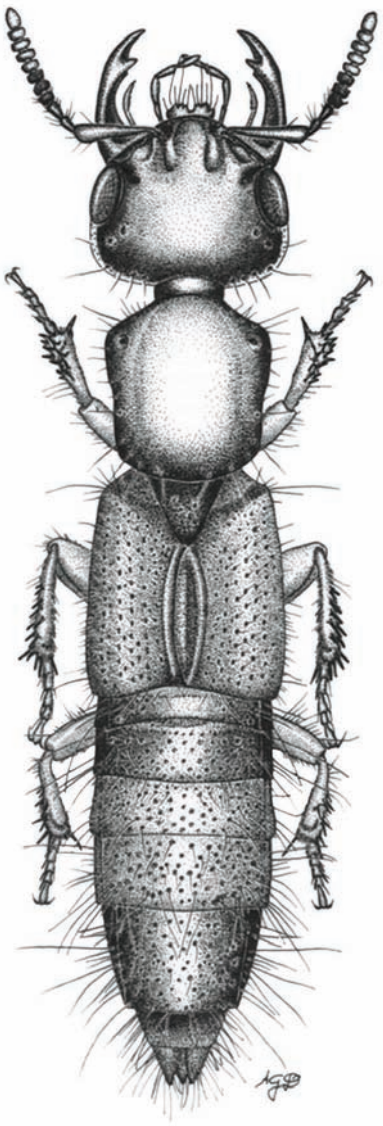


Figure 401. Habitus of *Thyreocephalus* sp. (ex Bordoni, 2002).

Linidius - Sharp, 1876: 196; Steel, 1938: 56
Xantholinus - Serville; Fauvel, 1878a: 243; 1878b: 538; Olliff, 1887: 479 (pars)
Saurohypnus - Sharp, 1885: 501; Casey, 1906: 373; Arnett, 1960: 247; 1968: 247; Moore, 1963: 94; Moore & Legner, 1974: 557
Indoscitalinus - Heller, 1900: 5; Cameron, 1932: 33; Steel, 1938: 55; Shibata, 1973: 126

TYPE SPECIES of *Thyreocephalus*: *Thyreocephalus jekeli* Guérin-Méneville, 1844, established by Lucas, 1920 by subsequent designation.

TYPE SPECIES of *Linidius*: *Linidius recticollis* Sharp, 1876 by original designation and monotypy.

TYPE SPECIES of *Saurohypnus*: *Saurohypnus scutellaris* Sharp, 1885, by monotypy.

TYPE SPECIES of *Indoscitalinus*: *Indoscitalinus albicornis* Heller, 1900, by monotypy.

DESCRIPTION. Body (Fig. 401) of big or very big size (12–25 mm), rarely of medium size (9–12 mm). Winged. Head in some species very big, posteriorly dilated, in others smaller, subovoid, normally with a sparse punctation, but sometimes with a dense punctation, at times with the folded surface of the temples covered with small and dense punctures; frontal grooves short; the ocular ones sometimes poorly obvious within the big punctation, very short and ending with a puncture. Eyes generally big and a little protruding. Mandibles strong, without lateral groove and with the base laterally flattened; prostheca very big and very long. Epistome wide and flat between the antennae, a little prominent. Distance between the antennae 1/5 longer than between the latter and the inner margin of the eyes. Antennae with a long scape, longer than the following 5 articles combined, with the 2nd article shorter than the 3rd one. Neck less wide than a half of the head. Labrum sclerotized, transverse, with some big denticulations, differing from one species to the other, and with long setae, generally protruding in the middle, with a slight median emargination. Maxillary palpi with the 2nd article longer than the 3rd one and the last one longer than the one before, having a subtruncate apex; labial palpi with the 2nd article a little longer than the 1st one and the last one longer than all the others, having a subtruncate apex. Ligula divided. Gular sutures generally joint along almost all their length, sometimes only juxtaposed. Pronotum without any dorsal series, generally only with one big puncture

close to the anterior angles; antesternal plate with a suture; upper epipleural line of the pronotum directed towards the prosternum much before the anterior angles of the pronotum and joint with the lower one at the level of the intercoxal apophysis of the prosternum and thus after the insertion of the forelegs; prosternum very short, with the intercoxal apophysis protruding; mesosternum short, transverse; metasternum long and very wide. Elytra with a punctation displayed in numerous regular series; or only with three series of spaced out punctures, of which one close to the suture, one median and one lateral; or with few series among which some stand out, composed of bigger and more obvious punctures, so to form a kind of weak groove, one close to the suture and one median, generally oblique. Legs with anterior tarsi not dilated, stumpy and rather big, size decreasing, but with the 2nd one longer than the 3rd one; median and posterior tarsi with the last article a little longer than the two previous ones combined; tibiae with several long spines; metatibiae in some species only with the apical ctenidium, that continues along the lateral margin, and in other species with a supplementary ctenidum overlapping on the former one and that continues along the lateral margin. Male genital segment elongated, with the sternite generally asymmetrical. Aedeagus subovoid (Figs. 442, 538), of a small, big and very big size, generally made of a rather robust membrane, with a small introflection plate usually subovoid, sometimes with a horizontal introflection fascia, at times prolonged in the distal part into a lobe that in some species is rather long, provided with big and long parameres or, on the other hand, small, symmetrical parameres, sometimes with complex ventral structures, sometimes strongly arcuate, converging, or bent almost at a right angle at about the half of their length, sometimes crossed apically, asymmetrical in some species; inner sack generally with the shape of a more or less long and wide ribbon, usually folded irregularly several times on itself, with a copulatory armour made of scales of different sizes. Female genital segment with the sternite proportionally short, made of two big supplementary sclerites that cover its proximal part (Bordoni, 2002: Fig. 67).

Distribution. This genus is present with several species in Madagascar, central America, and with two species in North America. It is characteristic of warm regions of the earth and is well represented in the Oriental Region from India and Nepal to Sulawesi, Sunda islands, and Moluccas (Bordoni, 2002). This genus is particularly represented in the Australian Region and that it is composed of a great number of species, some of which distinguishable, despite the size of these Staphylinids, above all by examining their microsculpture and sometimes their aedeagus (Bordoni, 2005, 2010). The few species of New Zealand are introduced (Bordoni, 2005). In Africa occurs with 43 species almost in all regions but in particular in Central Africa (Figs. 422, 549).

Bionomics. The species belonging to this genus live in rotting matter, in debris, under stones, sometimes in dung, in carrion of small animals, in rotting fruits on the ground; some of them are probably subcorticicolous. The pre-imaginal stages described are those of *T. albertisi* (Marucci & Clancy, 1952); before (Paulian, 1941) one larva attributed to *T. anachoreta* sensu auct. (*T. amphidaseus* Bordoni) was described. Dettner (1987) studied the defensive glands of this genus.

This genus contains smaller species with narrow body and head not dilated and larger species with wide body and dilated head. Body larger (10 mm - only one specie - 35 mm, on average from 14 to 20 mm); head without fossa behind eyes and tempora; metatibia with supplementary ctenidium that continues along the lateral margin. It can be divided in some groups based on the presence/absence and distribution of the setiferous punctures on head, shape of labrum, colouration, dimension and aedeagus.

KEY OF THE SPECIES-GROUPS

(for the setiferous punctures see figure 1667)

1. Interior ocular punctures absent.....1. group a
-. Interior ocular punctures present.....2

2. Transverse distance between interior ocular puncture (if are two punctures, measured from the innermost point) and inner margin of eye distinctly smaller than transverse distance between this puncture and frontal groove (with short frontal groove, imagine an extension of the same) .....1. group b
-. Transverse distance between interior ocular puncture (if are two punctures, measured from the innermost point) and inner margin of eye

distinctly larger than transverse distance between this puncture and frontal groove (with short frontal groove, imagine an extension of the same).....2. group c

1. group a

The species of this group are characterized by the absence of interior ocular punctures and post-ocular setiferous punctures.

KEY TO THE SPECIES

1. Abdomen entirely orange yellowish. Aedeagus as in figure 405. Liberia....1. *T. liberianus* n. sp.
-. Abdomen yellowish with the first three segments with median bronze dark spot. Aedeagus as in figure 410. Natal.....2. *T. zuluensis* n. sp.

1. ***Thyreocephalus liberianus*** n. sp.

EXAMINED MATERIAL. Holotype male: Liberia, Sinoe, Gbabony Camp, F. Krell 10.III.1988 (SMNS); paratypes: same data, 5 females (SMNS), 1 male, 2 females (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body 21.5 mm; from anterior margin of head to posterior margin of elytra: 12 mm. Head and pronotum black shiny, elytra and abdomen orange yellowish; the first segments partially infuscate; three first antennomeres reddish brown, subsequent infuscate; legs reddish brown. Head and pronotum with sparse micro-punctation. Head and pronotum and related punctation as in figure 402. Labrum as in figure 403. Elytra sub-quadrangular, a little shorter than pronotum, slightly dilated posteriad and there a little wider than pronotum, with marked humeral angles. Surface with wide, very superficial, very spaced punctation, arranged in three series, one near the suture, one median and one lateral. Abdomen with fine and dense, transverse micro-striation and fine, not sparse punctation, arranged in some series. Tergite and sternite of the male genital segment as in figure 404. Aedeagus 1.85 mm long (Fig. 405), sub-ovoidal, with narrow, ovoide median lobe; parameres long; inner sac long and narrow, folded on itself, covered by very fine, sparse scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Liberia.

DISTRIBUTION. The species in knowm only from te type locality, in Liberia (Fig. 416).

2. ***Thyreocephalus zuluensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Kwa Zulu Natal, Ithala Game Res., 27.31S, 31.12E, R. Fouqué, 18–19.II.2003 (cB).

DESCRIPTION OF THE HOLOTYPE. Male. Length of body 20 mm; from anterior margin of head to posterior margin of elytra: 10 mm. Head and pronotum black, elytra yellowish with bronze scutellum, abdomen yellowish, the first 3 segments with median bronze black spots; paratergites yellowish; mandibles black; antennae brown black; legs brown. Head and pronotum and related punctation as in figure 406. Labrum as in figure 407. Elytra sub-quadrangular, as long and wide as pronotum, with rounded humeral angles. Surface with very sparse punctures, arranged in three series, one near the suture, one median and one lateral. Abdomen with fine, transverse micro-striation and fine, dense punctation. Tergite and sternite of the male genital segment as in figures 408, 409. Aedeagus 1.7 mm long (Fig. 410), long and narrow, of characteristic shape; inner sac narrow and long, tube-like, covered with very fine spinulae.

ETYMOLOGY. The specific epithet refers to Zulu.

DISTRIBUTION. The species in knowm only from te type locality, in Natal (Fig. 416).

2. group b

The species of this group are characterized by transverse distance between interior ocular puncture and inner margin of eye distinctly smaller than transverse distance between this puncture and frontal groove.

KEY TO THE SPECIES SUB-GROUPS

1. Anterior margin of labrum rounded, without protrusions (Fig. 412).....1. *T. ferox* sub-group

-. Anterior margin of labrum not rounded, with evident protrusions (Figs. 499, 602).....2

2. Head with two postocular setiferous more or less closed punctures.....3
-. Head with two postocular setiferous separate punctures; body black, elytra with bluish reflexes; head with very dense puncturation.....2. *T. coeruleipennis* sub-group

3. Setiferous postocular punctures in one depression.....4
-. Setiferous postocular pounctures not in a depression.....3. *T. guineensis* sub-group

4. Body with black basic color...4. *T. ater* sub-group
-. Body black with at least partly yellowish abdomen.....5. *T. pilosus* sub-group

1. *Thyreocephalus ferox* sub-group

Discal setiferous puncture on head present, three setiferous postocular punctures, labrum rounded, large black species

1. ***Thyreocephalus ferox*** (Harold, 1881) (Figs. 1698, 1699)

Xantholinus ferox - Harold, 1881: 262
Eulissus ferox - Bernhauer & Schubert, 1914: 311; Herman, 2001a: 3627
Eulissus methneri - Bernhauer, 1937: 610; Herman, 2001a: 3628
Thyreocephalus ferox - Janak, 2010: 146; Janak & Bordoni, 2015: 51
Eulissus methneri - Bernhauer, 1937: 610; Herman, 2001a: 3628
Thyreocephalus methneri - Janak, 2010: 146 (syn. of *T. ferox*)

Type material. The Museum für Naturkunde of Berlin preserves 1 specimen labelled "*Hildebrndt.*" (green, hadwritten), "*60 750*" (white, printed), "*Type*" (printed on orange label), "ferox *Har.*" (on big green label with black edge), "*Lectotypus (male)* Xantholinus ferox *Harold, J. Janak des. 1991*" "Thyreocephalus ferox *(Harold), J. Janak det. 1991*". It is a male.

The Field Museum of Natural History of Chicago preserves 1 specimen labelled "*Trockenwald b. / Mtotchovu D. O. A. / April 16 leg. Methner*", "Methneri *Brh. / typ. un.*", "methneri / *Brnh. Typus/ uni.* Eulissus" (hand of Bernhauer), "Thyreocephalus / ferox *(Harold), J. Janak det. 2002*".

Examined Material. (Tanzania), D. Ostafrika, Makond. Hochld., Nanyamba Ntschitschira, H. Grote 12.XII.10, 1 female (MNB), 1 male (cB); D. Ostafrika, Makond Hochld., Ntschitschira Mahirta-Newala, H. Grote, 15–16.XII.10, 1 male (MNB); Zanzibar, "*ex typ.*", 1 male (IRSNB).

Description. Body 14.5 mm long; length from the anterior margin of the head to the posterior margin of elytra: 7.5 mm. Black with antennae and legs brown dark. Head and pronotum with micro-punctation. Head and pronotum and related punctation as in figure 411. Labrum of particular shape, as in figure 412. Elytra longer than pronotum, posteriad dilated and there wider than pronotum, with less marked humeral angles. Surface with superficial punctation, arranged in three series, one near the suture, one median and one lateral. Tergite and sternite of the male genital segment as in figures 413, 414. Aedeagus very large (Fig. 415), 3 mm long, with truncated median lobe, almost rounded; parameres symmetrical; inner sac ribbon-like, large and long, wrapped on itself, covered with numerous little scales.

Distribution. Kenya (probably, from type), Tanzania, including Zanzibar (Fig. 416).

2. *Thyreocephalus coeruleipennis* sub-group

1. Head subquadrate, tempora straight, only slightly dilated.....2
-. Head rounded, tempora rounded, markedly dilated.....3

2. Disc of head very densely punctured, some punctures confluent. Tempora behind eyes densely punctate. Slightly smaller, 13–15 mm long. Aedeagus smaller and narrower (Fig. 421). West- and Central Africa, Angola....1. *T. coeruleipennis*
-. Disc of head more or less densely punctured, punctures not confluent. Tempora behind eyes sparsely punctate. Larger, 16–19 mm long. Aedeagus larger and wider (Fig. 427). Cameroon,

Central Africa Republic, D.R. Congo, Ivory Coast and Zambia.....2. *T. subcorticalis*

3. Abdomen unicolored black, brown or dark reddish brown …..... 4
-. Abdominal segments 6 and 7 in contrast to precedent segments light reddish. Aedeagus elongate (Fig. 432). Rwanda.....3. *T. raptor*

4. Disc of head densely and coarsely punctate. Paramere of aedeagus relatively shorter (Fig. 437). Guinea, Republic of Congo, D. R. Congo, Rwanda, Uganda.....4. *T. basilewskyi*
-. External characters as in *T. basilewskyi*. Aedeagus smaller, with rounded median lobe, different paramerse and inner sac mighty different (Fig. 442). Guinea.....5. *T. occidentalis* n. sp.
-. Disc of head sparsely and finely punctate. Paramere of aedeagus relatively long (Fig. 448). Western, Central and Eastern Africa ....6. *T. interocularis*

1. ***Thyreocephalus coeruleipennis*** (Quedenfeldt, 1881)

Xantholinus coeruleipennis Quedenfeldt, 1881: 293
Thyreocephalus coeruleipennis; Bernhauer, 1912: 479; Bernhauer & Schubert, 1914: 313; Bernhauer, 1915: 362; Cameron, 1950: 33; Coiffait, 1968: 154; Herman, 2001a: 3762; Janak & Bordoni, 2015: 55

TYPE MATERIAL. According to Horn et al. (1990) the collection of Quedenfeld shall be in Paris, but the specimen was not found. Neotype was designated (Janak & Bordoni, 2015) from Angola, (Oberssanga, S. Samba's S. Tessmann, 30.I.1914) in MNB.

EXAMINED MATERIAL. Sierra Leone, Kenema, 150 m, J. Klapperich, II.1972, 1 ex. (SMNS).

Gabon, Libreville, Mocquerys, 4 females (MNW); Libreville, 1 male (IRSNB); Loango (Nat. Park), Chutes de Samlia, Riv. N. Gamie, 1 male (IRSNB); Chutes de Samlia, Riv. N...amie, Mocquerys, 1 female (IRSNB); Ogoué de N'Gola, Lambaréné, 1 female (IRSNB); 2 males (IRSNB); Ashanti, 1 ex. (cB); Ashanti, 1 male (DEI); Ashanti reg., Abofour, Opro river, 320 m, 7.07N, 1.48W, S. Endrödy-Younga 7.IV.1966, 1 male (cB), 3 females (MTM); Western reg., Pretsea, 30 m, 4.55N, 1.52W, S. Endrödy-Younga, 6.IV.1966, 1 female (MTM).

Sudan, Equatoria Lotti forest, Linnavuori, 14–17.III.1963, 1 female (NMW).

Cameroon, Johann Albrechtshohe, L. Conradt, 3–28.VIII.1898, 1 ex. (MNB); Johann Albrechtshohe, L. Conradt, 4 exx. (MNB), 1 ex. (cB); Conradt, 1 ex. (MNB); Joko, 1 ex. (MNB); Lolodorf, Conradt, 1 ex. (MNB); Lolodorf, Conradt, 8.II–27.III.1895, 1 ex. (MNB); Jacum (?), L. Colin, VI.1911, 1 ex. (cB); Tomo, n/Victoria, Wiper. SKNB, 22–31.I.1980, 1 ex. (DEI), 1 ex. (cB); Tome n/ Victoria, Wypr., 22–31.I.1980, 1 female (DEI); Nkoibisson, Dept. Nyong-Sanaga, L. G. Segers X.1963, 1 female (cB); spt., 1 female (IRSNB).

Fernando Poo Is., Conradt, VI.1900, 2 exx. (MNB); Sa. Jsabel, L. Conradt, 1900, 1 ex. (MNB)

(Equatorial Guinea), Span. Guinea, Makomo, Campogbt., S. Tessmann, 1 ex. (MNB); Span. Guinea, Makomo, Campogbt., G. Tessmann, 1-17.II.1906, 1 female (MNB); Span. Guinea, Benitogbt, S. Tessmann, 15-30.VI.1906, 1 ex. (cB); Span. Guinea, Benitogbt., G. Tessmann, 15–30.VI.1906, 1 female (MNB).

Uganda SE, Mabira Res., Najembe, P. and B. Malec, 4–6.XI.2006, 1 ex. (MNB).

Congo, Yangambi (Stan.), J. Decelle V.1960, 1 male, 3 females (MRAC), 1 female (cB); Kivu, Costermansville, H. Bomans, 1951, 2 females (MRAC), 1 male, 3 females (cB); Terr. Kalehe, Karambi, N. Leleup, 16.IX.1960, 1 male (MRAC); (Zaire), Kisangani, J. Tarverniers, II.1972, 1 male (cB); C. Afr., S. Gruer 1907-08 (Kivu See ?), 1 ex. (MNB); Mawambi, Grauer, 1910, 2 males (NMW); Mawambi-Irumu, Grauer, 1 male, 1 female (NMW); Ukaika Dez., Grauer 1910, 1 female (NMW); Ed Luja Kondue, 1 male, 1 female (NMW); Stanleyfalls, R.P. Kohl, 1 female (NMW); Stanley Pool, 1 male (IRSNB); Mafakumba, Col Le Moult, 1 male (NMW); Lulua, Kapanga, G.F. Overlaet, IX.1939, 1 female (NMW).

CITED MATERIAL (not examined). (Congo), Urwald Mawambi, Mawambi-Irumu, Ukaika (Bernhauer, 1913).

Zentralafrika, Kivu See, S. Graner; Angola, Camerun (Bernhauer, 1912a).

Cameroon, Ebolowa (Bernhauer, 1915a).

Camerun, Yaoundé (Bernhauer, 1942).

Congo, Rutshurum, 1285 m (Cameron, 1950); Congo, Hembe Bitale (Scheerpeltz, 1956).

Gabon, Belinga (Coiffait, 1968).

Description. Body 14–15 mm long; length from the anterior margin of the head to the posterior margin of elytra: 7.5-8 mm. Black with bluish elytra and a little reddish abdomen. Shiny. Head and pronotum with micro-punctation. Head and pronotum and related punctation as in figure 417. Labrum as in figure 418. Elytra scarcely longer and wider than pronotum, a little dilated posteriad, with rounded humeral angles. Surface with large and deep punctation, arranged in three series, one near the suture, one median and one lateral. Abdomen with transverse micro-striation and very fine and sparse punctation, arranged in some series on each segment. Tergite and sternite of the male genital segment as in figures 419, 420. Aedeagus 2.1 mm long (Fig. 421), with sub-triangular median lobe; parameres symmetrical; inner sac ribbon-like, wide and long, wrapped on itself, covered with little scales.

Distribution. Gabon, Sierra Leone, Ghana, Fernando Poo Isl., Cameroon, Equatorial Guinea, Congo (Eastern or central-eastern regions), Angola (Fig. 422).

Bionomics. The only citation is "*sous écorces d'arbres abattus*".

Remarks. This specie differs from *T. basilewskyi* by the following characters: body very smaller and narrower, head very narrower, different shape of labrum, punctation of head not oblong, punctation on elytra less spaced, shape of aedeagus.

2. ***Thyreocephalus subcorticalis*** Janak et Bordoni, 2015

Thyreocephalus subcorticalis Janak & Bordoni, 2015: 58

Type material. The holotype male: from Côte d'Ivoire, Lomé, Bingerville, P. Genty, 2.IX.1966 is preserved in MNHNP. Paratypes: Côte d'Ivoire, Parc du Banco, C. Gerard, 2.IX.1966, 1 male (MNHNP); Cameroon, Mt Kala, 1150 m, Darge III.1972, 1 male (MRAC); Cameroon, Yaoundé, coll. Levasseur, 1 female (MNHNP); Rep. Centrafric., La Maboke, R. Pujol, 5.VII.1966, 1 male, 3 females (MNHNP); 1 male (cB); Congo, Lualaba, Zilo, V. Allard, V.1960, 1 male (cJ), 1 female (MRAC); Congo, Mayidi, P. Van Eyen, 1942, 1 male (MRAC); Congo, Kasai, Dekese, F. François 1959, 1 male (MRAC); Congo, Deghese (= Dekese), Kasai, V. Allard, XII.1959, 1 male (MNHNP); Congo, Sankuru, Mt Pomba Zeo (Gandajika), Don R. Maréchal, 4.II.1960, 1 female (MRAC); Congo, Kindu, coll. L. Levasseur, 1 male, 2 females (MNHNP), 1 male (cB); Congo, Kivu, Terr. Kalehe, Karambu, N. Leleup, 16.IX.1960, 1 male (MRAC); Congo, Kivu, Bukavu (Costermansville), H. Bomans, 1951, 1 male (cB); Congo, Yangambi (Stan.), J. Decelle, XI.1961, 1 female (MRAC); same data, V.1960, 1 male (MRAC), 1 female (cB); (Zambia), N-Rhodesia, Abercorn (= Mbala), 1800 m, N. Leleup, VII.1960, 1 male (cB).

Description. Body 18.5 mm long; length from the anterior margin of the head to the posterior margin of elytra: 10 mm. Brown amaranth dark, with blackish head and elytra with bluish reflexes; antennae and legs brown. Head and pronotum with micro-punctation. Head and pronotum and related punctation as in figure 423. Head with very dense punctation; setiferous punctures very large and marked. Clypeus with dense punctation. Labrum as in figure 424. Scutellum large, with some punctures. Pronotum with marked lateral concavity. Elytra a little longer and wider than pronotum, slightly dilated posteriad, with a little rounded sides and largely rounded humeral angles. Surface with fine but evident, sparse punctation, arranged in three series, one near the suture, one median and one lateral. Abdomen with transverse, extremely fine and dense micro-striation, and very sparse, medium-sized punctation, arranged in few, spaced series. Tergite and sternite of the male genital segment as in figures 425, 426. Aedeagus 2.2–3 mm long (Fig. 427), ovoid, large, with more or less rounded median lobe; parameres similar to that of *T. coeruleipennis*; inner sac wide, very long, rolled on itself some times.

Distribution. The species seems occurs in Ivory Coast, Central Africa Rep., Congo (south-western or central-western regions) (Fig. 443).

Bionomics. Some specimens were collected under bark; some in "*coupe de* Triplochiton scleroxylon", "*coupe de* Cola cordifolia" (both Sterculiaceae).

Remarks. The specimen chosed as holotype have the label "*Holotype,* Thyreocephalus bancoensis *n. sp., L. Levasseur det. 68, in litt.*". One

specimen from La Maboke (Central African Rep.) have the label "*Holotype,* Thyreocephalus centrafricanus *n. sp., L. Levasseur det. 68, in litt.*".

The species differ from *T. coeruleipennis* by the larger body, dilated head, more marked punctation of head, less widely distributed, by different shape of labrum, with not protruding denticulations that appear rather with flat and sub-rectilinear anterior margin, by the larger aedeagus, with more wide and long inner sac, sometime folded on itself.

3. ***Thyreocephalus raptor*** Tottenham, 1956 (Figs. 1700, 1701)

Thyreocephalus raptor Tottenham, 1956: 256; Herman, 2001: 3766; Janak & Bordoni, 2015: 60
Thyreocephalus parcior Tottenham, 1956: 257; Herman, 2001: 3766; Janak & Bordoni, 2015: 60 (syn. of *T. raptor*)

EXAMINED MATERIAL. The Musée de l'Afrique centrale of Tervuren preserves 1 specimen labelled "*Coll. Mus. Congo / Ruanda: Tshuruyaga, for. / Rugege, 2400 m / P. Basilewsky 22 / I.1953*", "*Holotype*" (printed on orange label), "Thyreocephalus / raptor / *Tottenham* [printed] / *TYPE*". It is a male.

The same museum preserves 1 specimen labelled alike, and "Thyreocephalus / parcior / *Tottenham* [printed] / *TYPE*". It is a female identical to raptor with the determination "Thyreocephalus raptor *Tott., Bordoni det. 2013*".

DESCRIPTION. Body 22 mm long; length from anterior margin of head to posterior margin of elytra: 10 mm. Body large, slightly flat. Black with bluish elytra and last three abdominal segments red; antennae and legs brown. Labrum as in figure 429. Head and pronotum with micro-punctation. Head and pronotum and related punctation as in figure 428. Elytra longer than pronotum, a little dilated posteriad and there as wide as pronotum. Surface with wide, very superficial punctation, arranged in three series, one near the suture, one median and one lateral. Scutellum with more or less transverse micro-striation and some punctures. Tergite and sternite of the male genital segment as in figures 430, 431. Aedeagus large (Fig. 432), 2.3 mm long; median lobe large, shaped spearhead; inner sac narrow and long, covered with fine scales.

DISTRIBUTION. Rwanda (Fig. 443).

REMARKS. The specimen described as *T. parcior* is a female which is narrower than the male - the type of *T. raptor*.

4. ***Thyreocephalus basilewskyi*** Tottenham, 1956

Thyreocephalus basilewskyi Tottenham, 1956: 258; Herman, 2001a: 3761; Janak & Bordoni, 2015: 60

TYPE MATERIAL. The Musée royal de l'Afrique centrale of Tervuren preserves 1 specimen labelled "*Ruanda / Tshuruyaga, forêt de Rugege / 2400 m, P. Basilewsky 22.I.1953*", "Thyreocephalus / basilewskyi *n. sp., Tott., Type*". It is a female.

EXAMINED MATERIAL. Ruanda, Cyangugu, Nyakabuyo, H. Mühle, 1-3.IV.1983, 1 ex (MNB), 1 x. (cB); Cyangugu, Nyakabuyo, H. Mühle, 27.IX.1984, 1 ex. (MNB); Cyangugu, Nyakabuyo, H. Mühle, 16.X.1984, 1 ex. (cB); Nyakabuyo, H. Mühle 15–24.IV.1984, 2 exx. (MNB), 1 ex. (cB); Nyakabuyo, H. Mühle, 3.II.1985, 1 ex. (MNB); Nyakabuyo, H. Mühle, 5–8.X.1985, 1 ex. (MNB); Nyakabuyo, H. Mühle, 3.X.1985, 1 ex. MNB); Hembe-Bitale, "Thyreocephalus densepunctatus *nov. spec.*", "*TYPUS* Thyreocephalus densepunctatus *O. Scheerpeltz*" (in litt.), 1 male (NMW).

(Congo), Zaire, Umg. Lwiro, Wabo Banyw'ne, III.1985, 1 ex. (SMNS), 1 ex. (cB).

Uganda, Tororo Bugirl, Mühle, 20.XII.1984, 1 female (MNB).

DESCRIPTION. Body 17–18 mm long; length from the anterior margin of the head to the posterior margin of elytra: 11–12 mm. Black with bluish elytra and abdomen brown dark, sometimes reddish brown. Body shiny. Pronotum with micro-punctation. Head and pronotum and related punctation as in figure 433. The females with less dilated head. The punctation of head is large, elongate, close, rugose, frequently confluent. Labrum as in figure 434. Elytra a little longer and wider than pronotum, scarcely dilated posteriad, with well marked humeral angles. Surface with wide and superficial punctation, arranged in one series near the suture, one median and one lateral, composed by few punctures. Abdomen with very fine and dense, transverse micro-striation and fine and very sparse

punctation. Tergite and sternite of the male genital segment as in figures 435, 436. Aedeagus large (Fig. 437), 2.88 mm long, with almost rounded median lobe; parameres symmetrical; inner sac ribbon-like, wide, wrapped on itself, covered with sparse little scales.

DISTRIBUTION. Rwanda, Uganda, Congo (Fig. 433).

5. ***Thyreocephalus occidentalis*** n. sp.

EXAMINED MATERIAL. Holotype male: Guinea, Feuta Djallon, 1200 m, Exped. Mus. G. Frey, Franz. Guinea, Bechyna, 23.VI.1951 (NMW).

DESCRIPTION OF THE HOLOTYPE. Male. Body 18 mm long; length from the anterior margin of the head to the posterior margin of elytra: 11-12 mm. The external characters are similar to those of *T. basilewskyi* (Fig. 438) but the abdomen is black and the labrum have different shape (Fig. 439). Tergite and sternite of the male genital segment as in figures 440, 441. Aedeagus very smaller than that *T. basilewskyi* (Fig. 442), 1.85 mm long, almost rounded, with rounded median lobe; inner sac narrow, folded on itself, covered with fine spinulae and scales.

ETYMOLOGY. The specific epithet refers to the western locality of the type.

DISTRIBUTION. Guinea (Fig. 443).

REMARKS. Female unknown. The specimen, previously identified as *T. basilewskyi* (Janak & Bordoni, 2015), bears also the labels "*Cotypus* / Thyreocephalus / densipunctatus / *O. Scheerpeltz*" (in litt.) (on rose label), "♂", "Thyreocephalus / densipunctatus / *nov. spe.*", "*ex coll. Scheerpletz*", "Thyreocephalus *male* / basilewskyi T*otth. / J. Janak det. 2002*". The specimen from Guinea differs by *T. basilewskyi* for the following characters: clypeus more wide, with sparser punctation; head with finer punctation; lateral margin of head less rounded; narrower pronotum, with more concave anterior margin; different sternite of the male genital segment and aedeagus.

6. ***Thyreocephalus interocularis*** (Eppelsheim, 1895)

Xantholinus interocularis - Eppelsheim, 1895: 131; Fauvel, 1903: 239

Thyreocephalus interocularis - Bernhauer & Schubert, 1914: 313; Bernhauer, 1942: 361; Cameron, 1950: 33; Tottenham, 1956: 259; Koppenhöfer, 1994: 388; Herman, 2001a: 3764; Janak & Bordoni, 2015: 64

Thyreocephalus diversiceps - Bernhauer, 1936: 21; Herman, 2001a: 3762; Janak & Bordoni, 2015: 64 (syn. of *T. interocularis*)

TYPE MATERIAL. The Field Museum of Natural History of Chicago preserves 1 specimen labelled "*Musée du Congo / Lulua: Kapanga", "III.1933 / G. F. Overlaer*", "Thyreocephalus / diversiceps / *Brnh. Typ.*". It is a female identical to *T. interocularis*. We have choosen this specimen as lectotype of the species. This specimen have the labels "*Lectoypus* Thyreocephalus diversiceps *Bh., Bordoni des. 2011*" and "Thyreocephalus interocularis *(Epp.), Bordoni det. 2012*".

It has not possible to find the holotype of *Xantholinus interocularis*, described from Togo, for which it was necessary to designate a neotype. One male labelled "*Togo*" (DEI) was chosen. It bears the label "*Neotypus* Xantholinus interocularis *Epp., Bordoni des. 2014*" and the determination label "Thyreocephalus interocularis *(Epp.), Bordoni det. 2014*".

EXAMINED MATERIAL. Guinea-Bissau, (Port. Guinea), Rio Geba, 2 exx. (FMNH); (Guinée Portug.), Rio Geba, Chime, 1906, 1 male, 1 female (NHMW); (Port. Guinea), Rio Geba, W. Afrika, Field Mus. Nat. Hist., A. Bierig, 1966, 2 females (FMNH).

Guinea, N'Zerekoré, S. H. Olsen 1–5.X.51, "Thyreocephalus interocularis*, ex coll. Scheerpeltz*", 1 male (cJ).

Sierra Leone, Northern Prov., near Bumbuna, W. Rossi, 17.I.1989, 1 ex. (cB); Simikoro, W. Rossi, 31.XII.1982, 1 ex. (cB).

Ghana, Wenchi road, 37 mi N Kumasi, R. Linnavuori, 18.IX.1973, 1 ex. (ZMH); Umg. Daaman, 1.52W, 3.30N, O. Schermann, 18.VII–18.VIII.1986, 1 ex. (MNW); Ashanti region Abofour, Opro river, 320 m, 7.07 N, 1.48 W, S. Endrödy-Younga, 2.IV.1966, 1 male (ZMB); Ashanti, region Mampong scarpe, 600 m, 7.00 N, 1.22W, S. Endrődy-Younga, 1.I.1966, 1 male (ZMB); Ashanti region, Kumawu, 274 m, 6.55N, 1.17W, S. Endrödy-Younga, 12.VIII.1967, 1 male (ZMB); Volta region, Kpeze, 400 m, 6.52N, 0.31W, S. Endrődy-Younga, 29.VIII.1967", 2 males (ZMB,

cJ); Volta region, Amedzofe, 830 m, 6.52N, 0.26W, S. Endrődy-Younga, 1.IX.1967, 1 male (cJ); Western region, Pretsea, 30 m, N 4 55 - W 1 52, S. Endrödy-Younga, 8.II.1966, 1 male(ZMB); Western region, Pretsea, 30 m, N 4.55N, 1.52W, S. Endrödy-Younga, 15.II.1966, 1 male (ZMB).

Togo, Konkoa (Bismarckburg), L. Conradt 13.II–20.III.1893, 1 ex. (MNB); Conradt, 1 ex. (DEI).

Cameroon, Lolodorf, L. Conradt, 1895, 3 exx. (DEI), 1 ex. (cB); Joko, 1 ex. (MNB); Joh.-Albrechtshöne, Conradt, 20.VIII–13.IX.1898, 1 ex. (cB).

(Equatorial Guinea), Span. Guinea, Nkolentangan, S. Tessmann, XI.1907–V.1908, 1 ex. (MNB), 1 ex. (cB).

Uganda, Budongo Forest N. P., 1.43N, 31.32E, 1224 m, U. Göllner, 12-29.I.1997, 1 ex. (MNB).

Rep. Congo, Odzala Nat. Park, leg. ?, II.1997, 1 ex. (cS).

Congo, Lulua, Kapanga, F. Overlaet II–IV.1933, 20 exx. (MRAC), 7 exx. (cB); Kivu, Kavumu, Kahunga, 82 km (Mingazi), H. Bomans, VIII–IX.1951, 8 exx. (MRAC), 3 exx. (cB); Ed Luja Kondué, 1 female (NHMW); Ukaika, Grauer, I.1911, 1 male (NHMW); Urw. Mawambi, Grauer, 1910, 1 female [Haut-Zaire, pr. Mambasa] (NHMW); Ukaika, Grauer, XII.1910, 1 ex. (NHMW); Urwald-Beni, Grauer, XI.1910, 1 male [Kivu, Beni] (NHMW).

Burundi, 10 km W Bujumbura, Arndt, 9.II.1992, 1 male (NME).

Kenya, Kakamega For., Udo's Bandas, 00°21'38.2"N, 34°51'24.9"E. V. Grabennikov, 9–11.XI.2001, 1 ex. (FMNH); Kakamega, 1500–1600 m, local people leg., I–IV.2006, 1 ex. (MNW).

(Uganda), British Uganda, Graver, 1 ex. (DEI).

CITED MATERIAL (not examined). Togo, Cameron, Gabon, Congo (Fauvel, 1903a).

(Congo), Urwald Beni, Urwald Mawambi, Ukaika (Bernhauer, 1913b).

Camerun, Dschang (Bernhauer, 1942).

DESCRIPTION. Body 15 mm long; length from the anterior margin of the head to the posterior margin of elytra: 9 mm. Black with bluish elytra and abdomen a little reddish. Shiny. Head and pronotum with micro-punctation. Head and pronotum and related punctation as in figure 444. Labrum as in figure 445. Elytra longer and wider than pronotum, squared, a little dilated posteriad, with rounded humeral angles. Surface with wide and superficial punctation, arranged in three series, one near the suture, one median and one lateral. Abdomen with feeble or evident traces of transverse micro-striation, with fine and very spaced punctation, arranged in few series. Tergite and sternite of the male genital segment as in figures 446, 447. Aedeagus proportionally little (Fig. 448), 1.85 mm long, with wide sub-triangular median lobe; parameres symmetrical; inner sac ribbon-like, wide and long, wrapped on itself, covered with little scales.

DISTRIBUTION. Guinea Bissau, Guinea, Sierra Leone, Ghana, Cameroon, Equatorial Guinea, Uganda, Rep. Congo, Congo, Burundi, Kenya (Fig. 449).

REMARKS. This species differs from *T. coeruleipennis* especially by more robust and wide body, more wide head and aedeagus. It is variable in dimension of body and aedeagus, and punctation as well. For example the specimens from Kivu have larger aedeagus (2.6 mm long).

3. *Thyreocephalus guineensis* sub-group

Head elongate, discal puncture on head absent, two setiferous postocular punctures, labrum lobate; body 17–19 mm long, reddish brown dark; elytra with an antero-lateral yellow spot or red dark.

KEY TO THE SPECIES

1. Body 17–17.5 mm long, reddish brown dark; elytra with a large yellow antero-lateral pach; 6 visible abdominal segment and genital segment red light. Aedeagus (Fig. 454). Guinea, Ghana, Central African Rep., Cameroon, Niger, Congo, Nigeria.....1. *T. guineensis*
-. Body 18–19 mm long, reddish brown black with darker head, elytra red dark, abdomen reddish. Aedeagus as in figure 459. Angola.....2. *T. paraferox*

1. ***Thyreocephalus guineensis*** (Bernhauer, 1912)

Eulissus guineensis - Bernhauer, 1912: 183; Herman, 2001a: 3627

Thyreocephalus guineensis - Janak & Bordoni, 2015: 67

TYPE MATERIAL. The Deutsches Entomologisches Institut of Müncheberg preserves 1 specimen labelled "*Guinea*", "*Syntypus*" (printed on red label), "guineensis / *Brnh. n. sp.*", "Thyreocephalus guineensis *(Bernhauer), J. Janak det. 2006*". The specimen is devoid of the genital segment.

EXAMINED MATERIAL. Guinea, N Zérékoré, S.H. Olsen, 28.VI.1950, 1 ex. (ZMUC).

Côte d'Ivoire, Zepréghé, Daloa,, J. Decelle, III.1962, 1 female (MRAC).

Ghana, Manso, Amenfi, ex coll. Breuning, IV–VI.1968, 1 female (MRAC).

(Niger), Oberssanga Kag., Beri b. Garnot, S. Tessmann, 26.II–2.III.1913, 1 ex. (MNB), 2 exx. (cB).

Kamerun, Joko, 1 ex. (MNB).

(Central African Rep.), Uamgebiet, Bosum (Bozoum), S. Tessmann, 1–10.IV.1914, 3 exx. (MNB); Uamgebiet, Bosum, S. Tessmann, 21–30.IV.1914, 1 ex. (MNB), 1 ex. (cB).

(Congo), Zaire, Buje, A. Simonetta, 27.III–4.IV.1975, 1 ex. (cB).

Congo, Route Kamituga à Bukavu, 1700 m, N. Leleup, 5.IV.1949, 3 males (MRAC, cJ).

Nigeria, Gashaka, Gumti NP, 560 m, Kwano, 07°20´N;11° 35´E, Kremitovský, 25.4–3.5.2011, 3 males (cJ, cK).

DESCRIPTION. Body 17–17.5 mm long; length from the anterior margin of the head to the posterior margin of elytra: 10–10.2 mm. Reddish brown dark; elytra with a large yellow, lateral, anterior patch ; 6° visible abdominal segment and genital segment red light. Head and pronotum and related punctation as in figure 450. Labrum as in figure 451. Pronotum shorter and narrower than head, very dilated anteriorly, with sinuate sides. Elytra as long and wide as pronotum, with very scarcely marked humeral angles. Surface with punctation arranged in three series, one near the suture, one median and one lateral. Abdomen with fine, deep and dense punctation. Tergite and sternite of the male genital segment as in figures 452, 453. Aedeagus, very large, 3.36 mm long (Fig. 454), oblong and proportionally narrow, with broad median lobe and long parameres; inner sac tape-like, very long, folded on itself, covered with scales.

DISTRIBUTION. Ivory Coast, Ghana, Niger, Cameroon, Rep. Centrafican, Congo, Nigeria (Fig. 460).

2. ***Thyreocephalus paraferox*** Janak, 2010

Thyreocephalus paraferox Janak, 2010:14; Janak & Bordoni, 2015: 70

TYPE MATERIAL. The Naturhistorisches Museum of Wien preserves 1 specimen labelled "*Kvg*", "*Angola, Mission sc. Suisse 1932-1933*", "*Emmerich Reitter vend. VIII. 1939*", "*ex coll. Scheerpeltz*". It is a male.

The Field Museum of Chicago preserves 1 paratype male labelled "*Angola, Chingufo, 25.XI.1972*", "*along path*", Coll. D.H. Kistner & R.J. Swift, No. 2640.

The Institut royal des Sciences Naturelles of Bruxelles preseves 1 female labelled "*Angola*", "ferox *Har. Var.*", "*Coll. et det. Fauvel*".

DESCRIPTION. Body 18.2–19 mm long; length from the anterior margin of the head to the posterior margin of elytra: 10–10.5 mm. Reddish brown black, with darker head, elytra red dark, scutellum black, abdomen reddish. Body narrow, shiny. Head and pronotum with more or less evident micro-punctation. Head and pronotum and related punctation as in figure 455. Labrum as in figure 456. Elytra sub-rectangular, as long as pronotum, a little dilated posteriad and there as wide as head, with slightly rounded sides and marked humeral angles. Surface with fine and superficial punctation, arranged in three series, one near the suture, one median and one lateral. Abdomen with transverse micro-striation and evident and not sparse punctation, arranged in some series on each segment. Tergite and sternite of the male genital segment as in figures 457, 458. Aedeagus ovoid (Fig. 459), elongate, very large, 3.5 mm long, with sub-triangular median lobe; parameres symmetrical; inner sac narrow and long, wrapped on itself some times, covered with little scales.

DISTRIBUTION. Angola (Fig. 460).

4. *Thyreocephalus ater* sub-group

Discal setiferous puncture on head missing, two postocular setiferous punctures close to each other in one depression, labrum lobate, ventral side of head with a fine tooth, basic colour black, large species; body 20–24 mm long, very robust, entirely

black or with the last two abdominal segments or the genital segment yellowish.

KEY TO THE SPECIES

1. Body less robust and wide, black, genital segment and apical part of previous segment reddish, tempora rounded, middle part of labrum roundly emarginated. Aedeagus (Fig. 465) more dilated, with large median lobe; parameres asymmetrical; inner sac tube-like. From Tanzania to Kenya.....1. *T. alluaudi*
-. Body more robust and wide, black, at most genital segment reddish, tempora angled, middle part of labrum sharply emarginate. Aedeagus with symmetrical parameres..... 2

2. Body narrower, pronotum longer than wide (length/width > 1.08). Aedeagus (Fig. 470) subovoidal; parameres symmetrical; inner sac shorter. Zambia, Namibia, Botswana, Zimbabwe, Mozambique, South Africa..... .....2. *T. meridionalis*
-. Body wider, pronotum as long as wide (length/width < 1.01). Aedeagus slender and narrow (Fig. 475); inner sac filiform. Almost all Africa until Malawi and North Zimbabwe.....3. *T. ater*

1. ***Thyreocephalus alluaudi*** (Fauvel, 1907) (Fig. 1683)

Xantholinus alluaudi - Fauvel, 1907: 34; Bernhauer & Schubert, 1914: 300; Bernhauer , 1939: 64
Eulissus alluaudi - Scheerpeltz, 1933: 1316; Herman, 2001a: 3625
Thyreocephalus alluaudi - Janak & Bordoni, 2015: 30

TYPE MATERIAL. The Institute royal des Sciences naturelles of Bruxelles preserves 5 specimens: the first is labelled "*Kiboscho 3 / (Kilimanjaro)*", "*Ex-Typis*" (red print), "*Lectotypus* / Xantholinus / alluaudi *Fvl. / J. Janak des. 1991*", "Thyreocephalus alluaudi *(Fvl.), J. Janak det. 1991*"; it is a male; the second have the label "*Kibonoto 9 / (Kilimanjaro)*" and "*Paralectotypus* / Xantholinus / alluaudi *Fvl. / J. Janak des. 1991*", and the same identification; it is a female; the third and fourth, males, have the label "*Nairobi 11 / Kilimanjaro*" and the same other labels; the fifth have the label "*Kibonoto 8/ Kilimanjaro*" and the other labels; it is a female. All have the label "*Coll. et det. A. Fauvel,* Xantholinus alluaudi *Fvl.*".

EXAMINED MATERIAL. Tanzania, Kilimandjaro, 1 ex. (MNB); Kilimancharo, Schira, E. Förster, 1 ex. (MNB); Kilimandjaro, kibonoto, 1000–1300 m, Sjostedt 1905-6, 2 exx. (MNB); Arusha, 1 ex. (MTM); Arusha env., Smrz 1–7.I.1995, 1 male (NMW); S. Tanganyika, Msamwia, 1850 m, Fromm XI.1908, 1 ex. (cB).

(Tanzania), Afr. or. Moschi (near Kilimandjaro), 1 ex. (MNB); (Tanzania), D.O. Africa, Tonga, 1 ex. (DEI); (Tanzania), Tonga, D. O. Afr., coll. Benningsen, 1 female (DEI).

Congo, P. N. U. Lusinga, 1760 m, G. F. de Witte, 28.XI–6.XII.1947, 1 female (MRAC).

Kenya, Loitokitok, Hovoika 6.XI.1989, 1 male (MNW); Nairobi, Muthaiga, Snížek, 4.IV.2007, 1 male (cJ); Nairobi, Muthaiga, Snížek, 9.V.2007, 1 male (cJ); Nairobi Westlands, H. Gonget, 19.X.1976, 1 ex. (ZMUC).

CITED MATERIAL (not examined). (Tanzania), Kilimandjaro, Meru (Eichelbaum, 1910, sub *Eulissus*).

DESCRIPTION. Body 21–22 mm long; length from the anterior margin of the head to the posterior margin of elytra: 12–13 mm. Black with last two visible abdominal segments reddish; elytra sometimes reddish. Body very robust, massive, shiny. Head and pronotum with micro-punctation. Head and pronotum and pertinent punctation as in figure 461. Labrum as in figure 462. Elytra squat but longer and wider than pronotum, posteriad dilated, with less marked humeral angles. Surface with very fine and spaced punctation, arranged in three series, one near the suture, one median and one lateral, composed by 7, 8 spaced punctures. Abdomen shiny, with feeble traces of transverse micro-striation and fine but deep, sparse punctation, arranged in some series. Tergite and sternite of the male genital segment as in figures 463, 464. Aedeagus large (Fig. 465), 2.4 mm long, with long median lobe; parameres asymmetrical; inner sac ribbon-like, proportionally short and narrow, covered with sparse little scales.

DISTRIBUTION. Ethiopia and from Tanzania to Kenya (Fig. 476).

2. ***Thyreocephalus meridionalis*** Janak et Bordoni, 2015

Thyreocephalus meridionalis - Janak & Bordoni, 2015: 32

Type material. The holotype male from Namibia, Popa Falls, 18°07'16"S, 21°34'51"E, M. Uhlig, 13.XII.1993 is preserved in MNB. Paratypes: Namibia, East Caprivi, Katima Mulilo, Zambezi riv., 950 m, R. Kmeco, 9–25.1.1999, 1 ex. (cJ); Namibia bor. or., Katima Mulilo, Caprivi zipfel, M. Snížek, 15–24.I.1995, 1 ex. (cJ); NO Zambia, E Mkushi env., Snizek and Tichy, 16–18.XII.2004, 1 ex. (cR); NW Zambia, Mutumbwe, B. and P. Malec, 24–30.I.2005, 1 ex. (MNB); Zambia, Livingstone Victoria Falls, Snizek, 26–31.XII.1994, 1 ex. (cJ); Zambia, Kapiri, Mposhi, 160 km N Lusaka, B. and P. Malec, 2.II.2005, 1 ex. (MNB); (Zimbabwe) Rhodesia, Atlantica Ecol. Res. Stat., nr. Salisbury (Harare), R. Clover and A. Kistner, 24.III.1970, 1 ex. (FMNH); Zimbabwe W, Bulawayo, Shangani, Naletale ruins, Snížek, 20.XII.2011, 1 female (cJ); Zimbabwe, north Mavhuradonha, Wilderness area, A. Kudrna, 17–19.XII.1998, 1 ex. (cJ); Zimbabwe, Kyle Recr. Park at Lake Mutiri Kwi, M. Uhlig, 2–4.XII.1995, 20.13S, 31.00E, 1 ex. (cB); Botswana. 10 km N of Maun, J. Moravec, 1 ex. (cJ); South Africa, Transvaal, Duiwelskloof, 23.42S, 30.06E, V.M. Uys, 12–14.I.1987 (SANC); (South Africa), Mp' home (?) Transv., M. Knothe, 1 ex. (MNB).

Description. Body about 24 mm long; length from the anterior margin of the head to the posterior margin of elytra: about 14 mm. Black with reddish genital segment. Very similar to *T. alluaudi*. Body massive, large, larger than that of *T. alluaudi*. Elytra with feebly bluish reflexes. Head and pronotum an related punctation as in figure 466. Head and pronotum with very minute, sparse micro-punctation. Head with some sparse, lateral punctures. Labrum as in figure 467. Pronotum with very sinuate sides. Elytra sub-quadrangular, slightly dilated posteriad, with marked humeral angles. Surface with fine punctation provided with long, brown setae, arranged in three series of very spaced punctures, one near the suture of 3, 4, one median of 4, 5 more wide and one lateral of 5, 6 punctures. Abdomen with extremely fine and dense, transverse micro-striation and sparse punctation. Tergite and sternite of the male genital segment as in figures 468, 469. Aedeagus 1.88 mm long (Fig. 470), sub-ovoidal, with long median lobe of characteristic apex; parameres symmetrical; inner sac shorter than in *T. alluaudi*.

Distribution. Zambia, Namibia, Zimbabwe, Botswana, South Africa (Fig. 476).

3. ***Thyreocephalus ater*** (Laporte, 1835)

Eulissus ater - Laporte, 1835: 117; Bernhauer & Schubert, 1914: 311; Bernhauer, 1915c: 362
Xantholinus ater - Erichson, 1839b: 318
Thyreocephalus ater - Cameron, 1952e: 831; Herman, 2001a: 3761; Janak & Bordoni, 2015: 34

Type material. It has not possible to find the holotype of this species, described from Senegal, for which it was necessary to designate a neotype. One male labelled "*Guinea, Deyr*." (MNB) was chosen. It bears the label "*Neotypus* Eulissus ater *Lap., Bordoni & Janak des. 2014*" and the determination label "Thyreocephalus ater *(Lap.), Bordoni & Janak det. 2014*".

Examined Material. Eritrea, Bogos, Antinori, 1871, 1 ex. (MCSNG); Mintil, 1 ex. (MNB); Kesadgua, D. Heyne, X.1909, 1 ex. (MNB).

(Eritrea), Abyss., Bogos, 2000 m, Hildenbrant., 1 ex. (MNB).

(Etiopia ?), Uha, X.12, 1 ex. (MNB).

Ethiopia, Kibe river, Trailin, V.1992, 1 ex. (cJ); Illubador prov., Gore, Malec, 2–3.IV.2002, 1 ex. (MNB).

Tchad, Bekao s. Moundou, H. Franz, 1 ex. (NMW); Fort-Sibut, Ht Chari, 1 ex. (MNB).

Guinea, 2 exx. (DEI); N' Zérékoré, Exped. Mus. G. Frey, 1951, Bechyne, 5.VII.51, 6 exx. (NHMW); Zérékoré, S. H. Olsen, 21.V.1953, 1 ex. (ZMUC); Région Kindia, Mt. Gangan, 500 m, Exped. Mus. G. Frey 1951, Bechyne, 5.V.51, 4 exx. (NHMW); Monts Nimba, Lola, 07°41.66'N, 08°24.11'W, M. Halada, 8.VII.2004, 1 ex. (cH); Guinea merid., Conacry, Foret Classe de Monts Nimba, near Lola, A. Kudrna, 7–9.VII.2004, 1 ex. (cB).

(Guinea), Franz. W Afrika, Baliso river, Yemhèrè-Tahiré, Knorr, 24.IX–24.X.1956, 1 ex. (SMNS), 1 ex. (cB); Kellesi-Plat, Yemhèrè-Tahiré, Knorr, 24.IX–24.X.1956, 1 ex. (cB), 1 ex. (SMNS).

Sierra Leone, Northern Prov., Bumbuna, R.

Mourglia, 13–16.VI.1988, 1 ex. (MNW); SW Kailahun Mobai Distr., 2 km W Potolu, 219 m, 7°58.621'N, 10°46.498'W, P. and B. Malec, 4–5.V.2013, 1 ex. (MNB).

Liberia, Saclepea, F. Krell, 16.II.1988, 1 ex. (SMNS); Bong Town, F. Krell, 20.III.1988, 1 ex. (SMNS); Cari Suakoko, F. Krell, 17.III.1988, 1 ex. (cB).

Côte d'Ivoire, Bingerville, J. Decelle, VI.1962, 1 ex. (cJ); Comoe, P. Moretto, IV.2002, 1 ex. (cB); Lamto, L. Bayer, VI.1962, 1 ex. (NHMW).

(Ghana), Togo Hinterland, Yendi, S. Thierry, 1 male (MNB).

Ghana, Manso, Amenfi, IV/VI.1968, 9 exx. (MRAC, cJ).

Togo, Bismarckburg, R. Büttner, 15.IX–15.X.1891, 1 ex. (MNB); Bismarckburg, S. Conradt, 1 ex. (MNB); 1 ex. (DEI); Socode, 3 ex. (DEI).

Nigeria, Jos, Exped. Mus. G. Frey Nigeria-Kamerun 1955–56, Bechyne, 7–18.X.55,12 exx. (NHMW); Umg. Jos/Vom, W. Assing 5.XI–2.XII.1984, 1 ex. (cA); Akwanga, leg. ?, VIII.1976, 1 ex. (cB); W Nile Distr., Rhino Camp, G. Babaut, 1 ex. (cB).

(Nigeria), Kano, Exped. Mus. G. Frey Nigeria-Kamerun 1955–56, Bechyne, 5.X.55, 2 exx. (NHMW); Kamerun, Tickau, L. Colin, X.1912, 1 ex. (MNB).

Gabon, Réserve de la Lopé, L. Bartolozzi and S. Taiti, 6–16.VIII.1995, 1 ex. (ZMF).

Kamerun, Joko, L. Colin IV.1912, 2 exx. (MNB); Joko, L. Colin, 1 male (cJ); Tino (?), L. Colin, IV.1912, 1 ex. (MNB); Joko, A. Heyne, 1 ex. (MNB); Joko, 6 exx. (MNB); Tonga, D.R. Afrs., 1 ex. (MNB).

(Central African Rep.), Uamgebiet Bosum (= Ouham river valley, Bozoum), S. Tessmann, 21.III–10.VI.1914, 22 exx. (MNB); Neu Kamerun, Bossum 1 ex. (MNB).

Central African Rep., 40 km S Kaga Bandoro, 530 m, 06.41N, 19.07E, J. Halada, 24.IV.2010, 1 ex. (cB).

Congo fr., Fort Sibut, 4 exx. (MCSNG), 1 ex. (cB).

(Congo), Mangu-Gebiet, Breite Katjambo bis Bogo Moba, Thierry, 1 ex. (MNB).

Rep. Congo, P.N.G., Miss. H. De Saeger, Mabanga, H. De Saeger, 25.VII.52, 3 exx. (MRAC).

Congo, Lulua: Kapanga, F. Overlaet, I.1933, 6 exx. (MRAC, cJ); Luluabourg (Kasai), J. Deheegher, III–VII.1965, 1 ex. (MRAC); Luluabourg, Fülleborh, 30.X.1898, 2 exx. (MNB); Maniema: Kasongo, P. Benoit VIII–IX.1959, 2 exx. (MRAC, cJ); Terr. de Kasongo, Lupaya, P. Benoit 8.II.1960, 1 ex. (MRAC); Haute Volta: Bobo-Dloulasso, R. Siffointe VIII.1964, 1 ex. (MRAC); Yangambi (Stanleyville), P. Dessart, V.1959, 1 ex. (MRAC); Atso, 72 km Aru, s route d'Aru à Aba, L. Demoulin 1948, 5 exx. (IRSNB), 2 exx. (cB); National Garamba Park, Miss. H. De Saeger, H. De Saeger, 9–28.II.1951 16 exx. (MRAC); National Garamba Park, Miss. H. De Saeger, H. De Saeger, 31.VII.1952, 1 ex. (MRAC).

Tanzania, Tonga D. R. Afrs., 5 exx. (MNB); near Vwawa, Mibeya Prov., Werner and Lizler, 7.XII.1999, 1 ex. (cB); Arusha, Murray 9.III.1986, 1 ex. (MTM).

Kenya, Loitokitok, Hovoika, 15.XI.2004, 1 ex. (MNW).

Uganda, SW Hioma, Rwera env., M. Snizek, 30.XI.2001, 1 ex. (cJ).

(Malawi), Nyassa, Heyne, 3 exx. (MNB); Nyassa-See, Kolbe, III.1907, 1 ex. (MNB).

Tukan Afr. (?), leg. ?, X.1912, 3 exx. (MNB).

CITED MATERIAL (not examined). (Kenya), Victoria Nyanza: Kisumu; Abyssinie, Lac Nyassa, Sénégal, Sierra Leone, Adda, Congo, Cameroun, Dahomey. (Fauvel, 1907, sub *Xantholinus*).

Belgisch-Kongo (Rep. Congo), Ubangi Distr., Duma, H. Schuboltz, 20.IX.1910 (Bernhauer (1915).

Sierra Leone, Congo: Mayidi, Cameroon: Yoko; Dahomey: Bassila (Cameron, 1952).

DESCRIPTION. Body 20–22 mm long; length from the anterior margin of the head to the posterior margin of elytra: 16–17 mm. Black, shiny. Body very robust, wide. Head and pronotum with feeble micro-punctation. Head and pronotum and pertinent punctation as in figure 471. Labrum as in figure 472. Elytra sub-rectangular, as long as pronotum and narrower that it, with sub-rectilinear and sub-parallel sides. Surface with three series of spaced punctures, one near the suture, one median and one lateral. Abdomen with very fine and dense, transverse micro-striature and well visible, dense and deep punctation. Tergite and sternite of the male genital segment as in figures 473, 474. Aedeagus large (Fig. 475), narrow, 2.5 mm long, with short median lobe; parameres symmetrical;

inner sac ribbon-like, covered with sparse little scales.

DISTRIBUTION. This specie occurs almost in all Africa south of Sahara until Malawi (Fig. 476).

REMARKS. This species differs from *T. alluaudi* by the abdomen completely black, shape of head, pronotum and labrum, punctation of head, shape of aedeagus and parameres. The National Garamba Park is situated in the North Congo, on the border with Sudan.

5. *Thyreocephalus pilosus* sub-group

Discal setiferous punctures on head absent, head with two contiguous setiferous postocular punctures situated in one larger depression (should be observed precisely, as sometimes setae broken), labrum lobate, large species, black with at least partly yellowish abdomen.

KEY TO THE SPECIES

1. Surface of the abdominal tergites entirely yellowish; postero-lateral surface of head with few, closed punctures.....2
-. Surface of some first abdominal tergites blackish.....3
-. First 4 visible abdominal tergites blackish brown (paratergites yellowish); body about 12 mm long; labrum as in figure 478. Aedeagus as in figure 481. Rep. Congo.....1. *T. tsingidianus*

2. Elytra and scutellum reddish brown; body 17–20 mm long; labrum as in figure 483. Aedeagus as in figure 486 with long, ovoidal median lobe. Cameroon, Gabon, Congo, Rep. Congo.....2. *T. africanus*
-. Elytra and scutellum orange; body 19.5 mm long; labrum as in figure 488; 3, 4 visible abdominal segments feebly infuscate in the middle. Aedeagus as in figure 491. Rep. Congo.....3. *T. pseudoafricanus*

3. First visible sternite at least partly black; first two abdominal segments blackish; elytra yellow with dark scutellum; body 18 mm long; head with few median punctures; labrum as in figure 493. Aedeagus (Fig. 496) with enlarged, subrounded median lobe. Cameroon, Congo, Eritrea, Ethiopia, Uganda.....4. *T. pilosus*
-. All visible sternite yellow; first two abdominal segments black or yellowish with black spots; elytra yellowish with black scutellum.....4

4. First visible abdominal tergite with median black sposts; lateral parts of first visible tergite and paratergites yellowish; body 21.5 mm long; head with some spaced lateral punctures; labrum as in figure 499. Aedeagus (Fig. 502) with apically rounded process of median lobe. Congo…….....5. *T. secretus*
-. First two visible abdominal tergites inluding lateral parts black, only paratergites yellowish; body 23 mm long; head with closed, lateral, little punctures; labrum as in figure 505. Aedeagus (Fig. 508) with apically angled process of median lobe. Congo, Rwanda.....6. *T. brunneiventris*

1. ***Thyreocephalus tsingidianus*** Janak et Bordoni, 2015

Thyreocephalus tsingidianus, Janak & Bordoni, 2015: 19

TYPE MATERIAL. The holotype male from Rep. Congo, Tsingidi, 2° 24. 15.6S, 12° 58. 11.0 E, J. Niemand, XI.2013 is preserved in TMSA.

DESCRIPTION. Body 17 mm long; length from the anterior margin of the head to the posterior margin of elytra: 11 mm. Body black; abdomen reddish brown with the first 4 visible segments blackish brown; 6° visible segment and genital segment yellowish; paratergites and sternites yellowish. Head and pronotum and related punctation as in fig. 477; labrum as in figure 478. Head and pronotum with extremely fine and dense micro-punctation. Elytra short, shorter and wider that pronotum, with marked humeral angles. Surface with superficial, wide punctation, arranged in three series, one near the suture, one median and one lateral. Abdomen with extremely fine and dense, transverse micro-striation and fine, sparse punctation, with yellow setae. Tergite and sternite of the male genital segment as in figures 479, 480. Aedeagus 2.2 mm long (Fig. 481), with narrow and very long median lobe.

DISTRIBUTION. Rep. Congo (Fig. 510).

2. ***Thyreocephalus africanus*** (Bernhauer, 1913)

Eulissus africanus - Bernhauer, 1913: 230; Bernhauer & Schubert, 1914: 1310; Tottenham, 1956: 255; Herman, 2001a: 3625

Thyreocephalus africanus - Janak & Bordoni, 2015: 21

TYPE MATERIAL. The Naturhistorisches Museum of Wien preserves 1 specimen labelled "*Ukaika-Mawambi / 1911 Grauer*", "Eulissus / africanus / *Brh.*", "*Typus*" (printed on red label), "Thyreocephalus africanus *(Bernh.), J. Janak det. 2004*". It is a female chosed as lectotype of the species. It have the label "*Lectotypus* Eulissus africanus *Bh., Janak & Bordoni des. 2014*" and "Thyreocephalus africanus *(Bh.), Janak & Bordoni det. 2014*" (Janak & Bordoni, 2015).

EXAMINED MATERIAL. Gabon, "semirufus *Fvl., R. I. Sc. N. B.17.479*, Eulissus, *Coll. et det. A. Fauvel*" 1 female (IRSNB).

(Cameroon), N-Kamerun, Johann Albrechtshöhe, L. Conradt, 2 exx. (MNB); N-Kamerun, Johann Albrechtshöhe, L. Conradt, 29.VIII–13.IX.1899, 1 ex. (cB); Neu Kamerun, S. Tessmann, 1 ex. (MNB).

Cameroun, Mt Kala, 1150 m, Darge, III.1972, 1 female (MRAC); Lolodorf, 1 ex. (DEI), 1 ex. (cB).

Rep. Congo, Soil Zoological Exp. Congo-Brazaville, Lefinie reservation, Mbéokala forest, Endrödy-Younga, 10.I.1964, 2 males 1 female (MTM); Soil Zoological Exp. Congo-Brazaville, Lefinie reservation, Mbéokala forest, Endrödy-Younga, 13.I.1964, 1 male (MTM); Soil Zoological Exp. Congo-Brazaville, Lefinie reservation, Nambouli river, Endrödy-Younga, 12.I.1964, 6 males, 4 females (MTM); Soil Zoological Exp. Congo-Brazaville, Lefinie reservation, Nambouli river, Endrödy-Younga, 2.I.1964, 1 female (MTM); Soil Zoological Exp. Congo-Brazaville, Lefinie Reservation, Nambouli river, Endrödy-Younga, 7.I.1964, 1 male, 1 female (MTM); Soil Zoological Exp. Congo-Brazaville, Lefinie reservation, Nambouli river, Endrödy-Younga, 11.I.1964, 2 males (MTM); Zaïre, Kisangani, J. Taverniers, XI.1972, 2 males, 4 females (MRAC, cJ).

Congo, W Albert-Nyansa, Jturi Eähre, S. Stuhlmann, 26.VIII.1891, 1 ex. (cB).

(Congo), Ukaika-Mawambi, Grauer, 1911, 1 ex. (NMW).

(Congo), Belg. Congo, Rwindi Camp, A. Emerson, 5.IV.1948, 1 ex. (FMNH); Rwindi Camp, A.E. Emerson, 5.IV. 1948, 1 male (FMNH); Oubanghi-Chari, Bangui, ex coll. Breuning, leg. ?, I–III.1968, 2 males, 1 female (MRAC, cJ); Zaïre, Etata s/ Tshuapa, J. Hauwaerts, IX.1970, 1 female (MRAC); Haut-Uelé: Moto, L. Burgeon, 1923, 1 female, "Thyreocephalus *n. sp. near* Eulissus semiflavus *Bernh.*" (Bernhauer handwritten), 1 female (MRAC); Haut-Uelé, Moto, L. Burgeon, 1922, 2 ex. (MRAC); Haut-Uelé, Moto, L. Burgeon 1923, 1 male (MRAC); Haut-Uelé, Watsa, L. Burgeon, 1922, "Eulissus africanus *Brnh.*" (Bernhauer handwritten), 1 female (MRAC); Watsa à Niangara, L. Burgeon, VII–1920, 1 male, 1 female (MRAC); Uele, Dingila, H. J. Brédo, V.1933, 1 female, "Eulissus africanus *Brnh.*" (Bernhauer handwritten) (MRAC); Bangu, R. Mayné, XI.1927, 1 male (MRAC).

CITED MATERIAL (not examined). (Congo), Ruwenzori: NW Beni (Urwald), I.1908 (cited as *T. pilosus*: Bernhauer, 1912).

DESCRIPTION. Body 17–20 mm long; length from the anterior margin of the head to the posterior margin of elytra: 7.5–8.5 mm. Head and pronotum black, elytra and scutellum reddish brown, abdomen yellowish; antennae and legs brown. Body shiny, massive. Head with micropunctation. Head and pronotum and related punctation as in figure 482. Labrum as in figure 483. Elytra a little longer and wider than pronotum, scarcely dilated posteriad, with marked humeral angles. Surface with very fine and sparse punctation, arranged in four series, two near the suture, one median and one lateral. Abdomen with extremely fine and dense, transverse micro-striation and very fine punctation, arranged in numerous series on each segment. Tergite and sternite of the male genital segment as in figures 484, 485. Aedeagus large (Fig. 486), 2 mm long, with very long and narrow, sub-ovoidal median lobe; parameres symmetrical, diaphanous; inner sac ribbon-like, long and narrow, covered with sparse little scales.

DISTRIBUTION. Gabon, Cameroon, Rep. Congo, Congo (Fig. 510).

BIONOMICS. Some specimens were collected in excrement and fruits.

Remarks. In the description Bernhauer (1913) cites also Cameroon.

3. ***Thyreocephalus pseudoafricanus*** Janak et Bordoni, 2015

Thyreocephalus pseudoafricanus - Janak & Bordoni, 2015: 23

Type material. The holotype male from Rep. Congo, Tsingidi, 2° 24. 15.6S, 12° 58. 11.0 E, J. Niemand, XI.2013, is preserved in TMSA; the paratype male in cB.

Description. Body 19.5 mm long; length from the anterior margin of the head to the posterior margin of elytra: 6.5 mm. Head and pronotum black; elytra and abdomen orange light; 3, 4 visible abdominal segments feebly infuscate in the middle; the last 3 visible abdominal segments yellowsih pale. Head and pronotum and related punctation as in figure 487; head and pronotum shiny; labrum as in figure 488. Posterior angles of head in lateral view very protruding. Elytra sub-quadrangular, large, longer and wider than pronotum, with rounded humeral angles. Surface with wide punctation, arranged in three series, one near the suture, one median and one lateral. Abdomen with very fine and dense, transversal micro-striation and fine, sparse punctation, with long yellowish setae; one blackish lateral seta on each segment. Tergite and sternite of the male genital segment as in figures 489, 490. Aedeagus 1.66 mm long (Fig. 491), with long, ovoidal median lobe.

Distribution. The species is know actually from the type locality only (Fig. 510).

4. ***Thyreocephalus pilosus*** (Roth, 1851)

Xantholinus pilosus - Roth 1851: 118
Eulissus pilosus - Eppelsheim 1895: 208; Bernhauer 1912: 478; Bernhauer & Schubert 1914: 311; Tottenham 1956: 224, 255; Herman 2001a: 3628
Thyreocephalus pilosus - Cameron,1950: 33; Janak & Bordoni, 2015: 23

Type material. The Zoologisches Staatssammlung of München preserves 1 specimen labelled "*Abyssinia*" (Nord Abyssinia, Tigré, W. Schimper leg.), "*Type von* Xantholinus pilosus *Roth*", "Thyreocephalus pilosus *(Roth), J. Janák det. 1992*", choosed as lectotype of the species. It have the label "*Lectotypus* Xantholinus pilosus *Roth, Janak & Bordoni des. 2014*" and "Thyreocephalus pilosus *(Roth), Janak & Bordoni det. 2014*" (Janak & Bordoni, 2015).

Examined Material. Eritrea, Adua XI, 1 ex. (NMW), 3 exx. (MNB); Adua, 6 exx. (MNB), 1 ex. (cB); Adua VI, 1 ex. (MNB); Abessyn, Adua, 2 exx. (*Eulissus speciosus* auct. det Bernhauer) (NMPC), 1 ex. (NMW), 1 ex. (sex indet.) (*Megalissus* Bierig) (FMNH); Adua, 4 exx. (MNB), 1 ex. (cB); Erythrée, 3 exx. (IRSNB); Asmara, 1 ex. (MNB); (Colonia) (Abessinia), coll. Jensen-Haarup, 3 exx. (ZMUC), 1 ex. (cB); Abyssinien, 1 ex. (MNB), 4 ex. (DEI), 1 ex. (cB), 9 exx. (IRSNB), 1 ex. (NMW); Abyssinia, Dr. Hofmann, 1 ex. (flavoniger Fauv.) (NMW); Abyssinie, Lac Daka, 14.III.1914, 1 ex. (NMPC); Abyssinie cent., Maraco, 1 ex. (cJ); Abissinia, Arussi Galla, Ganale Gudda, V. Bottego, III–V.1893, 1 ex. (MCSNG).

Ethiopia, Illubabor Prov., Umgebung Bedele, Werner IV.1994, 1 ex. (DEI); Illubabor Prov., Matu, Malec 29–30.III.2002, 1 ex. (MNB), 1 ex. (cB); Grambela, Illubabor, Werner and Sudre, 5.V.2001, 1 ex. (DEI); Jimma, Kaffa prov., G. de Rougemont VII.1971, 1 male (cR); Dorze Lodge, 2400 m, 06°10'56"N, 037°34'35"E, V. Major leg., 2 exx. (cB).

Kamerun Samml., Joko, Colin, 1 ex. (cJ).

Uganda, 1 ex. (NMPC); Uganda Central, Ch. Alluaud, I–II 1909, 1 ex. (NMPC); Victoria Nyanza, Arcipelago di Sesse, Bugala, E. Bayon, 1908, 2 exx. (MCSNG), 1 ex. (cB).

Congo, Kivu, Masisi, 1 ex. (IRSNB).

(Congo), Zaire, Umg. Lwiro, W. Banyw'ne, III.1985, 1 ex. (SMNS), 1 ex. (cB), 1 ex. (DEI).

Cited material (not examined). Ruwenzori: NW Beni (Urwald), I.1908 (but = *T. africanus* Bh.) (Bernhauer, 1912).

Congo, Hembe Bitale (Scheerpletz, 1956).

(Congo), Parc Nat. Albert-Rutshuru (Cameron, 1950).

Ruanda, terr. Nyanza, Gitarama, 1850 m (Tottenham, 1956).

Description. Body 18 mm long; length from the anterior margin of the head to the posterior margin of elytra: 9 mm. Head and pronotum black,

elytra yellowish, with scutellum and adjacent area infuscate, almost black; abdomen yellowish with the first two visible tergite almost completely brown black; first visible sternite at least partly black; antennae brown dark; legs brown black. Shiny, very robust and large. Head and pronotum with very fine micro-punctation. Head and pronotum and related punctation as in figure 492. Labrum as in figure 493. Elytra sub-quadrate, as long and wide as pronotum, with slightly rounded sides and less marked humeral angles. Surface with very spaced punctation, arranged in three series, one near the suture, one median and one lateral. Abdomen with transverse micro-striation and very fine and sparse punctation, arranged in some series, more dense on the sides. Tergite and sternite of the male genital segment as in figures 494, 495. Aedeagus elongated (Figs. 496, 497), 1.7 mm long, with dilated median lobe; parameres symmetrical; inner sac very narrow, tube-like, covered with little spinulae.

DISTRIBUTION. Eritrea, Ethiopia, Cameroon, Congo, Uganda (fig. 510).

5. ***Thyreocephalus secretus*** (Bernhauer, 1935)

Eulissus secretus, Bernhauer - 1935: 101; Herman, 2001a: 3629
Thyreocephalus secretus - Janak & Bordoni, 2015: 26

TYPE MATERIAL. The Field Museum of Natural History of Chicago preserves 1 specimen labelled "*Musée du Congo / Lulua: Kapanga*", "*XII.1932 / Overlaet*", "secretus *Brh. / typ*", "secretus / *Brnh. Typus /* Eulissus" (hand of Bernhauer), "Thyreocephalus secretus *(Bernh.), J. Janak det. 2006*". It is a male that was chosen as lectotype of the species. It bears the label "*Lectotypus* Eulissus secretus *Bh., Bordoni & Janak des. 2014*" and the determination label "Thyreocephalus secretus *(Bh.), Bordoni & Janak det. 2014*" (Janak & Bordoni, 2015).

EXAMINED MATERIAL. Congo, Lulua, Kapanga, F. G. Overlaet, XI.1932, 1 male, 1 female (MRAC, cJ); Lulua, Kapanga, F. G. Overlaet, XII.1932, 2 females (MRAC); Lulua, Kapanga, F.G. Overlaet, I.1933, 5 males, 2 females (MRAC); Lulua, Kapanga, F.G. Overlaet, II.1933, 5 males (cJ).

DESCRIPTION. Body 21.5 mm long; length from the anterior margin of the head to the posterior margin of elytra: 12 mm. Head, pronotum and scutellum black, elytra and abdomen reddish yellow, first 2 visible abdominal segments with median black spots; all sternites yellowish; antennae and legs brown dark. Shiny. Head and pronotum with micro-punctation. Head and pronotum and related punctation as in figure 498. Labrum as in figure 499. Elytra as long as pronotum, posteriad dilated and there wider than pronotum, with rounded humeral angles. Surface with wide, spaced punctation, arranged in three series, one near the suture, one median and one lateral. Tergite and sternite of the male genital segment as in figures 500, 501. Aedeagus ovoidal (Figs. 502, 503), elogated, 1.65 mm long, with sub-triangular, long median lobe, with rounded apex; parameres symmetrical; inner sac narrow and long, apparently devoid of scales.

DISTRIBUTION. Congo (Fig. 510).

6. ***Thyreocephalus brunneiventris*** (Tottenham, 1956) (Fig. 1682)

Eulissus brunneiventris - Tottenham, 1956: 252; Herman, 2001a: 3625
Thyreocephalus brunneiventris - Janak & Bordoni, 2015: 29

TYPE MATERIAL. The Musée de l'Afrique centrale of Tervuren preserves 1 specimen labelled "*Coll. Mus. Congo / Ruanda: Rubengera, / 1900 m, terr. Kibuye / P. Basilewsky 12. / II-53*", "Eulissus / brunneiventris / *Tottenham* [printed] / *TYPE*", "Thyreocephalus brunneiventris *(Tott.), J. Janak det. 2006*" (Janak & Bordoni, 2015).

EXAMINED MATERIAL. Ruanda, Cyangugu Pref., Umg. Nyakabuye, R. Mühle, 15–26.IV.1985, 1 female (MNB); Umg. Cyangugu, R. Mühle, 15–26.IV.1985, 1 ex. (MNB); Cyangugu Pref., Umg. Nyakabuyo, R. Mühle, 15–26.IV.1985, 1 ex. (MNB).

Congo, Kivu, Mulungu, Tshibinda, P.C. Lefèvre, XI.1951, 2 males, 1 female (MRAC, cJ).

DESCRIPTION. Body 23 mm long; length from the anterior margin of the head to the posterior margin of elytra: 12 mm. Head and pronotum black, elytra yellowish with black scutellum, abdomen yellowish with first two visible tergites

black with yellow paratergites; scape and legs brown dark, antennomeres lighter. Body large and massive. Labrum as in figure 505. Head and pronotum whit very fine and dense micro-punctation. Head and pronotum and related punctation as in figure 504. Elytra as long as pronotum, a little dilated posteriad and there as wide as pronotum, with rounded humeral angles. Surface with sparse and superficial punctation, arranged in three series, one near the suture, one median and one lateral. Abdomen with fine and dense, transverse micro-striation and fine, not sparse punctation. Tergite and sternite of the male genital segment as in figures 506, 507. Aedeagus 1.5 mm long (Figs. 508, 509); median lobe brusquely enlarged, with agled apex; inner sac narrow and short, covered with fine, sparse scales.

DISTRIBUTION. Rwanda, Congo (Fig. 510).

REMARKS. This species differs from *T. secretus* especially in the shape of apex of median lobe of the aedeagus; the black spots on first tergites seems to be quite variable, but the basal part of first visible tergite is generally completely black, only paratergites are yellow.

3. group c

The species of this group are characterized by transverse distance between interior ocular puncture and inner margin of eye distinctly larger than transverse distance between this puncture and frontal groove.

KEY TO THE SUB-GROUP

1. Head with two separate postocular setiferous punctures; abdomen brown more or less light (apart *T. mirabilis* n. sp., black but characterized by lateral and posterior margins of elytra yellow).....1. *T. mocquerysi* sub-group
-. Head with two contiguous postocular setiferous punctures; abdomen black with genital segment or last two segments reddish.....2. *T. nairobiensis* sub-group
-. Head with one postocular setiferous puncture; body reddish brown to brown.....3. *T. magnus* sub-group
-. Head without postocular setiferous punctures; body very large, brown; labum not rounded.....4. *T. giganteus* sub-group
-. Head with three postocular setiferous punctures, body almost flat, brown or black with more or less bluish elytra; head dilated.....5. *T. clypeatus* sub-group

1. *Thyreocephalus mocquerysi* sub-group

Discal setiferous punctures on head present, two separate postocular setiferous punctures, head not flattened, labrum lobate, body moderate, with not dilated head; colour variable.

KEY TO THE SPECIES

1. Body smaller, slender, 10–13 mm long, with not dilated head.....2
-. Body larger,14–20 mm long, with more dilated head.....8

2. Head with fine punctation only, focused on the sides.....3
-. Head with larger and dense punctation on most of the surface.....4

3. Body 11–13 mm long, brown amaranth. Labrum as in figure 512. Aedeagus as in figure 515. Fernando Poo Isl.....1. *T. atlanticus*
-. Body 13 mm long, reddish brown with lighter elytra. Labrum as in figure 517. Aedeagus as in figure 520. Gabon.....2. *T. strinatii*

4. Body smaller, 10–11 mm long; head black, pronotum brown amaranth, elytra yellowish red, abdomen reddish brown. Labrum as in figure 522. Aedeagus as in figure 525. Gabon, Fernando Poo Isl., Cameroon.....3. *T. mokaensis*
-. Body larger, 11.5–12.5 mm long.....5
5. Head and pronotum black.....6
-. Head black; pronotum, elytra and abdomen reddish brown….....7
-. Head and pronotum reddish brown, elytra and abdomen brown light; labrum as in figure 527. Male unknown. Cameroon....4. *T. pallidus* n. sp.

6. Elytra yellowish with brown scutellum, abdomen brown light. Labrum as in figure 529. Aedeagus as in figure 532. Ghana, Congo.....5. *T. burgeoni*

-. Elytra reddish more or less infuscate; abdomen reddish brown with posterior half of 6° visible segment and genital segment red; body 11.5 mm long; labrum as in figure 535. Aedeagus as in figure 538. Uganda.....6. *T. ugandensis* n. sp.
-. Elytra brown more or less dark with humeral angles, lateral and posterior margins yellow; body 11.5 mm long; labrum as in figure 540. Aedeagus as in figure 543. Sierra Leone.....7. *T. mirabilis* n. sp.

7. Body 11.5 mm long, more robust, head more broad, pronotum longer and more dilated forward. Folded surface of elytra not yellowish. Labrum as in figure 545. Aedeagus as in figure 548. Cameroon.....8. *T. camerunensis*
-. Body 11.5 mm long, less robust, head less broad, pronotum shorter and less dilated forward. Folded surface of elytra yellowish. Labrum as in figure 551. Aedeagus as in figure 554. Ghana, Ivory Coast.....9. *T. marginipennis*
-. Body 12.5 mm long; labrum as in figure 567. Aedeagus as in figure 570. Congo.....10. *T. konduensis* n. sp.

8. Head with finer punctation focused on the median surface.....9
-. Head with more or less larger and dense punctation almost on all the surface.....10

9. Head with micro-punctation; head black, pronotum, elytra and abdomen reddish brown more or less dark; head with fine punctation on median and lateral surface. Body 15 mm long. Labrum as in figure 557. Aedeagus as in figure 560. Gabon, Congo.....11. *T. mocquerysi*
-. Head and pronotum with micro-punctation; body black with bluish elytra; labrum as in figure 562. Aedeagus as in figure 565. Guinea.....12. *T. lolaensis* n. sp.
10. Body 14-16 mm long, reddish brown dark, with black head and lighter abdomen. Head more dilated. Labrum as in figure 572. Aedeagus as in figure 575. Gabon, Equatorial Guinea.....13. *T. gabonensis*
-. Body 20 mm long, reddish brown. Head scarcely dilated. Labrum as in figure 577. Aedeagus as in figure 580. From Cameroon to South Africa.....14. *T. semipiceus*

1. ***Thyreocephalus atlanticus*** (Bernhauer, 1915)

Eulissus atlanticus - Bernhauer, 1915: 298; Scheerpeltz, 1933: 1317; Herman, 2001a: 3625
Thyreocephalus atlanticus - Janak & Bordoni, 2015: 84

TYPE MATERIAL. The Museo civico di Storia naturale of Genova preserves 13 specimens; one of these is labelled "*Is. Fernando Poo / Basilé / VIII.IX.1901 L. Fea*", "*Syntypus* / Eulissus / atlanticus / *Bernhauer 1915*" (on orange label). This specimen, male, was chosed as lectotype of the species. It is labelled "*Lectotypus* Eulissus atlanticus *Bh., Bordoni des. 2006*". Six specimens are labelled "*Bahia de S. Carlos / 0-400 m / XII.1901 L. Fea*", "*Typus*" (printed on label with red edge), "atlanticus / *Bernh.*", "Eulissus / atlanticus / *Brh. n. sp*" (hand of Bernhauer) and six are labelled "*Basilé / 400-600 m / VIII-IX.1901 L. Fea*", "Syntypus", in addition to the previous labels. These 12 specimens were chosed as paralectotypes of the species. These specimens are labelled "*Paralectotypus* Eulissus atlanticus *Bh., Bordoni des. 2006*". All are also labelled "Thyreocephalus atlanticus *(Bh.), Bordoni det. 2006*".

The Field Museum of Natural History of Chicago preserves 2 specimens labelled "atlanticus *Bernh. Cotypus*" (hand of Bernhauer), one also labelled "*Is Fernando Poo / Bahia de S. Carlos / XII.1901 / 200-300 m L. Fea*", "*Museo civ. Genova*" and the other also labelled "*Is. Fermando Poo / Basilé / 400-600 m / IX.1901 L. Fea*", "*Museo civ. Genova*" (on orange label). These specimens were chosed as paralectotypes of the species. These specimens are labelled "*Paralectotypus* Eulissus atlanticus *Bh., Bordoni des. 2006*" and "Thyreocephalus atlanticus *(Bh.), Bordoni det. 2006*".

EXAMINED MATERIAL. Congo, Yangambi, J. Decelle, II.1952, 1 ex. (MRAC); Yangambi (Stanleyville), J. Decelle, V.1960, 1 ex. (MRAC); Stan., Yangambi, J. Decelle, II.1953, 1 ex. (cJ); Uele, J. Decelle, 16 exx. (MRAC).

DESCRIPTION. Body 11–13mm long; length from the anterior margin of the head to the posterior margin of elytra: 5–6 mm. Brown amaranth, shiny. Head and pronotum with micro-punctation. Head of variable shape, sometimes very dilated posteriad. Eyes large and flat. Head and pronotum and related

punctation as in figure 511. Labrum as in figure 512. Elytra a little longer and wider than pronotum, posteriad dilated, with marked humeral angles. Surface with punctation arranged in three series, one near the suture, one median and one lateral. Abdomen with superficial transverse micro-striation and fine, not sparse punctation, arranged in some series. Tergite and sternite of the male genital segment as in figures 513, 514. Aedeagus large (Fig. 515), 2.35 mm long, with sub-triangular median lobe; parameres symmetrical; inner sac ribbon-like, curled up on itself, long and very narrow, covered with sparse little scales.

Distribution. Fernando Poo Isl., Congo (Fig. 549).

2. ***Thyreocephallus strinatii*** (Scheerpletz, 1958)

Eulissus strinatii - Scheerpeltz, 1958: 826; Scheerpeltz, 1971: 169; Herman, 2001a: 3629
Thyreocephalus strinatii - Janak & Bordoni, 2015: 86

Type material. The Naturhistorisches Museum of Wien preserves 1 specimen labelled "*Typus* / Eulissus / strinatii / *O. Scheerpeltz*", "*ex. Coll. Scheerpeltz*", "*Gabon. Grotte / de Pahou. 6.8.57 / leg. V. Aellen, P. Strinati*", "*située a 2 km / au ESE de / Latoursville*". It is a male.

Examined Material. Cameroun, 1 ex. (IRSNB) (Cameroon), Joko, Colin, 1 ex. (cB).

Congo, Libenge, R. Cremer, M. Neuman, 17.I.1948, 1 ex. (cJ).

Description. Body 13 mm long; length from the anterior margin of the head to the posterior margin of elytra: 6.8 mm. Reddish brown, with elytra lighter. Shiny. Head and pronotum with micropunctation. Head and pronotum and related punctation as in figure 516. Labrum as in figure 517. Lateral margins of head flat, covered by little punctures. Elytra sub-rectangular, as long as pronotum and wider than it, with largely rounded humeral angles. Surface with fine punctation, arranged in four series, two near the suture, one median and one lateral. Abdomen with fine and dense, transverse micro-striation and fine, not sparse punctation, arranged in some series on each segment. Tergite and sternite of the male genital segment as in figures 518, 519. Aedeagus ovoidal (Fig. 520), proportionally large, 2.3 mm long, with sub-triangular median lobe; parameres symmetrical; inner sac wide and long, wrapped on istself, covered with fine scales.

Distribution. Gabon, Cameroon, Congo (fig. 549).

3. ***Thyreocephalus mokaensis*** (Bernhauer, 1915)

Eulissus mokaensis - Bernhauer, 1915: 299; Scheerpletz, 1933: 1317; Herman, 2001a: 3628
Thyreocephalus mokaensis - Janak & Bordoni, 2015: 80
Eulissus flaviventris - Bernhauer, 1939: 259; Herman, 2001a: 3627; Janak & Bordoni, 2015: 80 (syn. of *T. mokaensis*)
Thyreocephalus semirufus - Coiffait, 1968: 155; Herman, 2001a: 3767; Janak & Bordoni, 2015: 80 (syn. of *T. mokaensis*)

Type material. In the Museo civico di Storia naturale of Genova are preserved 8 specimens labelled "*Ins. Fernando Poo / Moka / II.1902 L. Fea, 1300-1500 m*", "*Syntypus* / Eulissus/ mokaensis / *Bernhauer*"; one of these also labelled "*Typus*", "mokaensis / *Bernh.*", "mokaensis / *Brh. n. sp*.". This specimen, male, was chosed as lectotype of the species. It is labelled "*Lectotypus* Eulissus mokaensis *Bh., Bordoni des. 2006*", and the others were chosed as paralectotypes. These are labelled "*Paralectotypus* Eulissus mokaensis *Bh., Bordoni des. 2006*". All are identificated as "Thyreocephalus mokaensis *(Bh.). Bordoni det. 2006*".

The Field Museum of Natural History of Chicago preserves 2 female specimens labelled "*Is. Fernando Poo / Moka / II.1902, 1300-1500 m, L. Fea*", "Eulissus mokaensis *Brh., Cotypus*". These were chosed also as paralectotypes of the species and labelled "*Paralectotypus* Eulissus mokaensis *Bh., Janak & Bordoni des. 2014*".

The Field Museum of Natural History of Chicago preserves 1 specimen labelled "*Umg. Kamerunberg / Ekona, 5-11.10.1935*", "*Dr. E. Zumpt leg. / Eing. Nr. 7, 1936*", "flaviventris*/ Brnh. Type / unic.* Eulissus". It is a female.

Five specimens are preserved in the Muséum national d'Histoire naturelle, Paris. One, male, with

the card "*Belinga 29 / 23.1.63 / H. Coiffait*", "*Mission biologique / au Gabon/ P. P. Grassé Directeur*", "*Holotype*" (printed on red card), "Thyreocephalus / semirufus *Coiff. / H. Coiffait 1967*"; the other, 3 males and 1 female, are labelled "*Paratype*" (printed on red card).

All these specimens are labelled also "Thyreocephalus mokaensis *(Bh.), Janak & Bordoni det, 2014*".

EXAMINED MATERIAL. Fernando Poo Is., Basilé, 400-600 m, L. Fea, VIII–IX.1901, 1 ex. (cB).

DESCRIPTION. Body 10-11 mm long; length from the anterior margin of the head to the posterior margin of elytra: 4.8-5.8 mm. Head black, pronotum brown amaranth, elytra red yellowish, abdomen reddish brown, antennae brown dark; legs brown light. Body shiny. Head and pronotum with micropunctation. Head and pronotum and related punctation as in figure 521. Labrum as in figure 522. Elytra narrow, dilated posteriad, longer and wider than pronotum, with less marked humeral angles. Surface with fine and sparse punctation, arranged in three series, one near the suture, one median and one lateral. Abdomen with fine, transverse microstriation and fine, deep, not sparse punctation. Tergite and sternite of the male genital segment as in figures 523, 524. Aedeagus ovoidal (Fig. 525), 1.95 mm long, with sub-triangular median lobe; parameres symmetrical; inner sac very narrow and long, wrapped on itself some times, covered with little scales.

DISTRIBUTION. Gabon, Cameroon, Fernando Poo Isl. (Fig. 549).

4. ***Thyreocephalus pallidus*** n. sp.

EXAMINED MATERIAL. Holotype female: SO Kamerun, Lolodorf, L. Conradt, 1895 (DEI).

DESCRIPTION OF HOLOTYPE. Female. Body 12 mm long; length from the anterior margin of the head to the posterior margin of elytra: 6 mm. Reddish brown light, with elytra and abdomen lighter. Shiny, slender. Head and pronotum with micropunctation. Characterized by sub-rectangular and narrow head, with sub-parallel sides, with large punctation. Head and pronotum and related punctation as in figure 526. Labrum as in figure 527. Elytra sub-rectangular, narrow, a little shorter than head, slightly dilated posteriad and there a little wider than head, with sub-rectilinear sides and strictly rounded humeral angles. Surface with very fine and sparse punctation, arranged in four series, one near the suture, two median and one lateral. Abdomen with fine and dense, transverse microstriation and fine, not sparse punctation, arranged in 5, 6 series on each segment, evident in particular on the sides.

DISTRIBUTION. Cameroon (Fig. 549).

REMARKS. Male unknown.

5. ***Thyreocephalus burgeoni*** (Bernhauer, 1929)

Eulissus burgeoni - Bernhauer, 1929: 122; Scheerpeltz, 1933: 1317; Herman, 001a: 3626
Thyreocephalus burgeoni - Janak & Bordoni, 2015: 82

TYPE MATERIAL. In the recent revision of *Thyreocephalus* (Janak & Bordoni, 2015) was designated as lectotype a specimen in MRAC. I am aware of a specimen in FMNH labelled "*Syntype"*, "*Haute Uele / (Kubango) / L. Burgeon*", "*Typus*", "*FMNHINS/ 2819282/ Field Museum*". The specimen in MRAC have not these labels. There is thus no good evidence that it should be considered as syntype, and thus Art. 74.2 can be applied and a new lectotype can be designated. The specimen in FMNH bears the labels "*Lectotypus* Eulissus burgeoni *Bh., Bordoni des. 2015*" and "Thyreocephalus burgeoni *(Bh.), Bordoni det. 2015*".

EXAMINED MATERIAL. Ghana, Brong-Ahafo reg., Kitampo cataract, Fullner falls, 200 m, 8.02N, 1.42W, S. Endrödy-Younga, 15.VIII.1965, 1 male (MTM).

Congo, Kibali-Ituri, t. Epulu, Mombasa-Monhbere, 900 m, N. Leleup, II.1954, 4 exx. (MRAC, cJ).

Congo, Haut Uele, Yebo, L. Burgeon, I.1926, 1 female (MRAC).

Kenya, Western Prov., Kakamega For. Res., M. Bendnarëk, 5–8.XII.2000, 2 males, 1 female (cJ).

DESCRIPTION. Body 11.5 mm long; length from the anterior margin of the head to the posterior margin of elytra: 5.5 mm. Head and pronotum black, elytra yellowish with brown scutellum, abdomen,

antennae and legs brown light. Head very shiny, with sparse micro-punctation. Pronotum with dense micro-punctation. Head and pronotum and related punctation as in figure 528. Labrum as in figure 529. Elytra as long as pronotum, posteriad a little dilated and there wide as pronotum, with rounded humeral angles. Surface with fine punctation, arranged in three series, one near the suture, one median and one lateral; some punctures with long and light setae. Abdomen shiny, with fine, transverse micro-striation and fine but evident, sparse punctation, arranged in some series. Tergite and sternite of the male genital segment as in figures 530, 531. Aedeagus little (Fig. 532), 0.9 mm long; median lobe shaped spearhead; inner sac covered with fine scales. Female genital segment as in figure 533.

DISTRIBUTION. Ghana, Congo (Fig. 549).

REMARKS. In the description the type locality is "*Haut-Uele: Kubango, L. Burgeon;* uelensis *Bh. in litt.*" (Bernhauer, 1929).

6. ***Thyreocephalus ugandensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Uganda, Fort Portal, U. Göllner, 16.II.1997 (MNB); paratype: Uganda, Kabarole, 29 km SE Fort Portal, MUBFS, Kibale Nat. Park, 1600 m, Schmidt, 26.VII–22.VIII.1999, 1 female (cA).

DESCRIPTION OF HOLOTYPE. Male. Length of body 10.4 mm; from anterior margin of head to posterior margin of elytra: 3.7 mm. Black with reddishs elytra, brown black abdomen; antennae and legs reddish brown. Pronotum with micro-punctation. Head (sub-rectangular in the paratype) and pronotum and related punctation as in figure 534. Labrum as in figure 535. Elytra narrow, not dilated posteriad, as long and wide as pronotum, with well rounded humeral angles. Surface with superficial, wide punctation, arranged in three series, one near the suture, one median and one lateral; some sparse puntures around these series. Abdomen with transverse micro-striation and fine, very sparse punctation on the sides. Tergite and sternite of the male genital segment as in figures 536, 537. Aedeagus 1,55 mm long (Fig. 538), sub-ovoidal, with narrow, sub-triangular median lobe; parameres robust; inner sac very narrow and short.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described. Length of body 10.4–11.5 mm; from anterior margin of head to posterior margin of elytra: 3.7–4.8 mm.

ETYMOLOGY. The specific epithet refers to Uganda.

DISTRIBUTION. The species in knowm only from Uganda (Fig. 549).

REMARKS. The type specimen have some labels: "*V. Ferrant, Museum Luxenbourg donavit*", "*ex. coll. Scheerpeltz*"; the symbol ♀ but is a male; the label "Thyreocephalus brunneiventris, *J. Janak det. 2006*" that I think mistake of tagging and not error of determination.

7. ***Thyreocephalus mirabilis*** n. sp.

EXAMINED MATERIAL. Holotype male: Sierra Leone, Eastern Prov., Gola North Forest Reserve, near Lalehum, W. Rossi, 6.I.1989 (cB); paratypes: same data, 2 females (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 11.5 mm; from anterior margin of head to posterior margin of elytra: 6.5 mm. Body robust, black; elytra and abdomen brown; humeral angles, lateral and posterior margins of elytra yellow. Antennae and legs brownish black; tarsi reddish. Head sub-rectangular, scarcely narrowed anteriorly, with sub-rectilinear sides and narrowly rounded posterior angles. Eyes of medium size, scarcely protruberent. Head and pronotum and related punctation as in figure 539. Labrum as in figure 540. Surface of head covered with very dense, small but deep punctation, and some large punctures bearing pale setae: one at the end of the ocular grooves, one near the posterior margin of the eyes, one median and some near the posterior margin of the head. Pronotum longer than head, anteriorly dilated but narrower than head, scarcely sinuate sides and narrowly rounded anterior angles. Surface with micro-punctation and with a large puncture near the anterior angles. Elytra narrow, scarcely dilated posteriad, longer than pronotum, approximately the same width, with slightly marked humeral angles. Surface with very fine and sparse punctation arranged in one

juxtasutural, one median and one lateral series, with pale setae. Abdomen with very fine and dense transverse micro-striation and fine and sparse punctation. Tergite and sternite of the male genital segment as in figures 541, 542. Aedeagus large (Fig. 543), 1.5 mm long, narrow, with symmetrical parameres; inner sac not visible.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is derived from the Latin *mirabilis -e* (admirable).

DISTRIBUTION. The species is only known from the type locality in Sierra Leone.

8. ***Thyreocephalus camerunensis*** Janak et Bordoni, 2015 (Figs. 1702, 1703)

Thyreocephalus camerunensis, Janak & Bordoni, 2015: 86

TYPE MATERIAL. The holotype male, labelled "*SO Camerun, Lolodorf, L. Conradt 1895*" is preserved in DEI.

DESCRIPTION. Body 12.5 mm long; length from the anterior margin of the head to the posterior margin of elytra: 6 mm. Head and pronotum shiny, with micro-punctation. Head black; pronotum, elytra and abdomen reddish brown; antennae brown, legs reddish brown. Head and pronotum and related punctation as in figure 544. Labrum as in figure 545. Elytra sub-rectangular, with sub-rectilinear and sub-parallel sides, shorter and slightly wider than pronotum, with rounded humeral angles. Surface with well visible, fine, spaced punctation, arranged in three series, one near the suture, one median and one lateral. Abdomen with fine and very dense, transverse micro-striation and fine and deep punctation, spaced in some series. Tergite and sternite of the male genital segment as in figures 546, 547. Aedeagus 1.7 mm long (Fig. 548), ovoid, with narrow, sub-triangular median lobe; parameres long; inner sac very narrow, sub-rectilinear.

DISTRIBUTION. The species is only known from Cameroon (Fig. 549).

9. ***Thyreocephalus marginipennis*** Janak et Bordoni, 2015 (Figs. 1704, 1705)

Thyreocephalus marginipennis, Janak & Bordoni, 2015: 77.

TYPE MATERIAL. The Holotype male labelled "*Ghana, Ashanti reg., Mampong scarpe, 600 m, 7.00N, 1.22W, S. Endrödy-Younga, 19.XII.1965*" is preserved in MTM. Paratypes: same data, 1 female in cB; Côte d'Ivoire, Lamé, Bingerville, P. Genty, 29.VIII.1968 , 1 female in MNHNP.

DESCRIPTION. Body 11.5 mm long; length from the anterior margin of the head to the posterior margin of elytra: 4.8 mm. Head black; pronotum, elytra and abdomen reddish brown very dark; folded surface of the elytra yellowish; antennae and legs brown. Pronotum with micro-punctation. Head and pronotum and related punctation as in figure 550. Head with fine punctation, a part the setiferous punctures. Labrum as in figure 551. Elytra as long and wide as pronotum, slightly dilated posteriad, with less marked humeral angles. Surface with very fine and spaced punctation, arranged in three series, one near the suture, one median and one lateral. Abdomen with fine and dense, transverse micro-striation and fine and sparse punctation on the sides. Tergite and sternite of the male genital segment as in figures 552, 553. Aedeagus 1.6 mm long (Fig. 554), ovoid, with narrow, sub-triangular median lobe; parameres short; inner sac semi-transparent, difficult to interpret.

DISTRIBUTION. The species is known from Ivory Coast and Ghana (Fig. 549).

BIONOMICS. One specimen was collected under bark.

10. ***Thyreocephalus konduensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kondué (Kasai), (Donateur 392), E. Luja, V.1911 (NMW).

DESCRIPTION OF HOLOTYPE. Male. Length of body 12.5 mm; from anterior margin of head to posterior margin of elytra: 5.5 mm. Black head, reddish elytra, dark scutellum, abdomen brown dark.

Body slender and narrow, shiny. Head and pronotum with micro-punctation. Head and pronotum and related punctation as in figure 566. Folded surface of the temples with the same punctation of the surface of the head. Labrum as in figure 567. Elytra sub-rectangular, with sub-rectilinear sides, a little longer and wider than pronotum, a little dilated posteriad, with largely rounded humeral angles. Surface with very fine and superficial punctation, arranged in four series, one near the suture, two median and one lateral. Abdomen with very fine and dense, transverse micro-striation and very fine and spaced punctation, arranged in few series. Tergite and sternite of the male genital segment as in figures 568, 569. Aedeagus 1.48 mm long (Fig. 570), sub-ovoidal, with short and sub-triangular median lobe; parameres narrow; inner sac narrow, folded on itself, covered by very sparse, small scales.

Etymology. The specific epithet referes to the type locality.

Distribution. The species in knowm only from the type locality, in Congo (Fig. 555).

Remarks. Female unknown.

11. ***Thyreocephalus mocquerysi*** (Fauvel, 1903)

Xantholinus mocquerysi - Fauvel, 1903: 239); Bernhauer & Schubert, 1914: 305

Thyreocephalus mocquerysi - Coiffait, 1968: 155; Herman, 2001a: 3765; Janak & Bordoni, 2015: 89

Eulissus milliaui - Bernhauer, 1932: 144; Scheerpeltz, 1933: 1317; Herman, 2001a: 3628; Janak & Bordoni, 2015: 89 (syn. of *T. mocquerysi*)

Type material. The Institut royal des Sciences naturelles of Bruxelles preserves 5 specimens; three are labelled "*Libreville / Gabon*", "mocquerysi", "*Ex-Typis*" (red print), one, male, with the label "*Lectotypus* Xantholinus mocquerysi F*vl., J. Janak des. 1991*"; the other, male and female, with the label "*Paralectotypus* Xantholinus mocquerysi *Fvl., J. Janak des. 1991*"; the fourth, male, is labelled "*Loanda/ Gabon*" and "*Paralectotypus* Xantholinus mocquerysi *Fvl., J. Janak des. 1991*"; the fifth, female, is labelled "*Cameroun*", "*Ex-Typis*" (red print) and represents different species (*Thyreocephalus strinatii*).

The Musée royal de l'Afrique centrale of Tervuren preserves 1 specimen female labelled "*Holotype*" (printed on orange label), "*Musée du Congo / Mongwalu (Kilo) / 19.X.1930 / Mme E. Milliau*", "*R. Det. / 1966 / T*" (printed), "Thyreocephalus / Milliaui / *Brnh. Typ.*", "Eulissus", "Thyreocephalus mocquerysi *(Fvl.), J. Janak det. 2006*".

Examined Material. Congo, Rutshuru, J. Ghesquière, III.1937, 1 ex. (MRAC); Rutshuru, J. Ghesquière, III.1938, 1 ex. (MRAC); Mongbwalu (Kilo), E. Milliau, V.1930, 1 ex. (MRAC); Rwankwi, J. V. Leroy, I.1944, 1 ex. (cJ); Ituri, terr. Bunia, Mont Hoyo, 1250 m, III–1952, N. Leleup, 1 ex. (cJ).

Cited material (not examined). Gabon, Belinga (Coiffait, 1968).

Description. Body 15 mm long; length from the anterior margin of the head to the posterior margin of elytra: 8 mm. Head black; pronotum, elytra, abdomen and legs reddish brown more or less dark, antennae brown dark. Folded surface of the temples covered by fine punctation. Pronotum with micro-punctation. Head and pronotum and related punctation as in figure 556. Labrum as in figure 557. Elytra as long as pronotum, posteriad dilated and there a little wider than pronotum, with rounded humeral angles. Surface with fine punctation, arranged in three series, one near the suture, one median and one lateral. Tergite and sternite of the male genital segment as in figures 558, 559. Aedeagus large (Fig. 560), 2.2 mm long; median lobe shaped spearhead; inner sac more or less wide, covered with fine scales.

Distribution. Gabon, Congo (Fig. 555).

Bionomics. One specimen was collected "*sous écorce*", and an other "*sur vielle souche* Erythrina".

Remarks. Coiffait (1968) have studied one of the specimens from Libreville and the specimen from Cameroon that must be attributed to *T. strinatii*. In the IRSNB is preserved also one female with the label "*Pulu Bunzi*" and the determination "Thyreocephalus mocquerysi *Fauv. var.*".

12. ***Thyreocephalus lolaensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Guinea, Lola, coll. L. Levasseur (MNHNP).

DESCRIPTION OF HOLOTYPE. Male. Length of body 16.5 mm; from anterior margin of head to posterior margin of elytra: 9 mm. Brown black shiny, elytra with evidet bluish reflexes; abdomen, antennae and leg brown. Body flat. Head and pronotum with very fine micro-punctation. Head and pronotum and related punctation as in figure 561. Labrum as in figure 562. Pronotum with marked medio-lateral concavity. Scutellum large, with transverse micro-striation and some punctures. Elytra a little longer and clearly wider than pronotum, posteriad dilated, with marked humeral angles. Surface shiny, with large, evident, not sparse punctation, arranged in three series, one near the suture, one median and one lateral; the median series oblique. Abdomen with fine and dense, transverse micro-striation and fine, very sparse punctation, arranged in few spaced series. Tergite and sternite of the male genital segment as in figures 563, 564. Aedeagus 1.6 mm long (Fig. 565), sub-spherical but narrow before the median lobe that have rouded sides; parameres of characteristic shape; inner sac narrow, covered with fine and sparse scales.

ETYMOLOGY. The specific epithet referes to the type locality.

DISTRIBUTION. The species in knowm only from the type locality, in Guinea (Fig. 555).

REMARKS. Female unknown. The specimen have the label "*Holotype,* Thyreocephalus lolaensis *n. sp., L. Levasseur det. 68, in litt.*". The species differ from the flat taxa, with dilated head and bluish elytra, by the punctation of the head and by the shape of pronotum and aedeagus.

13. ***Thyreocephalus gabonensis*** Coiffait, 1968

Thyreocephalus gabonensis - Coiffait, 1968: 154; Herman, 2001a: 3763; Janak & Bordoni, 2015: 76

TYPE MATERIAL. The Muséum national d'Histoire naturelles of Paris preserves 5 specimens. One of these is labelled "*Belinga 93 / 12.2.63/ H. Coiffait*", "*Mission Mission biologique / au Gabon / P. P. Grassé Directeur*", "*Holotype*" (printed on red label), "Thyreocephalus gabonensis *Coiffait 1967*"; the other are labelled "*Belinga 52 / 27.2.63 / H. Coiffait*", "*Paratype*" (printed on red label). The first is a male, the other are females.

EXAMINED MATERIAL. (Equatorial Guinea), Guinea Espaňola, Lago Atonguain, J. Mateu, 2 exx. (MRAC, cJ).

DESCRIPTION. Body 14–16 mm long; length from the anterior margin of the head to the posterior margin of elytra: 7–8 mm. Reddish brown dark with black head and lighter abdomen; reddish genital segment, antennae brown, legs reddish brown. Head large and wide, with rounded sides and largely rounded posterior angles. Eyes small and flat. Surface shiny, with fine, deep, dense punctation, apart from clypeus and posterior margin. Head and pronotum and related punctation as in figure 571. Labrum as in figure 572. Pronotum shorter and narrower than head, with rounded anterior angles and sinuate sides. Surface shiny, with micro-punctation. Elytra narrow, narrower than pronotum and as long as it, with marked humeral angles. Surface shiny, with punctation arranged in three series, one near the suture, one median and one lateral. Abdomen with transverse micro-striation and fine and sparse punctation. Tergite and sternite of the male genital segment as in figures 573, 574. Aedeagus proportionally small (Fig. 575), 1.9 mm long, with triangular median lobe; parameres symmetrical; inner sac ribbon-like, very narrow and short, covered with little scales.

DISTRIBUTION. Gabon, Equatorial Guinea (Fig. 555).

14. ***Thyreocephalus semipiceus*** Bernhauer, 1937 (Figs. 1706, 1707)

Thyreocephalus semipiceus - Bernhauer, 1937: 610; Levasseur, 1968: 52; Herman, 2001a: 3767; Janak, 2010: 142; Janak & Bordoni, 2015: 73

TYPE MATERIAL. The Field Museum of Natural History of Chicago preserves 1 specimen labelled "*D. O. Africa / Daressalam / leg. Methner*", "semi-

piceus / *Brh. Typ. un.*", "semipiceus / *Brnh. Typus / unic.* Thyreocephalus". It is a female.

Examined Material. Ethiopia, Kaffa Prov., near Bebka, 1300 m, A. Kudrna jr., 8.IV.2008, 1 male (cB); near Tepi, Wernewr and Sudre, 6.V.2002, 1 female (DEI).

Tanzania, near Mikumi, Morogoro Prov., Werner and Lizler, 9.XII.1999, 1 ex. (MNB); Muheza, Lizler, IV.1996, 2 exx. (MNB); 30 km SW Morogoro, Lizler, IV.1998, 1 ex. (cB); Same Park, Kilimanjaro Prov., 1000 m, Werner, I.1990, 1 ex. (DEI), 1 ex. (cB), 1 ex. (cJ); Uluguru Mts, Werner, IV.1991, 2 exx. (DEI), 1 ex. (cB); Pangani, U. Poggensee, 16.VII.1996, 1 female (MNB).

Kenya, Bura, Taita Region, Werner, I.1991, 2 exx. (DEI), 1 ex. (cB); Sagala Hills, Taita, Werner, I.1993, 1 ex. (DEI), 1 ex. (cB); Mtito Andej, 900 m, Tsavo Park, Werner, I.1990, 2 exx. (DEI); Tsavo Nat. Park, Umg. Voi, 550 m, A. Puchner, 19.IV.2006, 1 ex. (NMW); Sosoma, 202 km E Thika, Snizek, 26.IV.2008, 2 exx. (cB); Nguni, N Ngomeni, Snizek, 27.IV.2008, 1 ex. (cB).

Mocambique, Parc Nat. Gorongosa, Werner & Lizler, 17–18.XII.2003, 3 exx. (NMW), 2 exx. (cB); Gorongosa Nat. Park, A. Dorchin, 25-26.XII.2004, 2 females (MNB), 1 female (cB); Manica prov., 50 km S Inohope, A. Kudrna jr., 23–27.XII.2003, 1 female (NMW), 1 ex. (cB).

Zimbabwe, Kyle Recr. Park at Lake Mutiriwki, 20.13S, 31.00E, M. Uhlig, 1–5.XII.1993, 1 ex. (MNB).

South Africa, Tvl (Transvaal), Barberton, 25.48 S, 31.03 E, C. G. Moolman, III.1979, 1 ex. (SANC); Tvl (Transvaal), Mogol Nat. Reserve, 23.58 S, 27.45 E, E. v. der Linde, 21.XII.1987, 1 ex. (SANC); Tvl (Transvaal), Klipvoordam Res., 25.08 S, 27.48 E, R. Oberprieler, 27.X.1981, 1 ex. (SANC); Natal, Mseleni Mission, W of Lake Sibayi, 27 20 S, 32 34 E, at light in night, P. Atkinson, I. 1986, 1 ex. (SANC).

Cited material. Congo, Katunda, 950 m; Vitshumbi, S Lac Eduard, 925 m (Cameron, 1950); Cameroun, Joko, 1 female (MTM); Kenya, Mtito Andej, 900 m, Tsavo Park Werner I.1990, 1 ex. (DEI); Kenya: Mtito Andej, Tsavo Park, Werner, I.1990, 3 females (DEI, cJ); Tanzania NE, Handeni, Makinda env., M. Snizek, 14.III.2002, 1 male (cJ); South Africa, LisbonCitrusEstate, Clanor, Transvaal, R. Toms, 27.XI.1981, 1 male (TM); S. Afr., Kruger Nat. Pk, Skukuza res. camp, 25.00 S, 31.35 E, Endrödy-Younga, 19.II.1995, 1 female (TM); NW Zambia, North Western Pr., 40 km SW Kabompo, 1100 m, A. Kudrna Jr., 15–16.XII.2007, 1 male (cJ) (Janak, 2010).

Description. Body 20 mm long; length from the anterior margin of the head to the posterior margin of elytra: 11 mm. Reddish brown, with head and pronotum sometimes brown black. Head and pronotum with traces of micro-punctation. Head and pronotum and related punctation as in figure 576. Labrum as in figure 577. Elytra very longer and wider than pronotum, sub-rectangular, a little dilated posteriad, with slightly rounded sides and very marked humeral angles. Surface with fine, not sparse punctation, arranged in numerous series. Tergite and sternite of the male genital segment as in figures 578, 579. Aedeagus (Fig. 580) ovoid, elongate, 2 mm long, with sub-ovoid median lobe with very narrow apex; parameres symmetrical; inner sac narrow and long, apparently devoid of scales.

Distribution. The species is known from Cameroon, Kenya, Tanzania, Zambia, Zimbabwe, Mozambique, South Africa (Fig. 581).

2. *Thyreocephalus nairobiensis* sub-group

Body black with red elytra, at most last two abdominal segments and genital segment reddish. Head with interior ocular puncture situated close to inner margin of eye, ocular groove between interior ocular puncture and inner border of eye very short and shallow, temples with two moderately large, contiguous or close, but separated setiferous postocular punctures, labrum lobate.

KEY TO THE SPECIES

1. Abdomen black with only genital segment reddish; labrum as in figure 583. Aedeagus as in figure 586. Botswana.....1. *T. manfredi*
-. Abdomen black with last two abdominal segments red.....2

2. Head and pronotum with micro-punctation; body blackish brown to black with elytra and last two abdominal segments red. Head with larger

punctation under the eyes. Body about 15 mm long. Labrum as in figure 588. Aedeagus as in figure 591. Kenya, Tanzania.....2. *T. nairobiensis*

-. Head with finer punctation behind eyes; labrum as in figure 593. Aedeagus very large with short parameres (Fig. 596). South Africa.....3. *T. meridioafricanus*

1. ***Thyreocephalus manfredi*** Janak et Bordoni, 2015 (Figs. 1684, 1685)

Thyreocephalus manfredi - Janak & Bordoni, 2015: 39

TYPE MATERIAL. The holotype male, labelled "*Botswana, Kasane, Chobe Safari Lodge, Chobe banks, M. Uhlig, 12-13.III.1993*" is preserved in MNB. Paratype female from Tanzania, Mweka Moshi, Diotz, 1530 m, Funaioli, XI.1967–III.1968 in cB.

DESCRIPTION. Body 15 mm long; length from anterior margin of head to posterior margin of elytra: 7.5 mm. Reddish brown with elytra lighter, abdomen completely black. Shiny. Head and pronotum with micro-punctation. Head and pronotum and related punctation as in figure 582. Labrum as in figure 583. Elytra shorter and wider than pronotum, a little dilated posteriad, with rounded humeral angles. Surface with fine punctation, arranged in three series, one near the suture, one median and one lateral. Abdomen with evident transverse micro-striation and deep, rather dense punctation, arranged in more series on each segment. Tergite and sternite of the male genital segment as in figures 584, 585. Aedeagus ovoidal (Fig. 586), 1.33 mm long, with long median lobe, asymmetrical parameres and tube-like inner sac, covered with fine spinulae.

DISTRIBUTION. Tanzania, Botswana (Fig. 597).

2. ***Thyreocephalus nairobiensis*** (Fauvel, 1907) (Figs. 1686–1689)

Xantholinus nairobiensis - Fauvel, 1907: 34; Bernhauer & Schubert, 1914: 306; Herman, 2001a: 3814

Eulissus turneri - Bernhauer, 1937: 299; Herman, 2001a: 3629; Janak & Bordoni, 2015: 39 (syn. of *T. nairobiensis*)

Thyreocephalus nairobiensis - Janak & Bordoni, 2015: 39

TYPE MATERIAL. The Institut royal des Sciences naturelles of Bruxelles preserves 1 specimen labelled "nairobiensis / *Wa-Kikuyu et Masai*", "nairobiensis / *Fvl.*" (hand of Fauvel), "*Type*" (printed on pink label). It is a female.

The British Museum of Natural History of London preserves 1 specimen labelled "*Type*" (printed on round label with red edge), "*Naivasha / Kenya Colony / 193 5 / Allen Turner*", "Eulissus / Turneri *Brnh. / type*" (hand of Bernhauer). It is a female choosed as lectotype of the species. It have the label "*Lectotypus* Eulissus turneri *Bh., Bordoni des. 2011*", and the determination "Thyreocephalus nairobiensis *(Fvl.), Janak & Bordoni des. 2013*".

The Field Museum of Natural History of Chicago preserves 2 specimens labelled "*Naivasha/ Kenya Colony / 1935 / Allen Turner*", "*Ostafrika/ Brit. Mus. / Don. Marshall*", "turneri / *Brnh. Type /* Eulissus" (hand of Bernhauer). These are females choosed as paralectotypes of the species. These have the label "*Paralectotypus* Eulissus turneri *Bh., Janak & Bordoni des. 2011*". All have the determination "Thyreocephalus turneri *(Bh.), Janak & Bordoni det. 2011*".

EXAMINED MATERIAL. Tanzania bor., Arusha env., Smrz, 1–7.I.1995, 1 female (NMW); Katono, Arushe, Ju. 1905, 1 male (cJ).

DESCRIPTION. Body 15 mm long; length from the anterior margin of the head to the posterior margin of elytra: 7.5 mm. Reddish brown with elytra and last two visible abdominal segments lighter. Shiny. Head and pronotum with micro-punctation. Head and pronotum and related punctation as in figure 587. Labrum as in figure 588. Elytra shorter and wider than pronotum, a little dilated posteriad, with rounded humeral angles. Surface with fine punctation, arranged in three series, one near the suture, one median and one lateral. Abdomen with evident transverse micro-striation and deep, rather dense punctation, arranged in more series on each segment. Tergite and sternite of the male genital segment as in figures 589, 590. Aedeagus ovoidal (Fig. 591), 1.83 mm long, with long median lobe, asymmetrical

parameres and tube-like inner sac, covered with fine spinulae.

DISTRIBUTION. Kenya, Tanzania (Fig. 555).

REMARKS. In the description of *T. turneri* the species is cited from Nairobi. Naivasha is located in Rif Valley Province, northwest of Nairobi, on the shore of Lake Naivasha.

3. ***Thyreocephalus meridioafricanus*** Janak et Bordoni, 2015 (Figs. 1690, 1691)

Thyreocephalus meridioafricanus - Janak et Bordoni, 2015: 42

TYPE MATERIAL. The holotype male from [South Africa], Durban, Glenwood, 24.V.1980, is preserved in SANC; a paratype female in cJ.

DESCRIPTION. Body 15 mm long; length from anterior margin of head to posterior margin of elytra: 7.5 mm. Reddish brown with elytra lighter, abdomen completely black. Shiny. Head and pronotum with micro-punctation. Head and pronotum and related punctation as in figure 592. Labrum as in figure 593. Elytra shorter and wider than pronotum, a little dilated posteriad, with rounded humeral angles. Surface with fine punctation, arranged in three series, one near the suture, one median and one lateral. Abdomen with evident transverse micro-striation and deep, rather dense punctation, arranged in more series on each segment. Tergite and sternite of the male genital segment as in figures 594, 595. Aedeagus ovoidal (Fig. 596), 3.38 mm long, with long median lobe, asymmetrical parameres and tube-like inner sac, covered with fine spinulae.

DISTRIBUTION. Rwanda (fig. 597).

3. *Thyreocephalus magnus* sub-group

Discal setiferous punctures on head present, one setiferous postocular puncture, labrum lobate, large reddish brown or brown species (apart *T. minutus*).

KEY TO THE SPECIES

1. Body large (13-35 mm).....2
-. Body (fig. 598) very small (9 mm), red orange with darker head and elytra-abdomen yellowish. Male unknown. Labrum as in figure 599. Cameroon.....1. *T. minutus* n. sp.

2. Body 24-35 mm long, dark reddish brown with red elytra and abdomen. Labrum as in figure 602. Aedeagus as in figure 605. Eastern and central Africa.....1. *T. magnus*
-. Body 13-18.5 mm long, reddish brown with orange brown elytra. Labrum as in figure 607. Aedeagus as in figure 610. Eastern and central Africa.....2. *T. michaeli*

1. ***Thyreocephalus minutus*** n. sp.

EXAMINED MATERIAL. Holotype female: SO Kamerun, Lolodorf, L. Conrad, 1895 (DEI).

DESCRIPTION OF HOLOTYPE. Female. Length of body about 9 mm; from anterior margin of head to posterior margin of elytra: 3.9 mm. Body slender, red orange, with darker head and elytra-abdomen yellowish. Head and pronotum and related punctation as in figure 598. Labrum as in figure 599. Elytra sub-rectangular, slightly dilated posteriad, with less marked and not protruding humeral angles. Surface with superficial punctation, arranged in three series, one near the suture, one median in a sulcus and one lateral, composed by very sparse punctures. Abdomen with transverse micro-striation and evident, not fine pucturation, arranged in some regular series.

DISTRIBUTION. The species in known only from the type locality in Liberia (Fig. 600).

REMARKS. Male unknown.

2. ***Thyreocephalus magnus*** Janak, 2010 (Figs. 1694, 1695)

Thyreocephalus magnus - Janak, 2010: 135; Janak & Bordoni, 2015: 47

TYPE MATERIAL. The Hungarian Natural History Museum of Budapest preserves 1 specimen labelled "*W Africa / Guinea Coyah / 15.III-15.IV.1969 / leg K. Ferencz*", "*Holotype* / Thyreocephalus / magnus *sp. n. / J. Janak det. 2002*". It is a male. Paratypes: cfr. "CITED MATERIAL".

EXAMINED MATERIAL. Guinea, Kindia, S. Murzin, 22.VI.1983, 1 female (NMW).

Guinea, Kindia, S. Murzin, 1–22.VI.1983, 4 exx. (NMW), 2 exx. (cB).

(Burkina Faso), Ober Volta, Boba Dinlasso (= Bobo-Dioulasso), 11.11N, 4.18W, Politzar, XII.1985, 1 ex. (MNB).

Ivory Coast, Comoe, P. Moretto, XI.2001, 1 ex. (cB); Comoe, P. Moretto, IV.2002, 2 males, 2 females (cB).

Benin, E Kandi, 7 km E Bensekou, A. Kudrna 23–24.VII.2001, 1 male, 1 female (cB); 11 km S Kerou, Dept. du L'Atakoa, F. and L. Kistner, 23.VI.2001, 5 exx. (SMNS), 3 exx. (cB).

Sierra Leone, Northern Prov., Bumbuna, W. Rossi, 6.IV.1996, 1 male, 1 female (cB); Freetown, L. Levasseur coll., 1 female (MNHNP); environ de Poli, Mango, 24.IV.1974, 1 female (MNHNP).

Nigeria, Gashaka Gumti NP, 560m, Kwano, 07°20´N;11° 35´E, P. Kremitovský, 25.IV–3.V.2011, 2 males, 4 females (cJ, cK).

(Cameroon), Vina Djivorké (Nyassae), leg. ?, 20.IV.1974, 1 female (cB).

CITED MATERIAL. Benin, Village Akongbere near Save, A. Kudrna Jr., 19.IV–26.IV.2000, 1 ex. (cJ); Benin, Bembereke, 2 km W of Gando, A. Kudrna Jr., 2–3.VII.2001, 1 male (cJ); Burkina Faso, Ober Volta Bobo Dioulasso, H. Politzar, X.1983, 1 female (NMW); Haute-Volta, Bobo-Dioulasso, 11.12N, 4.18W, 5 males, 2 females (MRAC, cJ); Cameroun, Joko, Kolin, 1 female (MNB); Central African Republic, Bambari, G. Pierrard, III.1964, 1 male, 1 female (MRAC); Guinea, same data as holotype, 2 males, 2 females (MTM), cJ); Région Kindia, Mt. Gangan 750 m Exped. Mus. G. Frey Franz. Guinea 1951, Bechyne, 3.V.51 (Typus *Thyreocephalus freyi* O. Scheerpeltz), 1 male (indicated as female !) (NMW); Région Kindia, Mt. Gangan 500 m, Exped. Mus. G. Frey Franz., Guinea 1951, Bechyne, 6.V.51 (cotypus *Thyreocephalus freyi* O. Scheerpeltz), 1 female (NMW); Guinea Coyah, K. Ferencz, IV.1967, 1 male (MTM); Nigeria, Kaduna, Politzar, 10–17.V.1971, 1 male (cJ); Nigeria, Kaduna, R. Frieser, IX.1971, 2 females (MRAC); Tchad, Mondou, Bebedjia, G. Ruella, 21.I.1978, 1 male (MRAC) (all paratypes) (Janak, 2010).

DESCRIPTION. Body 24–35 mm long; length from the anterior margin of the head to the posterior margin of elytra: 14.5–19.5 mm. Dark reddish-brown or brown, elytra and abdomen red, antennae brownish with apical half of antennal segment 11 reddish-brown. Shiny, very robust and long. Head and pronotum with micro-punctation. Head and pronotum and related punctation as in figure 601. Labrum as in figure 602. Elytra longer and wider than pronotum, a little dilated posteriad, with very marked humeral angles. Surface with fine but well visible punctation, arranged in numerous, sometimes irregular, series. Abdomen with extremely fine and dense, transverse micro-striation and fine, not sparse punctation, arranged in numerous series on each segment. Tergite and sternite of the male genital segment as in figures 603, 604. Aedeagus very large (Fig. 605), very narrow and long, 3.1–3.3 mm long, with narrow, acute median lobe; parameres symmetrical; inner sac very narrow and long, with few, little scales.

DISTRIBUTION. Guinea, Burkina Faso, Ivory Coast, Benin, Sierra Leone, Nigeria, Tchad, Cameroon, Central African Republic, Congo (Fig. 600).

3. ***Thyreocephalus michaeli*** Janak, 2010 (Figs. 1696, 1697)

Thyreocephalus michaeli - Janak, 2010: 138; Janak & Bordoni, 2015: 49

TYPE MATERIAL. The Musée royal de l'Afrique centrale of Tervuren preserves 1 specimen labelled "*Ivory Coast / à la lampe U. V. / Côte d'Ivoire: Bingerville, 18.III.1962, J. Decelle*". It is a male. Paratypes: cf. "CITED MATERIAL".

EXAMINED MATERIAL. Guinea, Foret Seringbara, Mts Nimba, 600 m, C. Vanderberg, 6.X.2008, 2 exx. (cST), 1 ex. (cB); N Zérékoré, S. H. Olsen, 1.V.1953, 1 ex. (ZMUC).

Liberia, Peter Town, Montserrado county, F. Krell, 26.III.1988, 2 exx. (SMNS), 1 ex. (cB); Nimba Prov., Saclepea, F. Krell, 26–27.III.1988, 1 ex. (SMNS); Bong Town, F. Krell, 21.III.1988, 1 ex. (cB).

Ghana, Ashanti region, Kwadaso, 259 m, 6.55N, 1.39W, S. Endrödy-Younga, 26.V.1969, 9 exx. (partially demaged) (MTM), 4 exx. (cB); Ashanti

region, Kwadaso, 320 m, 6.42N, 1.39W, S. Endrödy-Younga, 17.III.1969, 7 exx. (MTM), 4 exx. (cB).

Nigeria, Nsukka, F. Krell, 22.VII,1988, 4 exx. (SMNS), 1 ex. (cB); Ile-Ife, F. Krell, 4.VII.1988, 1 ex. (SMNS); Ibadan, H. S. Clausen I–VI.1954, 2 exx. (ZMUC).

Central African Rep., SW, 50 km Boda, 500 m, 04.03N, 17.20E, J. Halada, 7.XII.2008, 1 ex. (cB); SW, 80 km Boda, 450 m, 04.29N, 16.47E, J. Halada, 21.XII.2008, 1 ex. (cB); 40 km NNE Bangui, 400 m, A. Kudrna, 13–16.III.2010, 1 ex. (cB); 70 km NNE Bangui, 130 m, 04.57N, 18.46E, J. Halada, 8.IV2010, 1 ex. (cB); 77 km NNE Bangui, A. Kudrna, 5.XI.2010, 1 ex. (B); 50 km E Bossangoa, 500 m, 06.28N, 18.02E, J. Halada, 27.V.2009, 1 ex. (cB); 45 km Nola, 570–600 m, 03.40N, 16.26E, J. Halada, 13–17.XII.2008, 2 exx. (cB); 45 km N Sibut, 530 m, 06.06N, 19.08E, J. Halada, 11.V.2009, 1 ex. (cB); 40 km S Bandoro, 06.41N, 19.07E, J. Halada, 14.V.2009, 2 exx. (cB).

Cameroon, Joh.-Albrechtshöne, L. Conradt, 13.VI–10.VII.1898, 1 ex. (MNB).

Central African Rep., Ombella-Mpoko Prov., 75 km NNE Bangui, A. Kudrna Jr., 5–11.IV.2010, 1 ex. (cJ), 1 ex. (cB); Lobaye Prov., 50 km S Boda, Ngoto vill., river Lobaye, 500m, A. Kudrna Jr., 7–9.XII.2008, 1 ex. (cJ); 60 km W of Bumbio, 630 m, N03° 50', E16° 44', M. Kadlecová, 4.XII.2010, 1 ex. (cJ).

Cited material. Cameroun: Kamerun, Joko, 1 male (MNB); Joko, Kamerun, 1 female (MTM); Central African Republic, La Maboke, R. Linnavuori, 6–9.VI.1973, 1 male (ZMH); Congo, Haut-Uele, Yebo Moto, L. Burgeon, III.1926, 1 male (MRAC); Bunia, 1938, RR. FF. Maristes, 1 ex. (sex indet).(MRAC); Haut-Uelé, Moto, L. Burgeon 1923, 1 male (MRAC); Ghana, Bechem Ghana, Werner, III.1986, 1 male (cS); Ghana, Kumasi, Werner, III.1986, 3 males (cS, cJ); Ghana, Ashanti Reg., Kumasi: Nhiasu, 6.43 N, 1.36W, Endödy-Younga, 22.XI.1967, 1 male (TM); Guinea, Sérédoux, Zott, 7-8.IV.1975, 2 females (MNB); Guinea, Sérédou, Zott, 16.IV.1975, 1 female (cJ); Côte d'Ivoire, Bingerville, J. Decelle 1–15.XI.1962, 1 male (MRAC); Côte d'Ivoire, Bingerville, J. Decelle, I.1962, 3 females, à la lampe U.V. (MRAC, cJ); Nigeria, Afr. Ore, Politzar, 27.XII.1970, 1 male (cJ) (all paratypes) (Janak, 2010).

Description. Body 13–18.5 mm long; length from the anterior margin of the head to the posterior margin of elytra: 8–10.2 mm. Reddish brown, elytra light orange brown, tibiae, mandibles and antennal segments dark reddish-brown to brown, apical parts of two first antennal segments and apical part of last segment paler reddish-brown. Shiny. Head and pronotum with micro-punctation. Head and pronotum and related punctation as in figure 606. Labrum as in figure 607. Elytra sub-rectangular with slightly rounded sides, as long as pronotum, and wider than it, with strictly rounded humeral angles. Surface with fine and dense punctation, arranged in numerous series. Abdomen with extremely fine and dense, transverse micro-striation and fine, deep, dense punctation, arranged in numerous series on each segment. Tergite and sternite of the male genital segment as in figures 608, 609. Aedeagus little (Fig. 610), very narrow, 1.6 mm long, with narrow, characteristic median lobe; parameres asymmetrical; inner sac very narrow and long, with few, little scales.

Distribution. The species is known from west and central Africa (Guinea, Ivory Coast, Ghana, Nigeria, Congo, Central African Republic, Cameroon) (Fig. 600).

Remarks. The specimens from Guinea are particularly large.

4. *Thyreocephalus giganteus* sub-group

Discal setiferous puncture on head present, setiferous postocular puncture on head missing, labrum lobate, body very large, brown.

1. ***Thyreocephalus giganteus*** Janak, 2010 (Figs. 1692, 1693)

Thyreocephalus giganteus - Janak, 2010: 132; Janak & Bordoni, 2015: 44

Type material. The Musée royal de l'Afrique centrale of Tervuren preserves the holotype of

this species, labelled "*Congo Belge, P. N. G., Miss. H. De Saeger, II / gd / 17, 10-IV-1951, Rec. H. De Saeger, 1557*" (National Park Garamba in Congo).

EXAMINED MATERIAL. Cameroon, Foumbot, leg. ?, 13.V.1968, 1 female (with the label "*Paratype,* Eulissus giganteus *n. sp., L. Levasseur det. 1970, in litt.*" (MNHNP); Foumbot, Safa, leg. ?, 25.IV.1970, 1 female (MNHNP).

Cameroon (?), Mt Ngaha (?), leg. ?, 3.VI.1971, 1 female (with the label "*Holotype,* Thyreocephalus inexpectatus *n. sp., L. Levasseur det. 1968, in litt.*) (MNHNP).

Central African Republic, Nahovvi (?), 20 km Bouar, P. Teocchi, 10.XI.1968, 1 female (cB); Nana-Grebizi Prov., 25 km NNE Mbres, 550 m, A. Kudrna, 25–26.VI.2011, 1 male (cB); La Maboke, R. Pujol, 2.V.1964, 1 male (with the label "*édeage et dern. segm. abd. accidants !", in coll. Levasseur*) (MNHNP).

CITED MATERIAL. Congo Belge, P. N. G., Miss. H. De Saeger, II/gd/17, 10.IV.1951, (National Park Garamba), Rec. H. De Saeger, 1557, 2 males, 2 females (MRAC, cJ, paratypes) (Janak, 2010).

DESCRIPTION. Body 32–35 mm long; length from the anterior margin of the head to the posterior margin of elytra: 20–23 mm. Body elongate, moderately slender. Dark brown, elytra and abdomen red or reddish-brown, antennae brown with apical half of segment 11 reddish-brown. Head and pronotum and related punctation as in figure 611. Labrum as in figure 612. Elytra trapezoidal, about as long as wide, with prominent humeral angles; surface with fine and sparse punctation. Abdomen with extremely fine punctures. Tergite and sternite of the male genital segment as in figures 613, 614. Aedeagus 3.7–3.12 mm long (Fig. 615), long and narrow, with long and slender parameres and very narrow inner sac, covered with very weakly fine scales.

DISTRIBUTION. Cameroon, Central African Rep., Congo (Fig. 600).

5. *Thyreocephalus clypeatus* sub-group

KEY TO THE SPECIES

1. Body smaller, about 17 mm long; head and pronotum black; elytra and abdomen brown black; elytra with bluish reflexes; labrum as in figure 617. Aedeagus as in figure 620. Ivory Coast, Gabon, Rep. Centrafr.....1. *T. fortepunctatus* n. sp.

-. Body larger, about 22 mm long; black with bluish elytra; labrum as in figure 622. Aedeagus as in figure 625. Ivory Coast, Congo, Burundi, Ghana.....2. *T. clypeatus* n. sp.

1. ***Thyreeocephalus fortepunctatus*** n. sp.

EXAMINED MATERIAL. Holotype male: Gabon, Lambarene, col. L. Levasseur (MNHNP); paratypes: Rep. Centrafricane, La Maboche, R. Pujol, 1.I.1966, 1 female (MNHNP); Cote d'Ivoire, Lamto (Toumodi), R.E.L., 2 males (MNHNP), 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body 17 mm; from anterior margin of head to posterior margin of elytra: 9.5 mm. Head and pronotum black, elytra brown amaranth with feeble bluish reflexes; abdomen brown amaranth dark; antennae and legs brown. Head and pronotum with micro-punctation. Head and pronotum and related punctation as in figure 616. Labrum as in figure 617. Head with deep, oblong punctation; setiferous punctation very large and excavate. Pronotum with evident lateral concavity, provided by some punctures. Elytra with micro-punctation, a little shorter and clearly wider than pronotum, with marked humeral angles. Surface with deep, medium-sized and spaced punctation, arranged in two series near the suture, one median and one lateral. Abdomen with fine and dense, transverse micro-striation and fine, very sparse punctation, arranged in 2, 3 spaced series. Tergite and sternite of the male genital segment as in figures 618, 619. Aedeagus 1,77 mm long (Fig. 620), sub-spherical, with sub-triangular median lobe with acute apex; parameres robust; inner sac very narrow, folded on itself.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet referes to the Latin *forte- punctatus -a -um* (very punctuated), in relation to the punctation of the head.

DISTRIBUTION. The species in known from Ivory Coast, Gabon and Central Africa Republic (Fig. 626).

REMARKS. The paratypes from Ivory Coast have the label "*Paratype,* Thyreocephalus lamtoensis *n. sp., L. Levasseur det 68, in litt.*".

2. ***Thyreocephalus clipeatus*** n. sp.

EXAMINED MATERIAL. Holotype male: Cote d'Ivoire, Bingerville, J. Decelle, 12–21XI.1962 (MRAC); paratypes: same data, 1 female (cB); same data, Divo, J. Decelle, 16–18.X.1962, 3 females (MRAC), 2 females (cB); same data, Dibi, N. D'Abollso, J. Decelle, IV–VI.1962, 1 female (MRAC); Gabon, Makokoli, A. Susini, II.2004, 1 ex. (cB); Congo, Yangambi (Stanleiville), J. Decelle, V.1960 (MRAC); same data, 30.X.1960, 2 females (MRAC), 1 male (cB); Congo, Yaosuka (Yangambi), P. Raigner and Van Boven, 1949, 1 male (MRAC); Congo, Reg. Thysville (Bas Congo), H. Michaux, 1959-1963, 1 female (MRAC), 1 male (cB); Congo, Kivu, Hombwe, Kahuzi, 1200–1400 m, N. Leleup, V.1961, 1 male (MRAC); Congo, Bas Congo, Mayidi, R. Van Eyen, 1952, 1 female (MRAC); Congo, Basoko, P. Benoit, X.1948, 1 female (MRAC); Confo, Massif Ruwenzori, riv. Kakalari, affl. Bombo, 1800 m, P. Vanschuytbroeck, I–IV.1958, 1 female (MRAC); Burundi, Crête du Congo-Nil, S N'Dani, IV. 1967, 1 male (MRAC), 1 male (cB); Ghana, Volta reg., Kpeze, 400 m, S. Endrödy-Younga, 29.VIII.1967, 5.52N, 0.31E, 1 male (cB).

DESCRIPTION. Length of body 22 mm; from anterior margin of head to posterior margin of elytra: 11 mm. Black with bluish elytra. Similar to *T. basilewskyi*, but larger, narrower; head more squat, more dilated; labrum of different shape (Fig. 622); anterior margin of clypeus very long, feebly rounded. Head and pronotum with dense micropunctation. Head and pronotum and related punctation as in figure 621. Labrum as in figure 622. Elytra less convex than in *T. basilewskyi*, with less rounded sides and more protruding humeral angles. Surface shiny, with more or less large and superficial punctures, arranged in three series, one near the suture, one median and one lateral; the median series less oblique; scutellum not large, with transverse micro-striation and 4, 5 big punctures. Abdomen with traces of transverse microstriation or smooth and with fine, spaced punctation, arranged in some series. Tergite and sternite of the male genital segment as in figures 623, 624. Aedeagus 1,7 mm long (Fig. 625), subspherical, with characteristic median lobe; parameres short; inner sac narrow and long, coverd with sparse, small scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the Latin *clipeatus -a -um* in relation to the particular shape of the clypeus.

DISTRIBUTION. The species occurs in Ivory Coast, Gabon, Congo and Ghana (Fig. 626).

REMARKS. The species is characterized by the very long anterior margin of clypeus, colouration, punctation of head, shape of the aedeagus. It differs from *T. raptor* by the wider and shorter body, by the different shape of head and pronotum, different labrum, by shorter, more squat and sub-rectangular elytra, by smaller scutellum and different aedeagus. The species is variable in size.

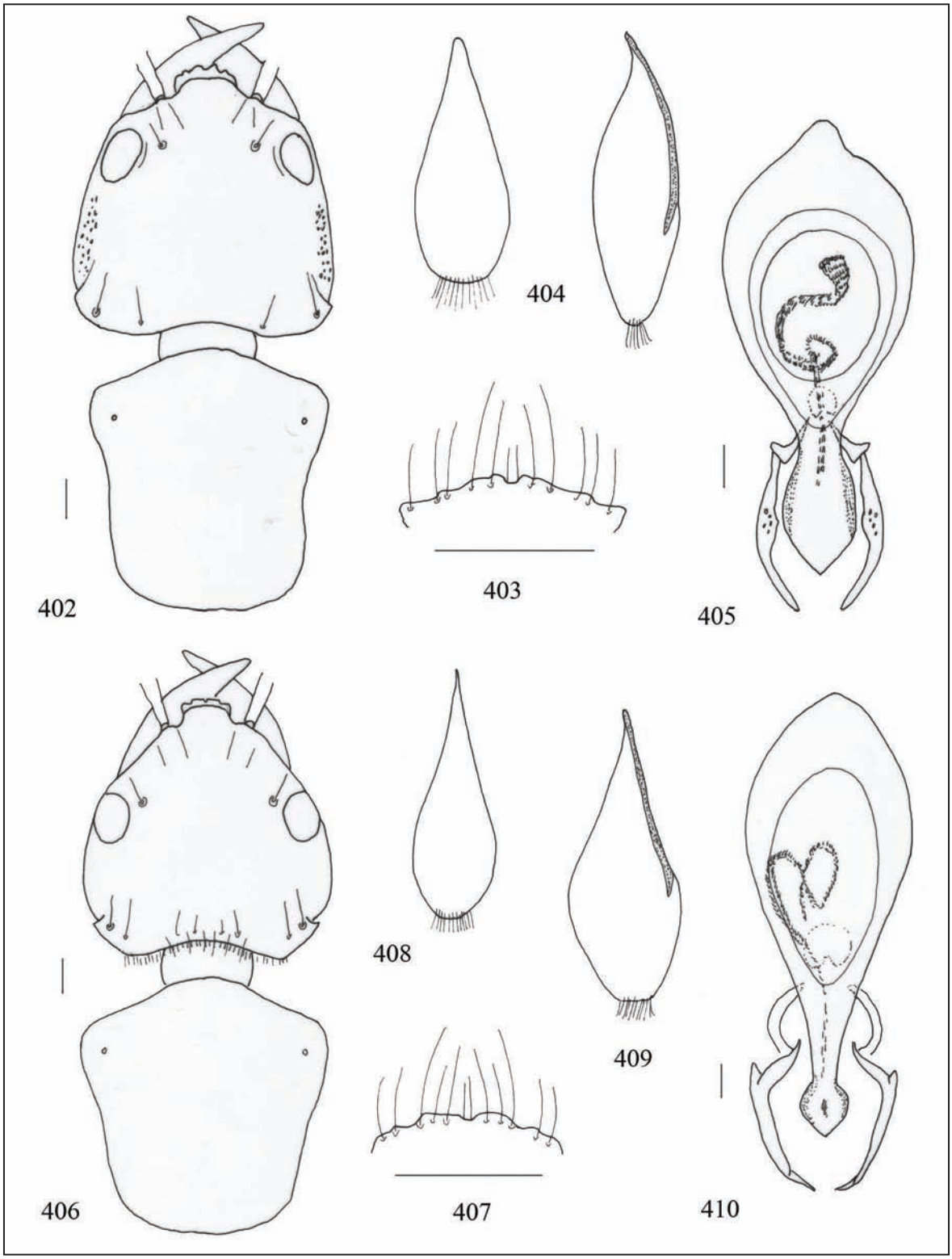
INTRODUCED SPECIES

Thyreocephalus annulatus (Fauvel, 1895)

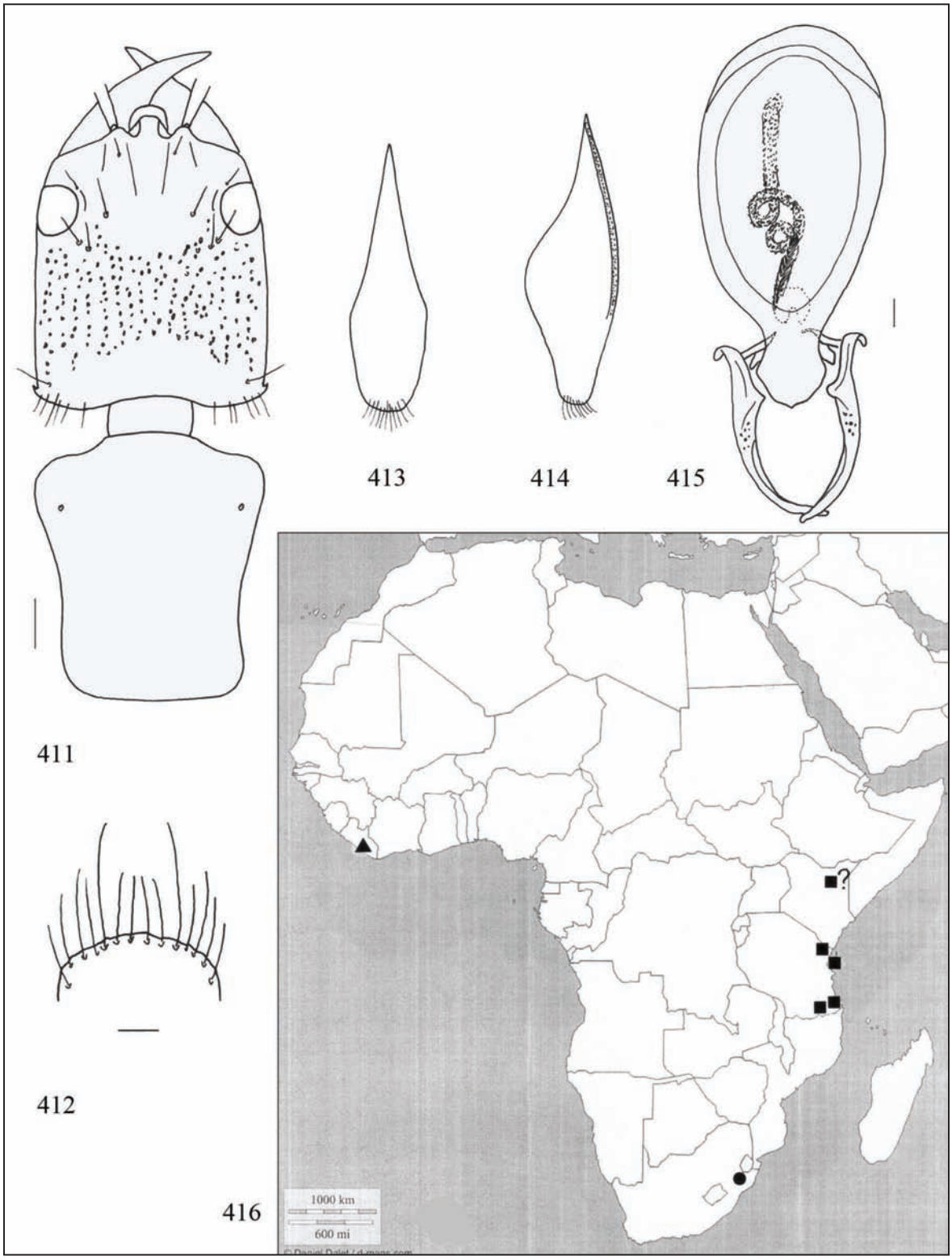
Xantholinus annulatus - Fauvel, 1895: 241
Thyreocephalus annulatus - Bernhauer & Schubert, 1914: 313; Herman, 2001: 3760; Bordoni, 2002: 256

EXAMINED MATERIAL. Angola, Lunda, ex Dundo, D.H. Kister and R.J. Swift, 14.XI.1972, 1 male, at light (FMNH).

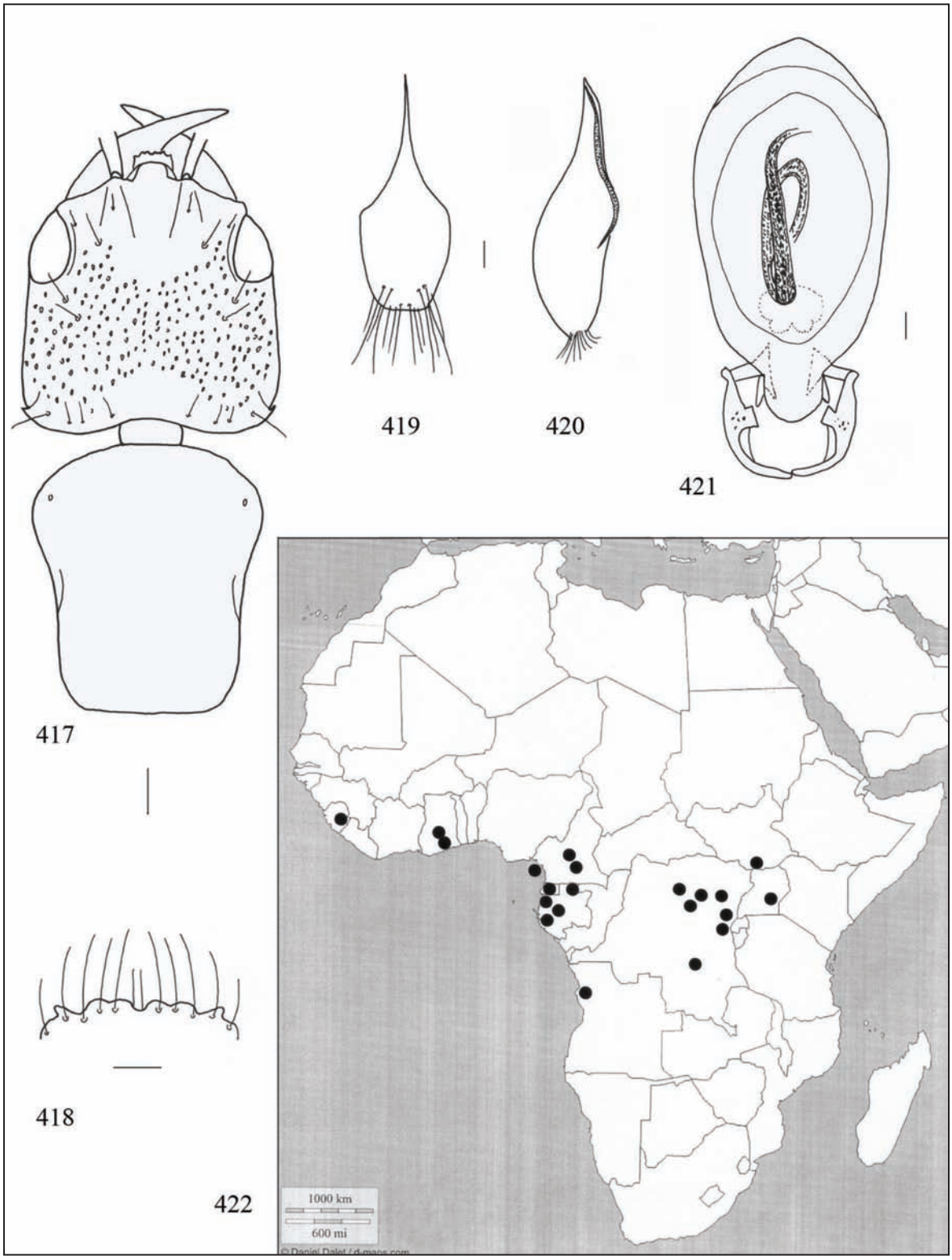
REMARKS. This introduced species occurs in the Oriental Region only (Bordoni, 2002).



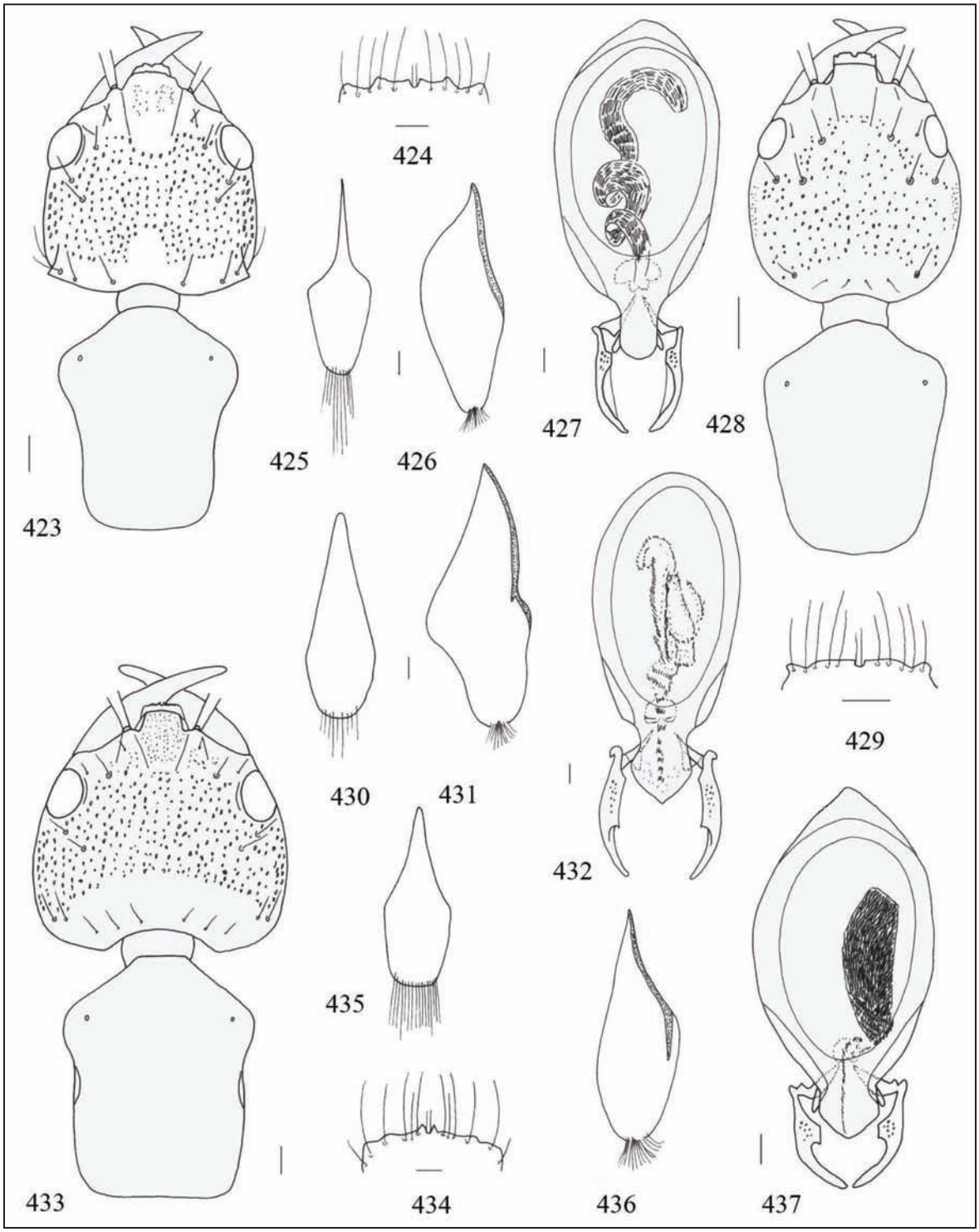
Figures 402–410. *Thyreocephalus liberianus* n. sp.: head and pronotum (bar scale: 0.5 mm) (Fig. 401), labrum (bar scale: 1 mm) (Fig. 402), tergite and sternite of the male genital segment, aedeagus (Figs. 402–405) (bar scale: 0.1 mm). *Thyreocephalus zuluensis* n. sp.: head and pronotum (bar scale: 0.5 mm) (Fig. 406), labrum (bar scale: 1 mm) (Fig. 407), tergite and sternite of the male genital segment, aedeagus (Figs. 408–410) (bar scale: 0.1 mm).



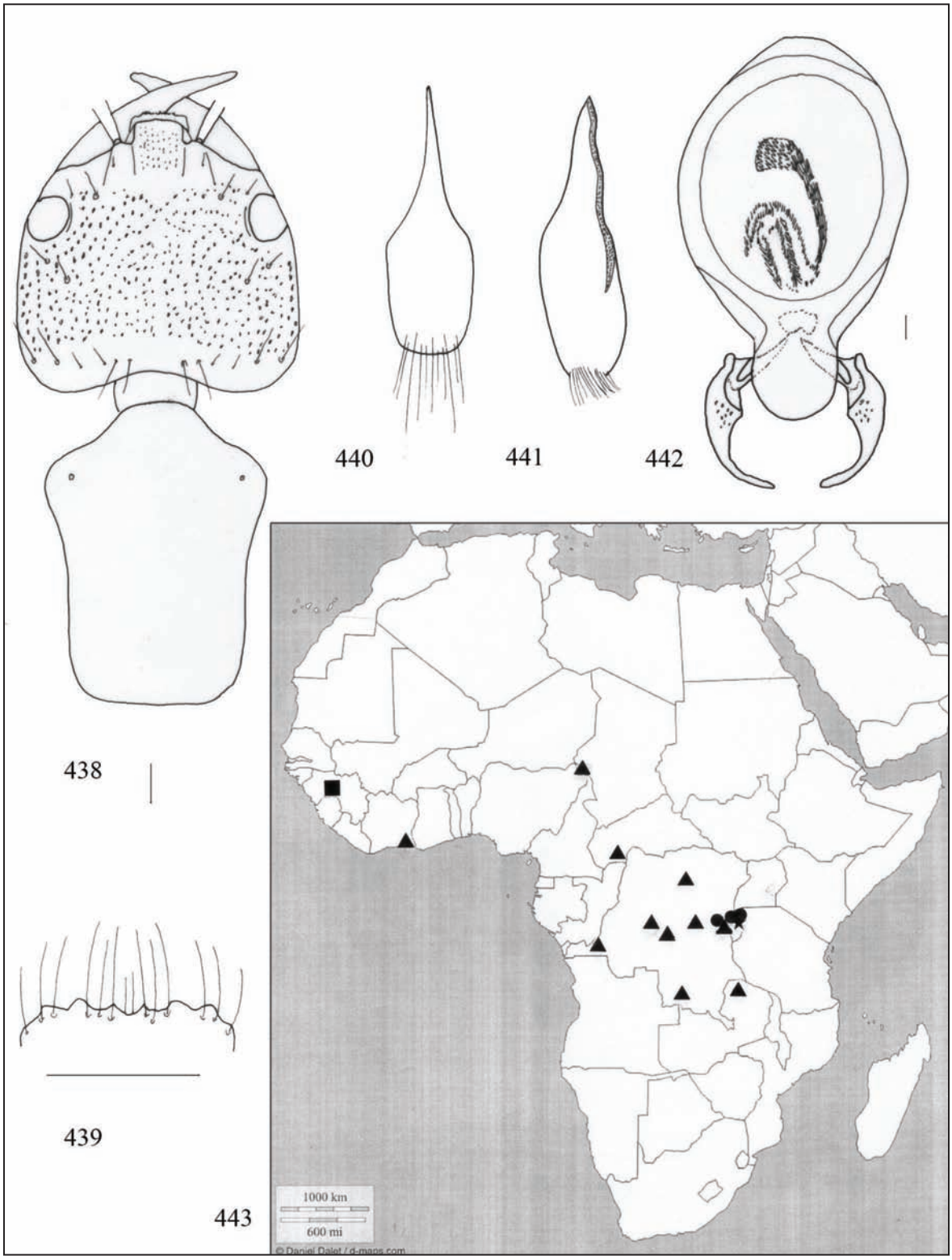
Figures 411–416. *Thyreocephalus ferox*: head and pronotum (bar scale: 0.5 mm) (Fig. 411), labrum (bar scale: 1 mm) (Fig. 412), tergite and sternite of the male genital segment, aedeagus (Figs. 413–415) (bar scale: 0.1 mm). Fig. 416: distribution of the genus *Thyreocephalus* group a: *liberianus* n. sp. (triangle), *zuluensis* n. sp. (circle), *ferox* (square).



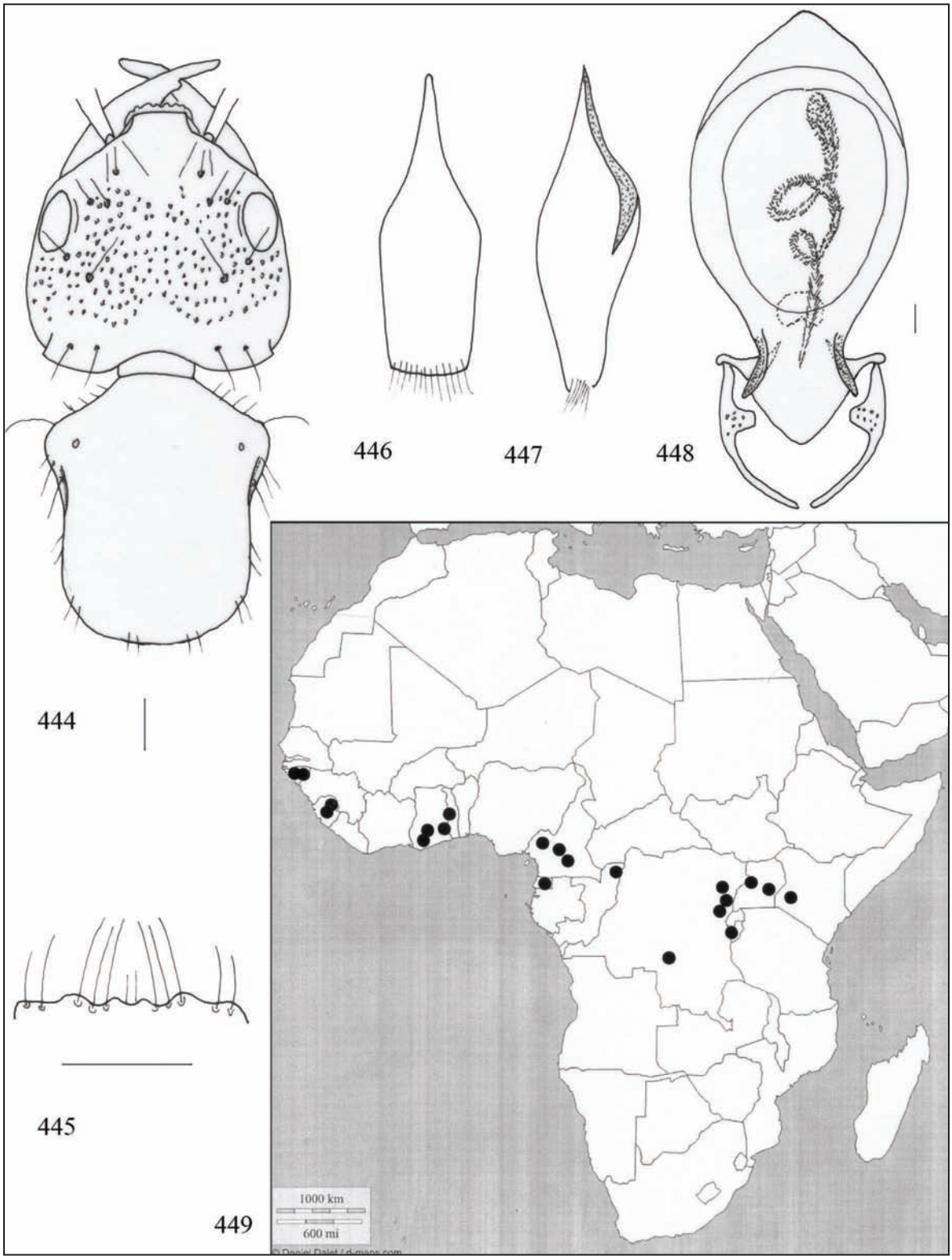
Figures 417–422. *Thyreocephalus coeruleipennis*: head and pronotum (bar scale: 0.5 mm) (Fig. 417), labrum (bar scale: 1 mm) (Fig. 418), tergite and sternite of the male genital segment, aedeagus (Figs. 419–421) (bar scale: 0.1 mm). Fig. 422: distribution of *Thyreocephalus coeruleipennis*.



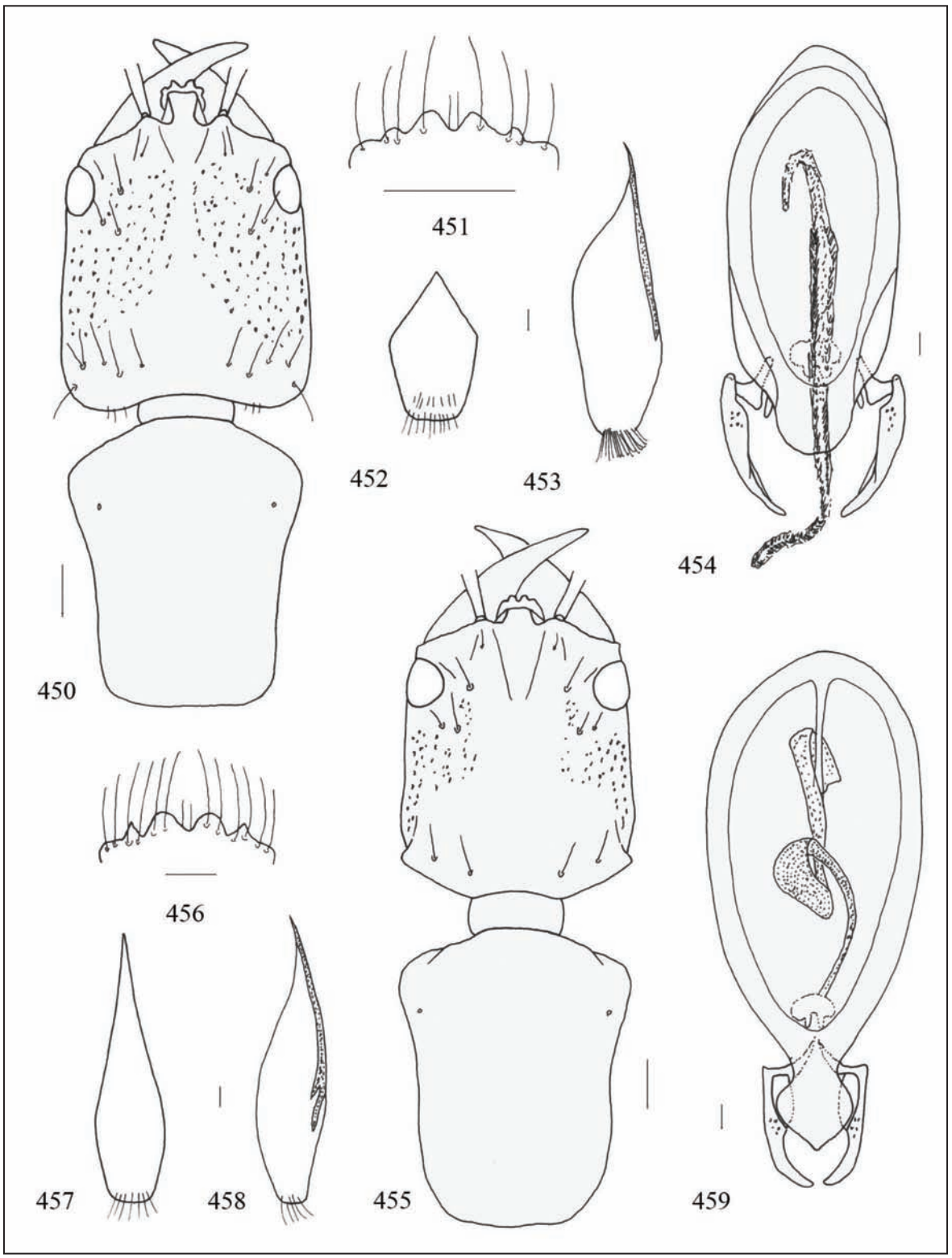
Figures 423–437. *Thyreocephalus subcorticalis*: head and pronotum (bar scale: 0.5 mm) (Fig. 423), labrum (bar scale: 1 mm) (Fig. 424), tergite and sternite of the male genital segment, aedeagus (Figs. 425–427) (bar scale: 0.1 mm). *Thyreocephalus raptor*: head and pronotum (bar scale: 0.5 mm) (Fig. 428), labrum (bar scale: 1 mm) (Fig. 429), tergite and sternite of the male genital segment, aedeagus (Figs. 430–432) (bar scale: 0.1 mm). *Thyreocephalus basilewskyi*: head and pronotum (bar scale: 0.5 mm) (Fig. 433), labrum (bar scale: 1 mm) (Fig. 434), tergite and sternite of the male genital segment, aedeagus (Figs. 435–437) (bar scale: 0.1 mm).



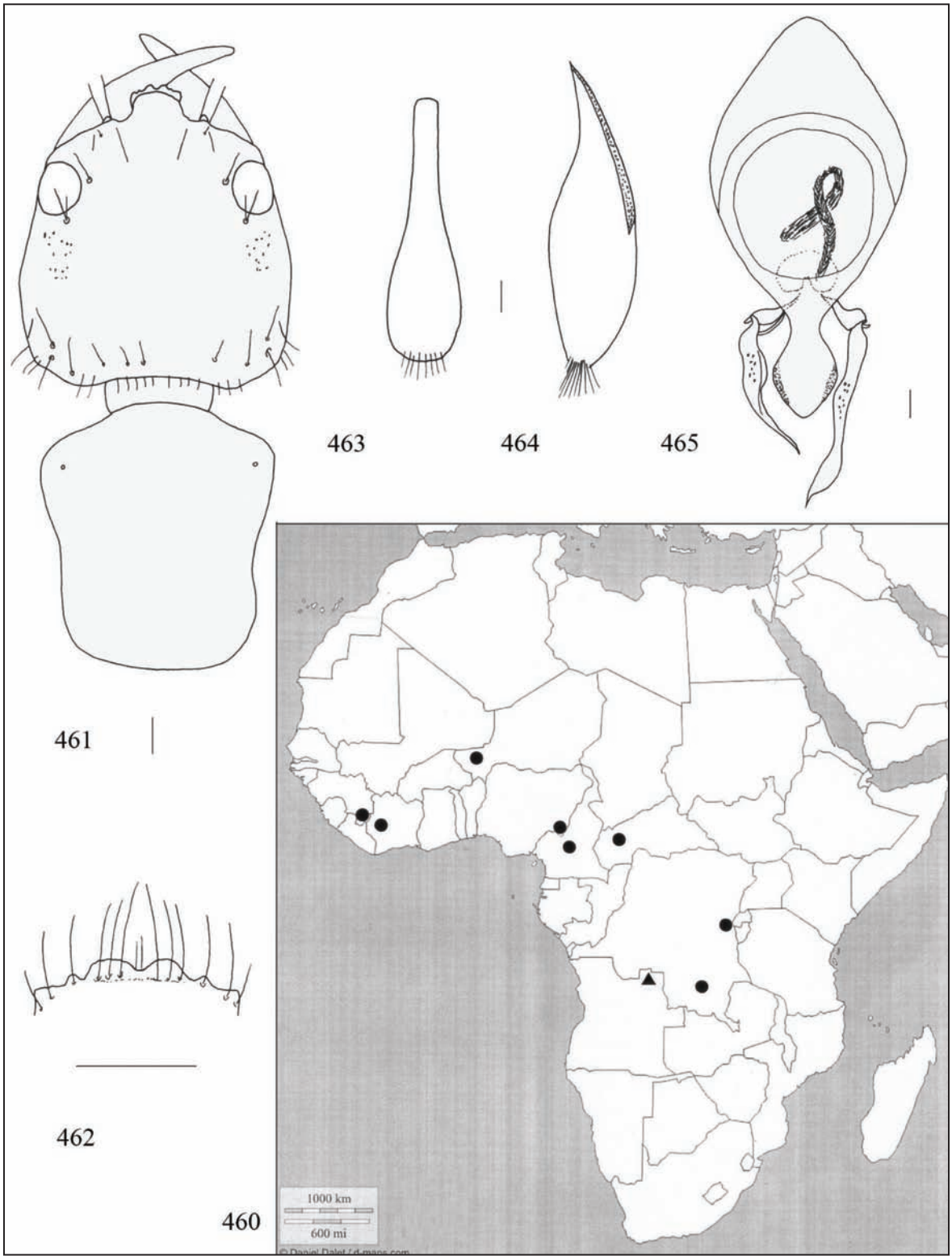
Figures 438–443. *Thyreocephalus occidentalis* n. sp.: head and pronotum (bar scale: 0.5 mm) (Fig. 438), labrum (bar scale: 1 mm) (Fig. 439), tergite and sternite of the male genital segment, aedeagus (Figs. 440–442) (bar scale: 0.1 mm). Fig. 443: distribution of *Thyreocephalus coeruleipennis* sub-group: *T. subcorticalis* (triangle), *T. raptor* (star), *T. basilewskyi* (circle), *T. occidentalis* n. sp. (square).



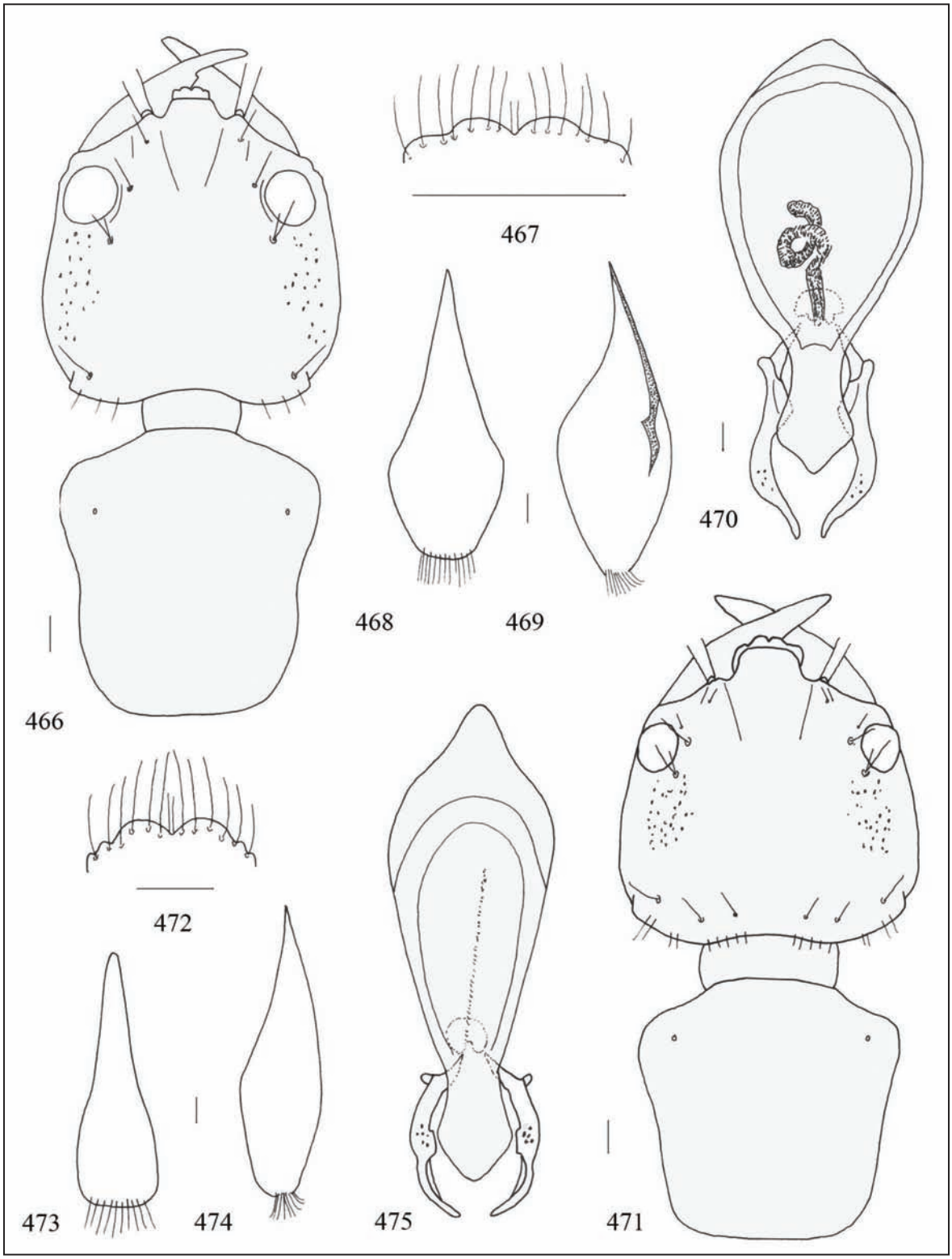
Figures 444–449. *Thyreocephalus interocularis*: head and pronotum (bar scale: 0.5 mm) (Fig. 444), labrum (bar scale: 1 mm) (Fig. 445), tergite and sternite of the male genital segment, aedeagus (Figs. 446–448) (bar scale: 0.1 mm). Fig. 449: distribution of *Thyreocephalus interocularis*.



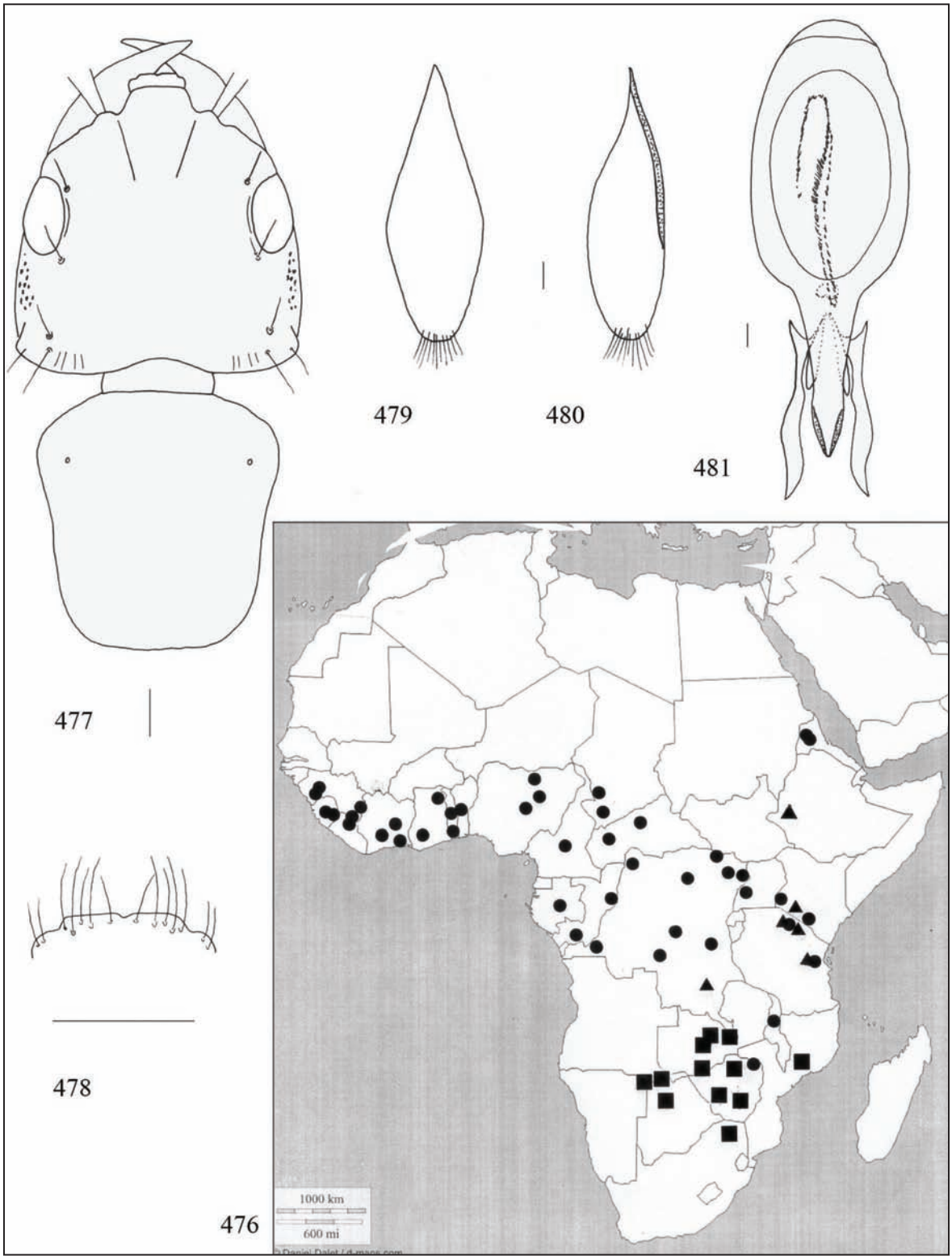
Figures 450–459. *Thyreocephalus guineensis*: head and pronotum (bar scale: 0.5 mm) (Fig. 450), labrum (bar scale: 1 mm) (Fig. 451), tergite and sternite of the male genital segment, aedeagus (Figs. 452–454) (bar scale: 0.1 mm). *Thyreocephalus paraferox*: head and pronotum (bar scale: 0.5 mm) (Fig. 455), labrum (bar scale: 1 mm) (Fig. 456), tergite and sternite of the male genital segment, aedeagus (Figs. 457–459) (bar scale: 0.1 mm).



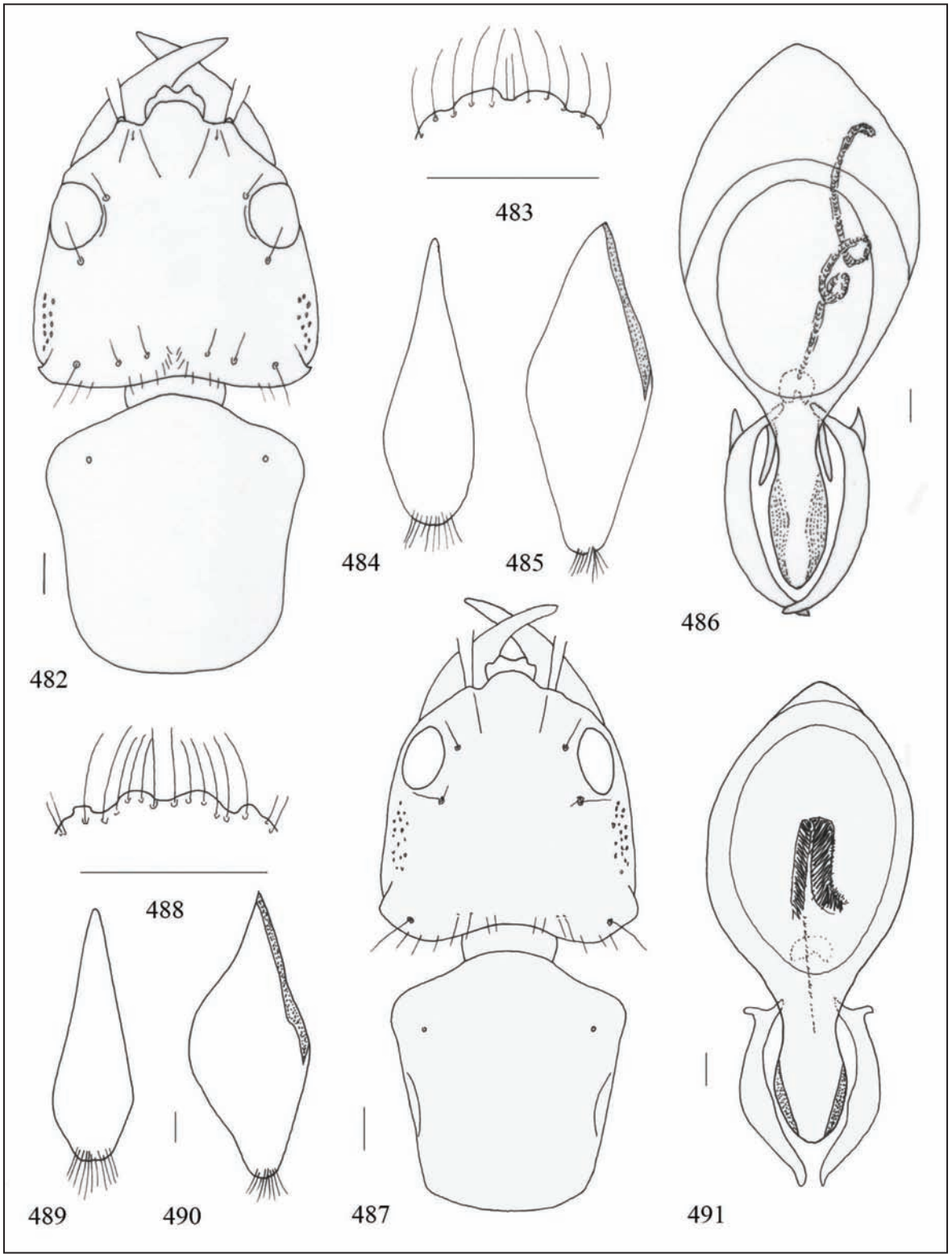
Figures 460–465. Fig. 460: distribution of *Thyreocephalus guineensis* sub-group: *T. guineensis* (circle, "Guinea" not listed), *T. paraferox* (triangle). Figs. 461-465. *Thyreocephalus alluaudi*: head and pronotum (bar scale: 0.5 mm) (Fig. 461), labrum (bar scale: 1 mm) (Fig. 462), tergite and sternite of the male genital segment, aedeagus (Figs. 463–465) (bar scale: 0.1 mm).



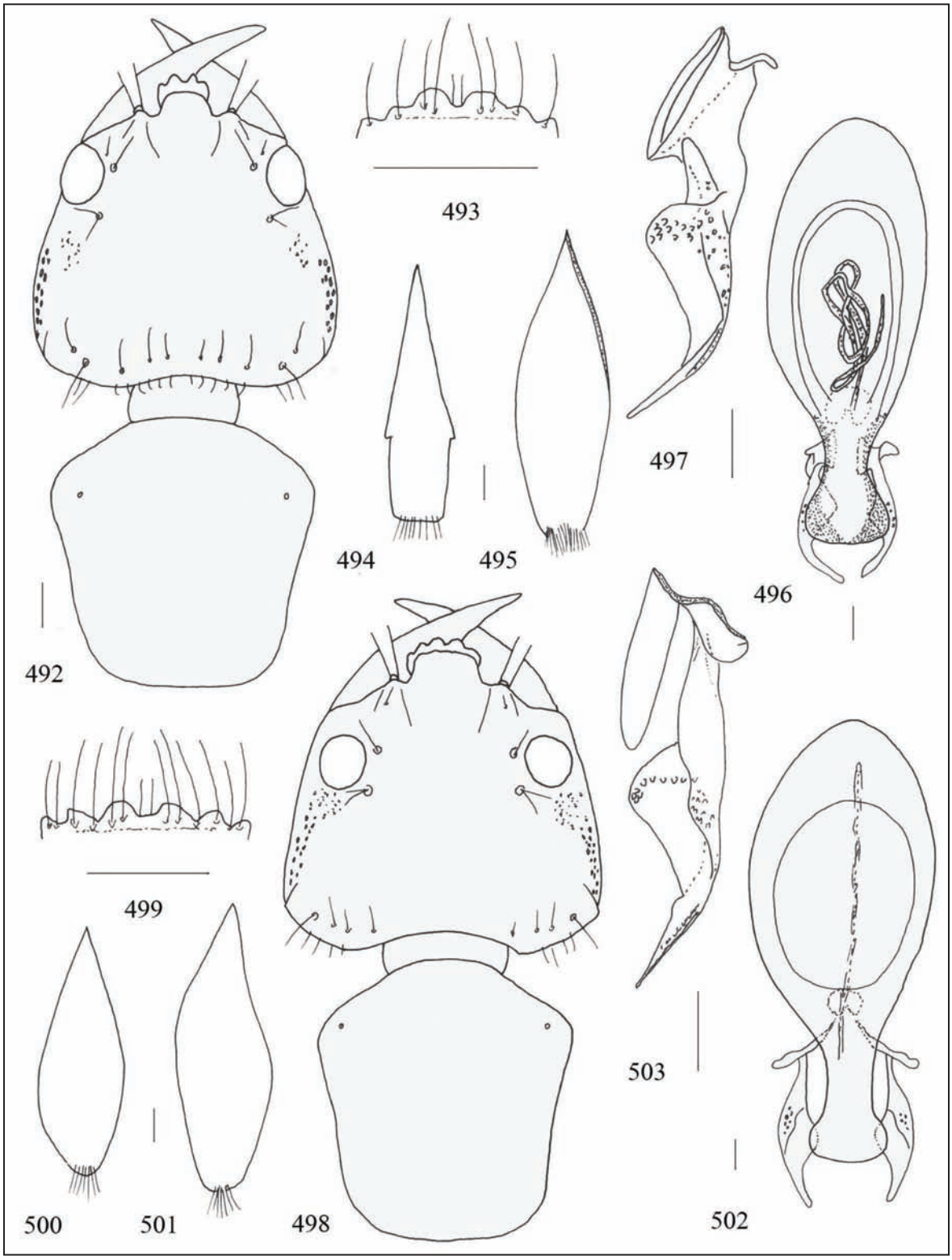
Figures 466–475. *Thyreocephalus meridionalis*: head and pronotum (bar scale: 0.5 mm) (Fig. 466), labrum (bar scale: 1 mm) (Fig. 467), tergite and sternite of the male genital segment, aedeagus (Figs. 468–470) (bar scale: 0.1 mm). *Thyreocephalus ater*: head and pronotum (bar scale: 0.5 mm) (Fig. 471), labrum (bar scale: 1 mm) (Fig. 472), tergite and sternite of the male genital segment, aedeagus (Figs. 473–475) (bar scale: 0.1 mm).



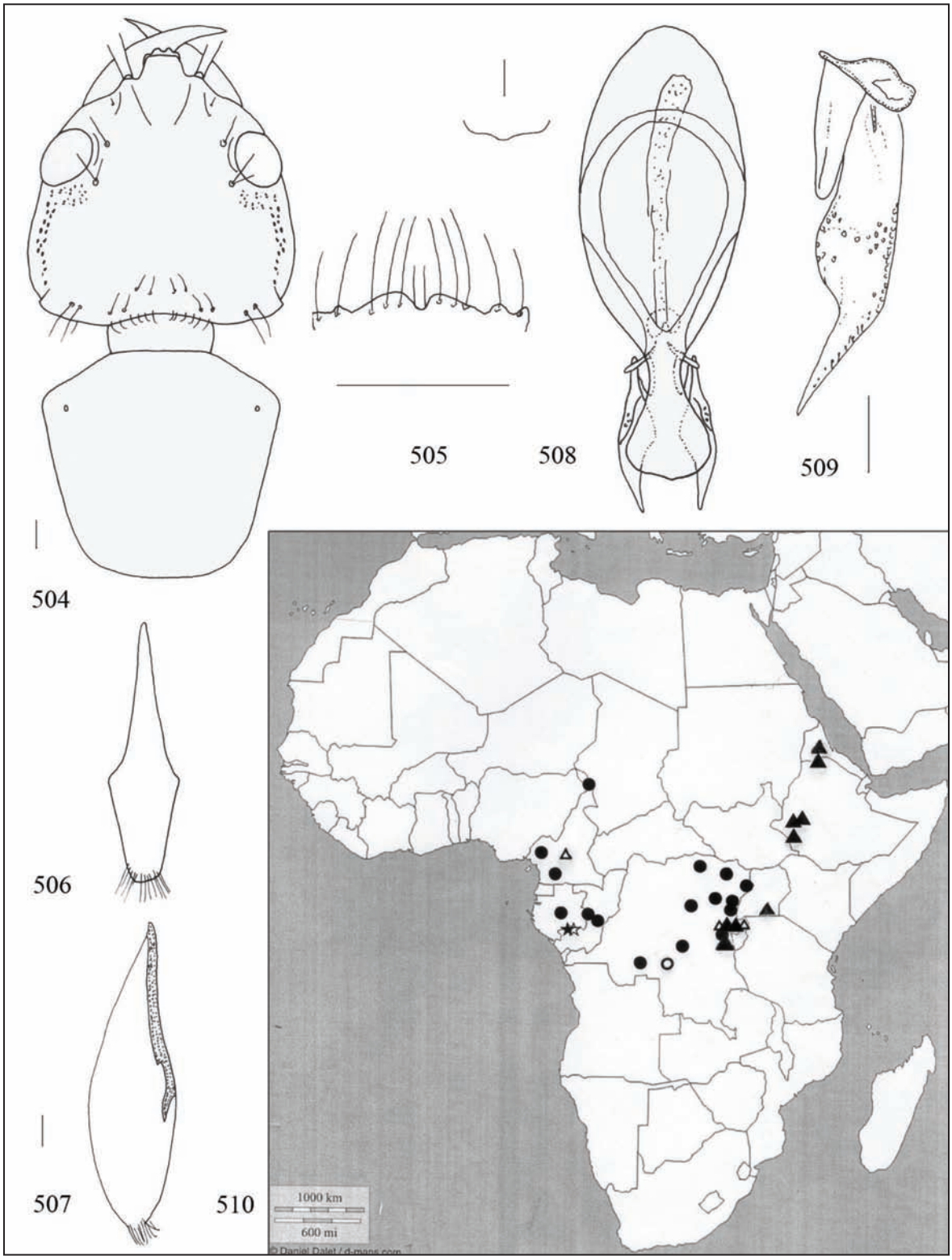
Figures 476–481. Fig. 476: distribution of *Thyreocephalus ater* sub-group: *T. alluaudi* (triangle), *T. meridionalis* (square), *T. ater* (circle). *Thyreocephalus tsingidianus*: head and pronotum (bar scale: 0.5 mm) (Fig. 477), labrum (bar scale: 1 mm) (Fig. 478), tergite and sternite of the male genital segment, aedeagus (Figs. 479–481) (bar scale: 0.1 mm).



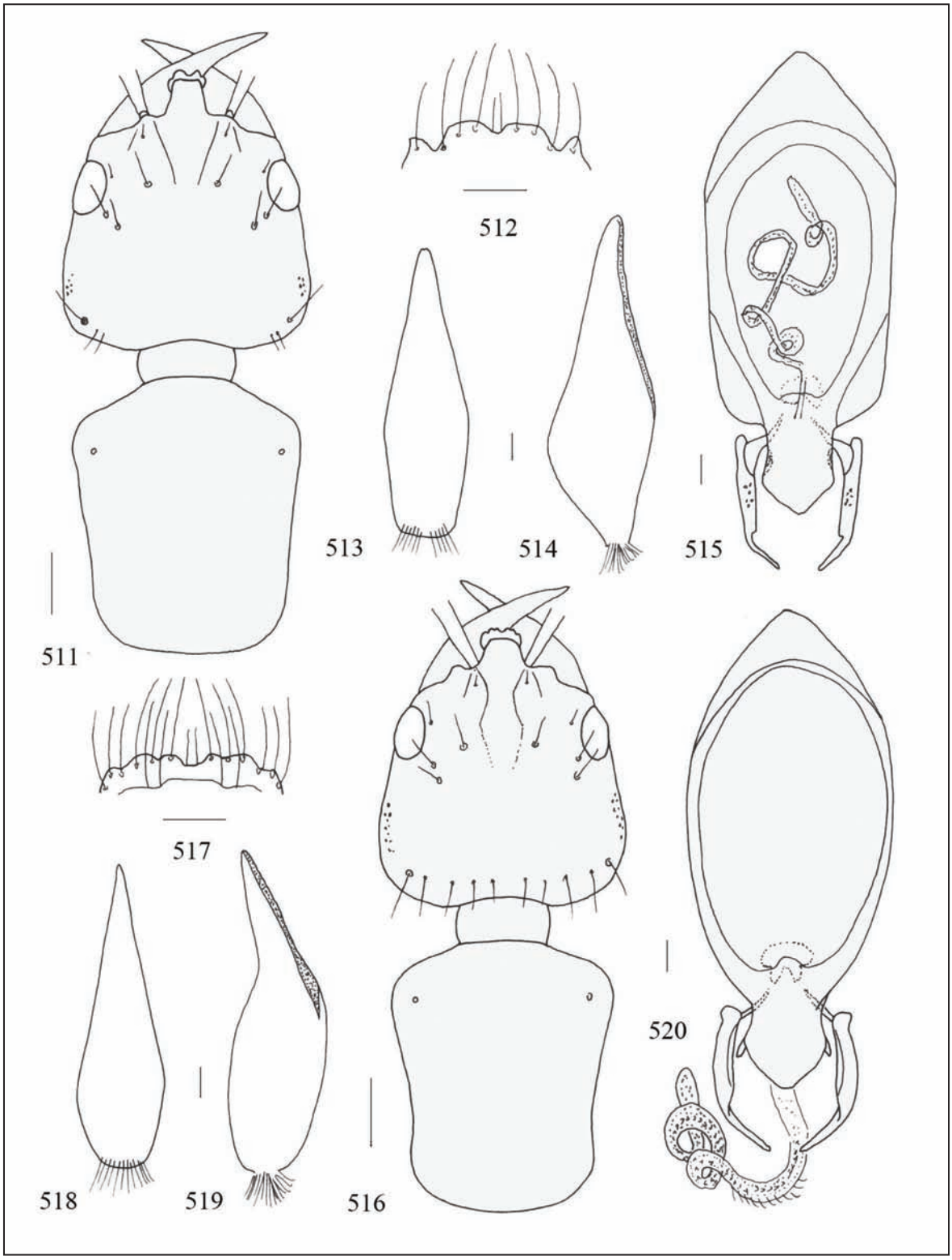
Figures 482–491. *Thyreocephalus africanus*: head and pronotum (bar scale: 0.5 mm) (Fig. 482), labrum (bar scale: 1 mm) (Fig. 483), tergite and sternite of the male genital segment, aedeagus (Figs. 484–486) (bar scale: 0.1 mm). *Thyreocephalus pseudoafricanus*: head and pronotum (bar scale: 0.5 mm) (Fig. 487), labrum (bar scale: 1 mm) (Fig. 488), tergite and sternite of the male genital segment, aedeagus (Figs. 489–491) (bar scale: 0.1 mm).



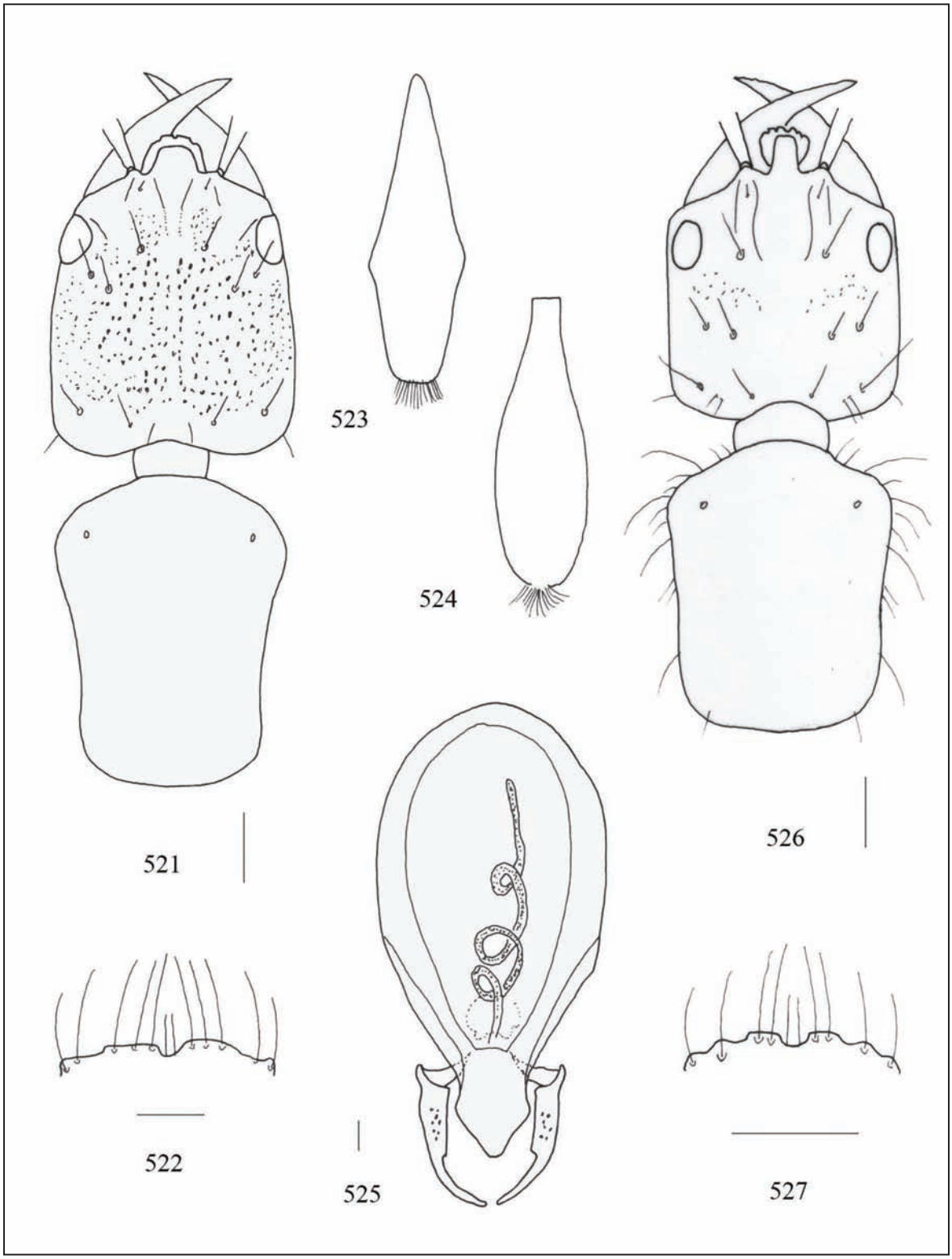
Figures 492–503. *Thyreocephalus pilosus*: head and pronotum (bar scale: 0.5 mm) (Fig. 492), labrum (bar scale: 1 mm) (Fig. 493), tergite and sternite of the male genital segment, aedeagus (Figs. 494–496), with paramere in lateral view (Fig. 497) (bar scale: 0.1 mm). *Thyreocephalus secretus*: head and pronotum (bar scale: 0.5 mm) (Fig. 498), labrum (bar scale: 1 mm) (Fig. 499), tergite and sternite of the male genital segment, aedeagus (Figs. 500–502), with paramere in lateral view (Fig. 503) (bar scale: 0.1 mm).



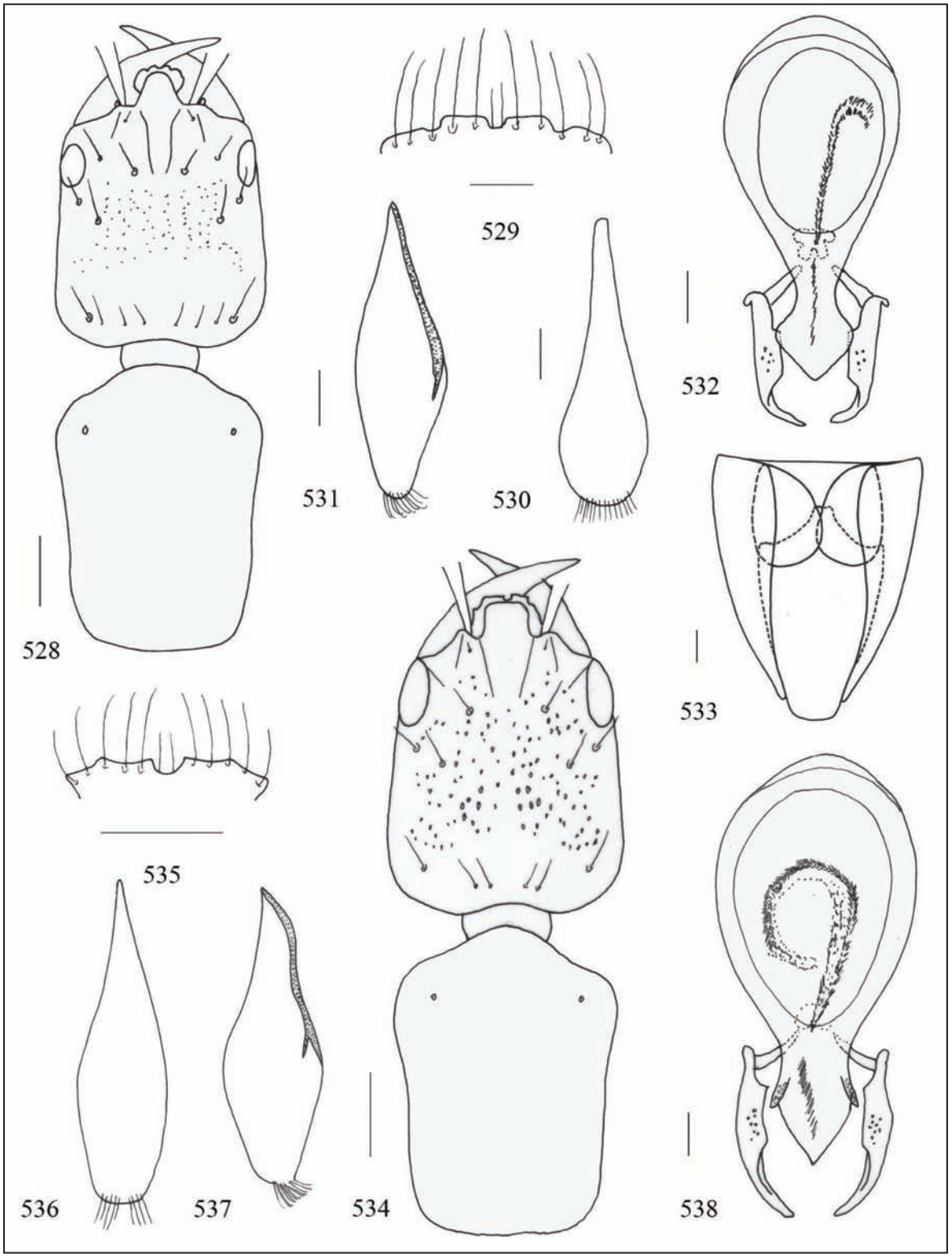
Figures 504–510. *Thyreocephalus brunneiventris*: head and pronotum (bar scale: 0.5 mm) (Fig. 504), labrum (bar scale: 1 mm) (Fig. 505), tergite and sternite of the male genital segment, aedeagus (Figs. 506–508), with paramere in lateral view (Fig. 509) (bar scale: 0.1 mm). Fig. 510: distribution of *T. pilosus* sub-group: *T. tsingidianus* (star), *T. africanus* (circle), *T. pseudoafricanus* (open star), *T. pilosus* (triangle), *T. secretus* (open circle), *T. brunneiventris* (open triangle).



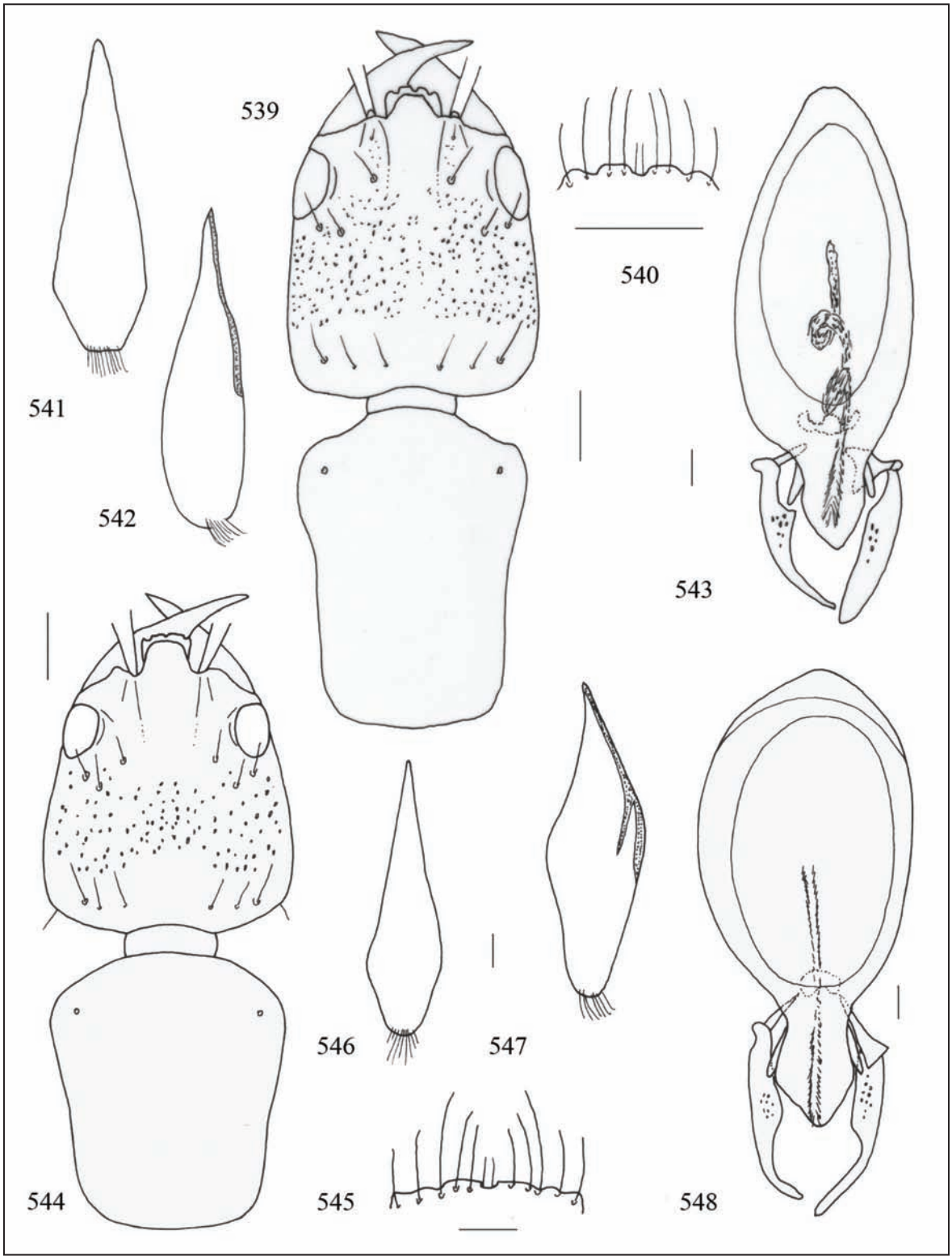
Figures 511–520. *Thyreocephalus atlanticus*: head and pronotum (bar scale: 0.5 mm) (Fig. 511), labrum (bar scale: 1 mm) (Fig. 512), tergite and sternite of the male genital segment, aedeagus (Figs. 513–515) (bar scale: 0.1 mm). *Thyreocephalus strinatii*: head and pronotum (bar scale: 0.5 mm) (Fig. 516), labrum (bar scale: 1 mm) (Fig. 517), tergite and sternite of the male genital segment, aedeagus (Figs. 518–520) (bar scale: 0.1 mm).



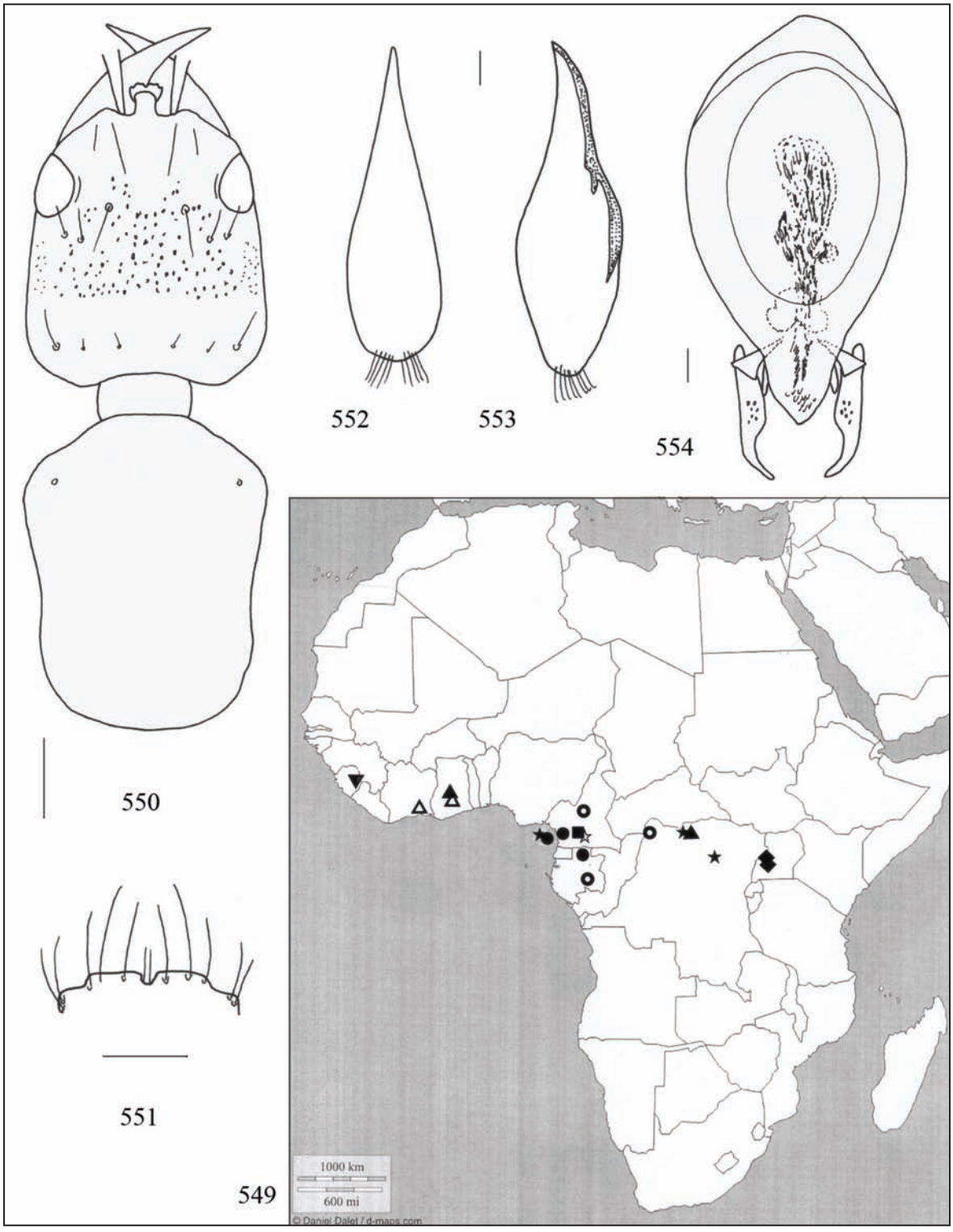
Figures 521–527. *Thyreocephalus mokaensis*: head and pronotum (bar scale: 0.5 mm) (Fig. 521), labrum (bar scale: 1 mm) (Fig. 522), tergite and sternite of the male genital segment, aedeagus (Figs. 523–525) (bar scale: 0.1 mm). *Thyreocephalus pallidus* n. sp.: head and pronotum (bar scale: 0.5 mm) (Fig. 526), labrum (bar scale: 1 mm) (Fig. 527).



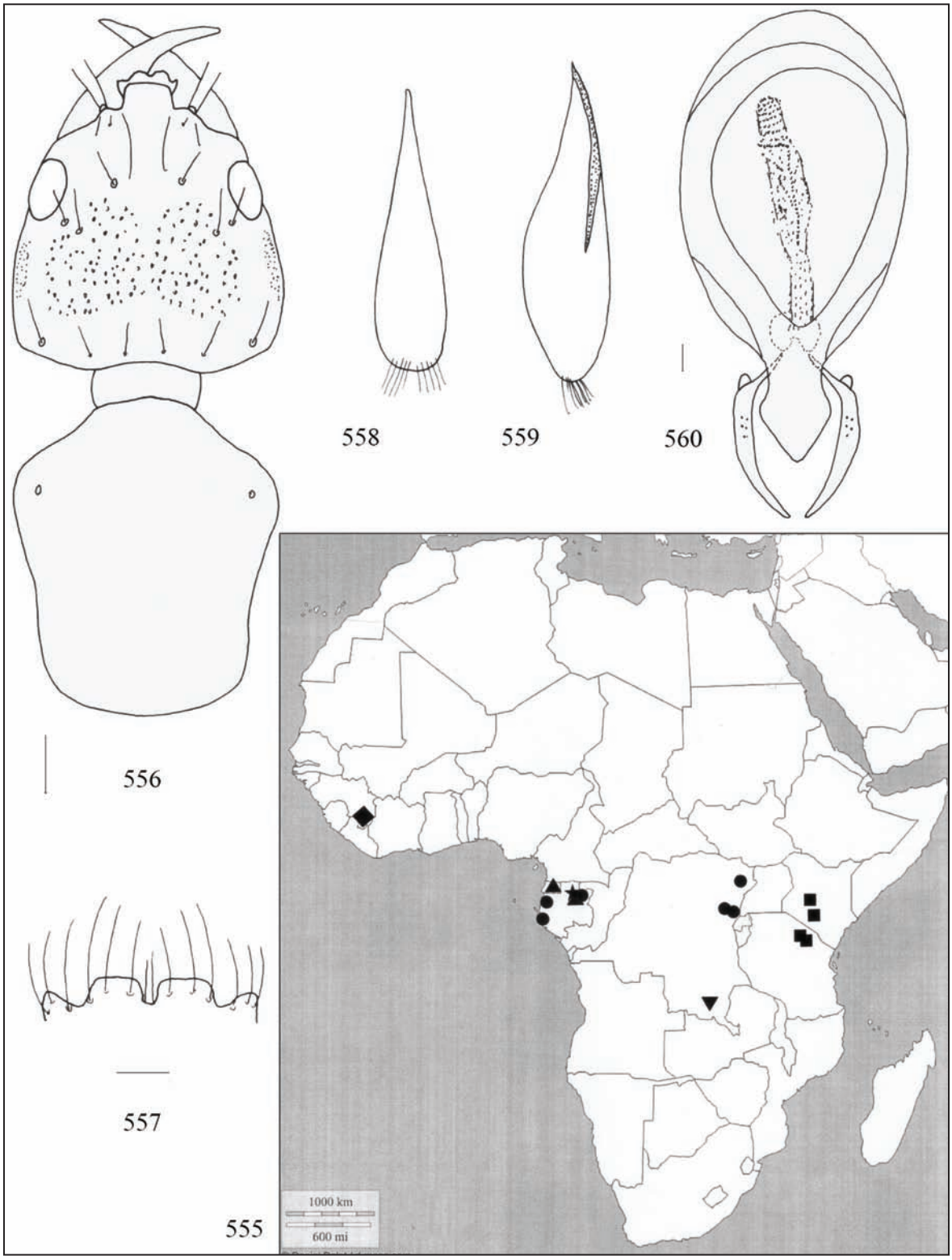
Figures 528–538. *Thyreocephalus burgeoni*: head and pronotum (bar scale: 0.5 mm) (Fig. 528), labrum (bar scale: 1 mm) (Fig. 529), tergite and sternite of the male genital segment, aedeagus (Figs. 530–532), with female genital segment (Fig. 533) (bar scale: 0.1 mm). *Thyreocephalus ugandensis* n. sp.: head and pronotum (bar scale: 0.5 mm) (Fig. 534), labrum (bar scale: 1 mm) (Fig. 535), tergite and sternite of the male genital segment, aedeagus (Figs. 536–538) (bar scale: 0.1 mm).



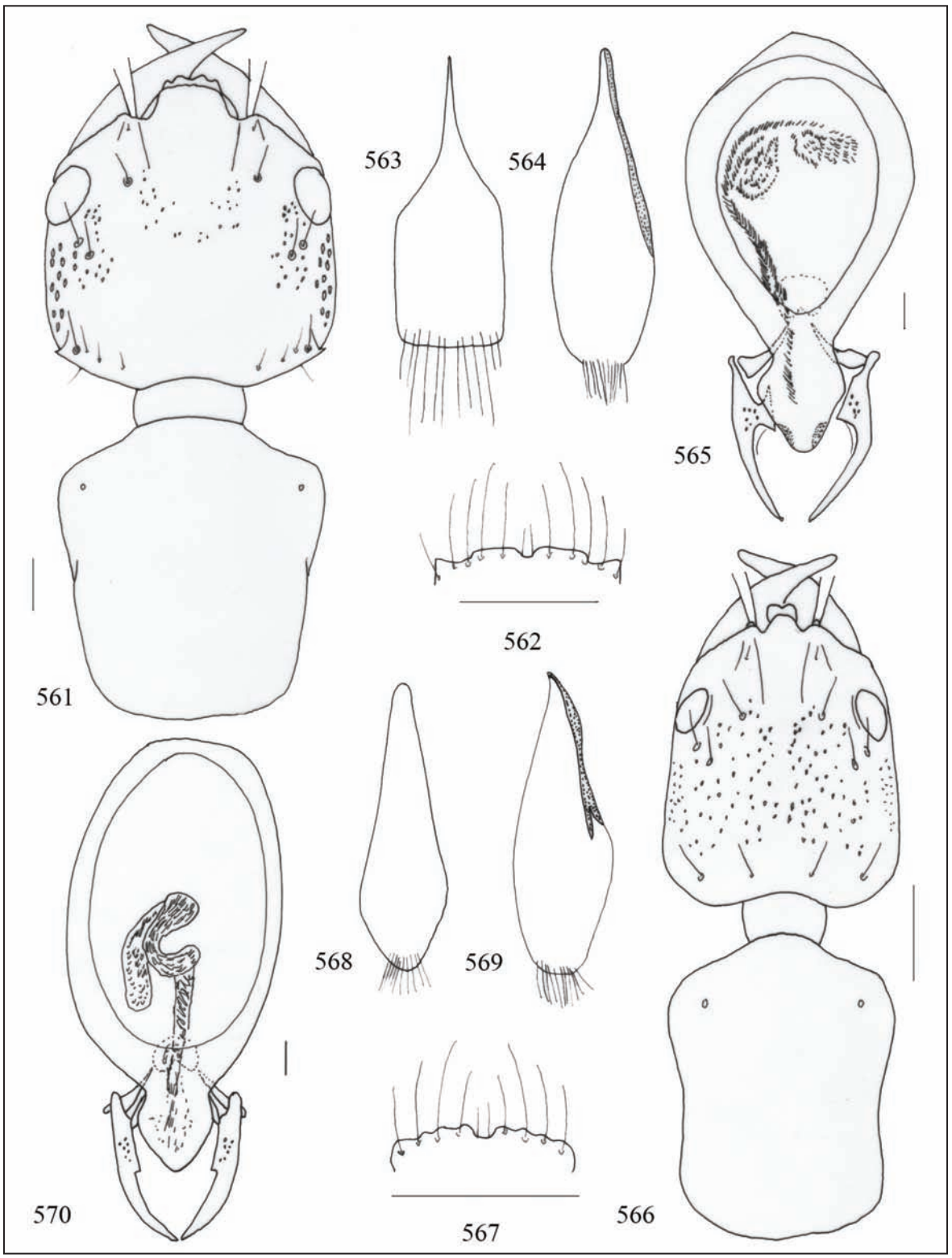
Figures 539–548. *Thyreocephalus mirabilis* n. sp.: head and pronotum (bar scale: 0.5 mm) (Fig. 539), labrum (bar scale: 1 mm) (Fig. 540), tergite and sternite of the male genital segment, aedeagus (Figs. 541–543) (bar scale: 0.1 mm). *Thyreocephalus camerunensis*: head and pronotum (bar scale: 0.5 mm) (Fig. 544), labrum (bar scale: 1 mm) (Fig. 545), tergite and sternite of the male genital segment, aedeagus (Figs. 546–548) (bar scale: 0.1 mm).



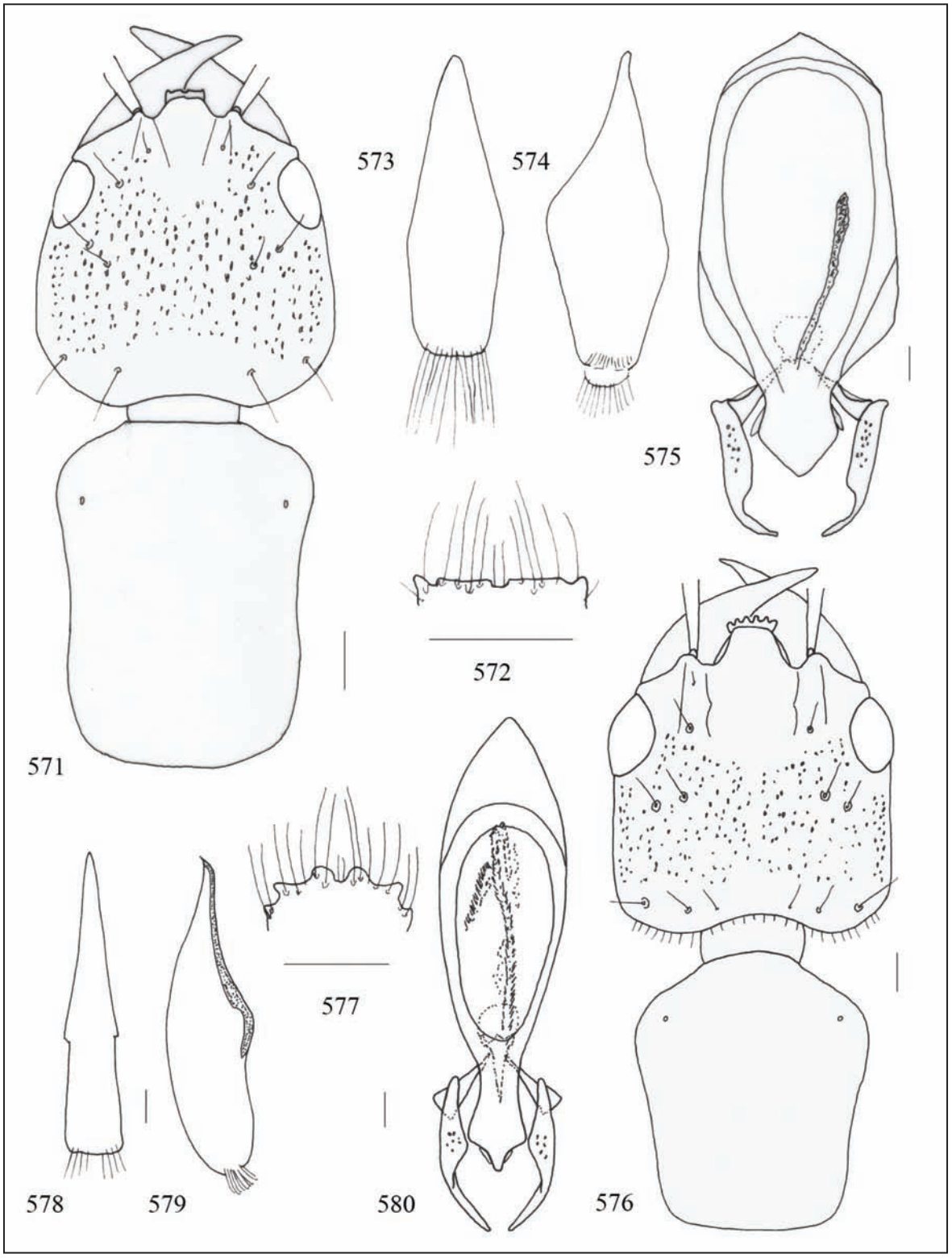
Figures 549–554. Fig. 549: distribution of *T. mocquerysi* sub-group: *T. atlanticus* (star), *T. strinatii* (open circle), *T. mokaensis* (filled circle), *T. pallidus* n. sp. (open star), *T. burgeoni* (filled triangle), *T. ugandensis* n. sp. (rhombus), *T. mirabilis* n. sp. (inverted triangle), *T. camerunensis* (square), *T. marginipennis* (open triangle). Figs. 550–554. *Thyreocephalus marginipennis*: head and pronotum (bar scale: 0.5 mm) (Fig. 550), labrum (bar scale: 1 mm) (Fig. 551), tergite and sternite of the male genital segment, aedeagus (Figs. 552–554) (bar scale: 0.1 mm).



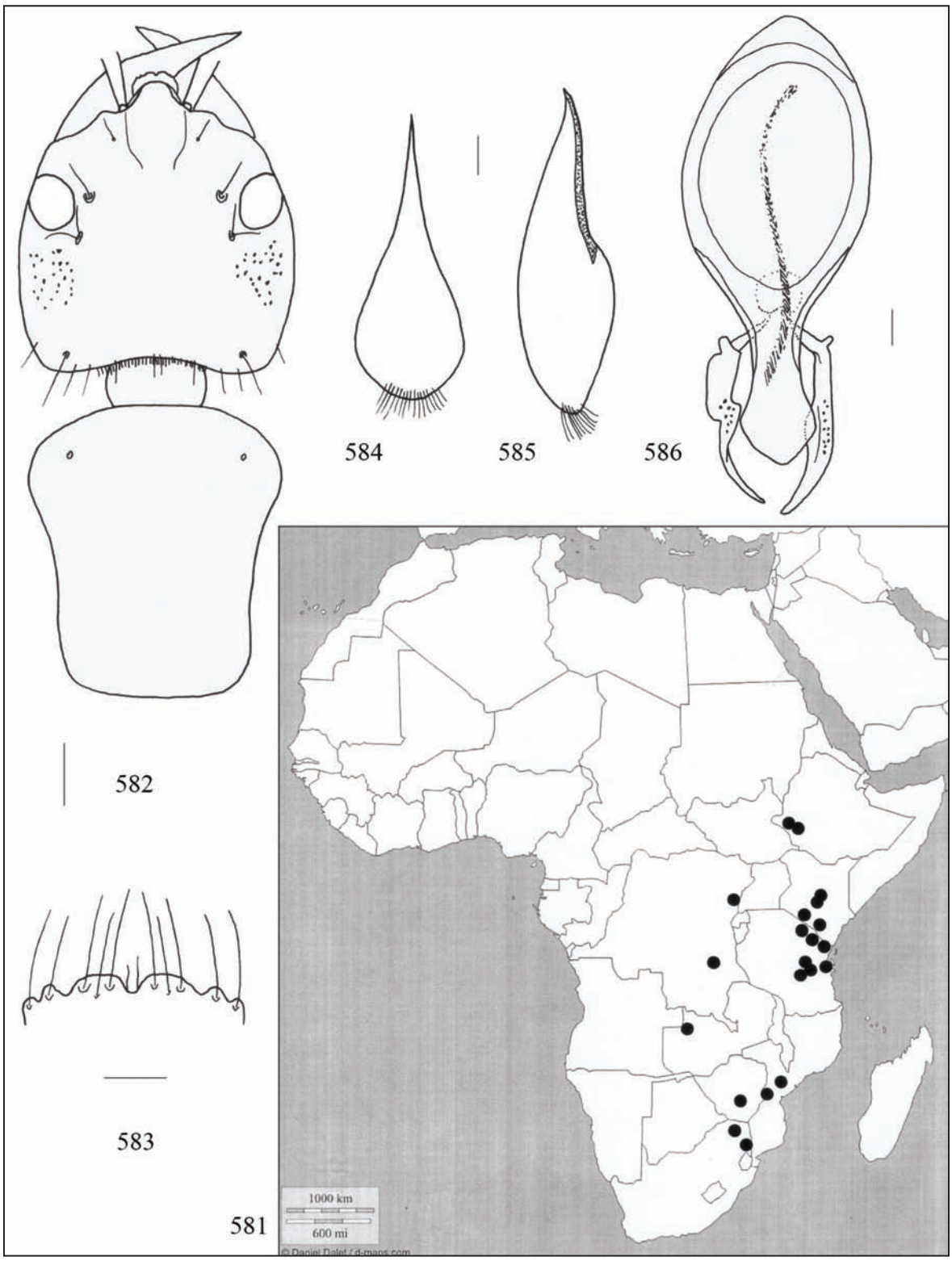
Figures 555–560. Fig. 555: distribution of *Thyreocephalus mocquerysi* sub-group: *T. mocquerysi* (circle), *T. lolaensis* n. sp. (rhombus), *T. konduensis* n. sp. (inverted triangle), *T. gabonensis* (star); and *T. nairobiensis* sub-group: *T. nairobiensis* (square). Figures 556–560. *Thyreocephalus mocquerysi*: head and pronotum (bar scale: 0.5 mm) (Fig. 556), labrum (bar scale: 1 mm) (Fig. 557), tergite and sternite of the male genital segment, aedeagus (Figs. 558–560) (bar scale: 0.1 mm).



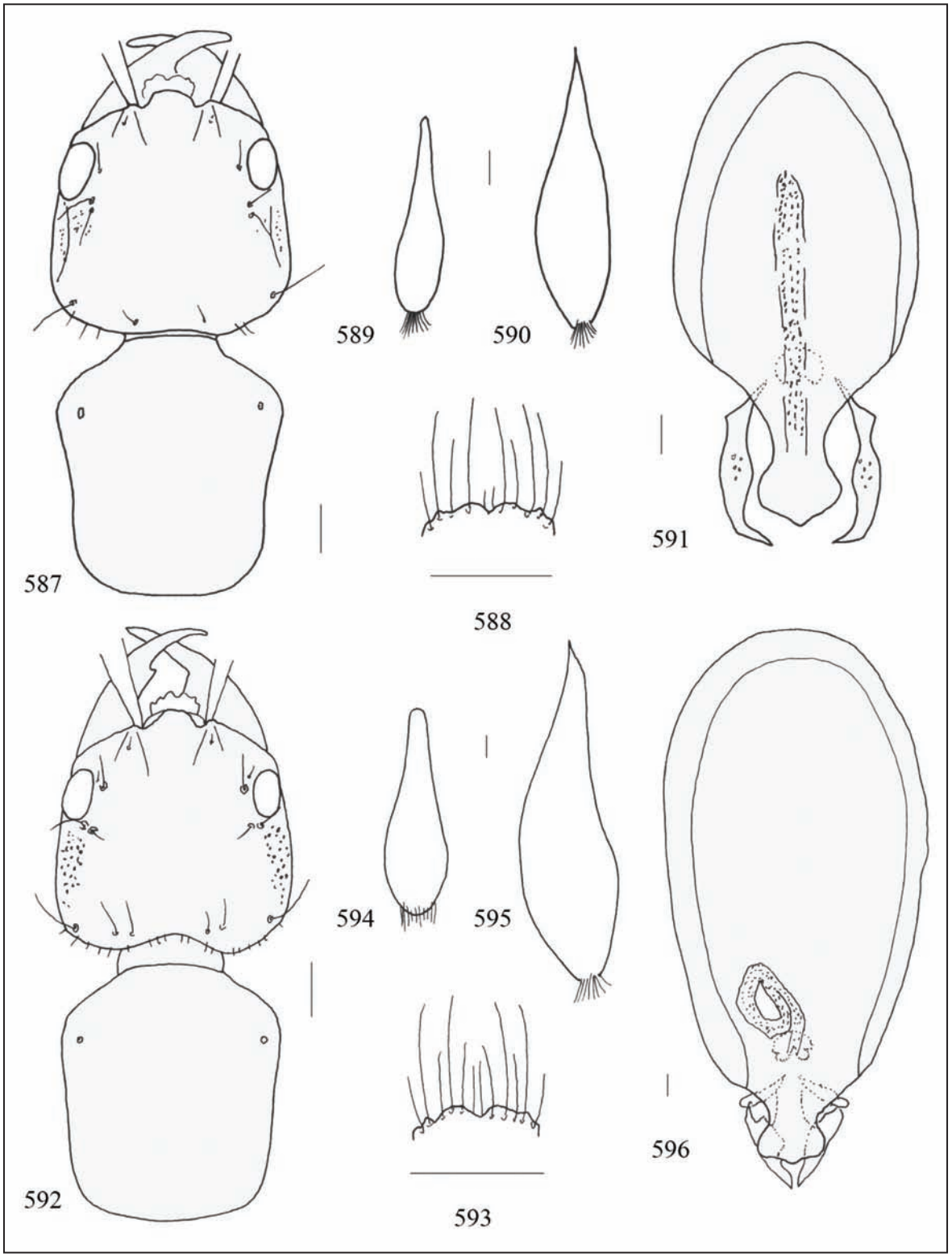
Figures 561–570. *Thyreocephalus lolaensis* n. sp.: head and pronotum (bar scale: 0.5 mm) (Fig. 561), labrum (bar scale: 1 mm) (Fig. 562), tergite and sternite of the male genital segment, aedeagus (Figs. 563–565) (bar scale: 0.1 mm). *Thyreocephalus konduensis* n. sp.: head and pronotum (bar scale: 0.5 mm) (Fig. 566), labrum (bar scale: 1 mm) (Fig. 567), tergite and sternite of the male genital segment, aedeagus (Figs. 568–570) (bar scale: 0.1 mm).



Figures 571–580. *Thyreocephalus gabonensis*: head and pronotum (bar scale: 0.5 mm) (Fig. 571), labrum (bar scale: 1 mm) (Fig. 572), tergite and sternite of the male genital segment, aedeagus (Figs. 573–575) (bar scale: 0.1 mm). *Thyreocephalus semipiceus*: head and pronotum (bar scale: 0.5 mm) (Fig. 576), labrum (bar scale: 1 mm) (Fig. 577); tergite and sternite of the male genital segment, aedeagus (Figs. 578–580) (bar scale: 0.1 mm).



Figures 581–586. Fig. 581: distribution of *Thyreocephalus semipiceus*. Figs. 582–586. *Thyreocephalus manfredi*: head and pronotum (bar scale: 0.5 mm) (Fig. 582), labrum (bar scale: 1 mm) (Fig. 583), tergite and sternite of the male genital segment, aedeagus (Figs. 584–586) (bar scale: 0.1 mm).



Figures 587–596. *Thyreocephalus nairobiensis*: head and pronotum (bar scale: 0.5 mm) (Fig. 587), labrum (bar scale: 1 mm) (Fig. 588), tergite and sternite of the male genital segment, aedeagus (Figs. 589–591) (bar scale: 0.1 mm). *Thyreocephalus meridioafricanus*: head and pronotum (bar scale: 0.5 mm) (Fig. 592), labrum (bar scale: 1 mm) (Fig. 593), tergite and sternite of the male genital segment, aedeagus (Figs. 594–596) (bar scale: 0.1 mm).

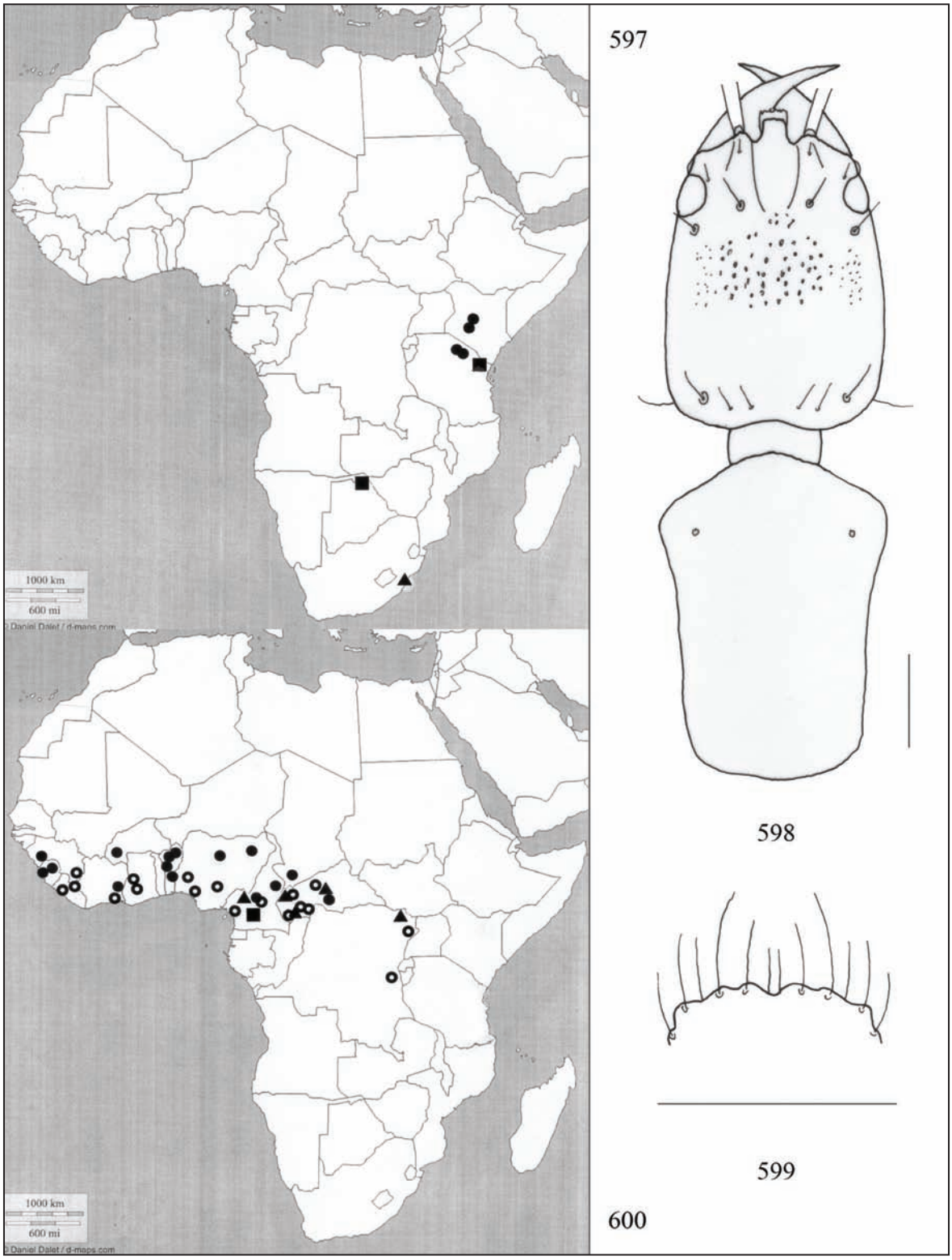
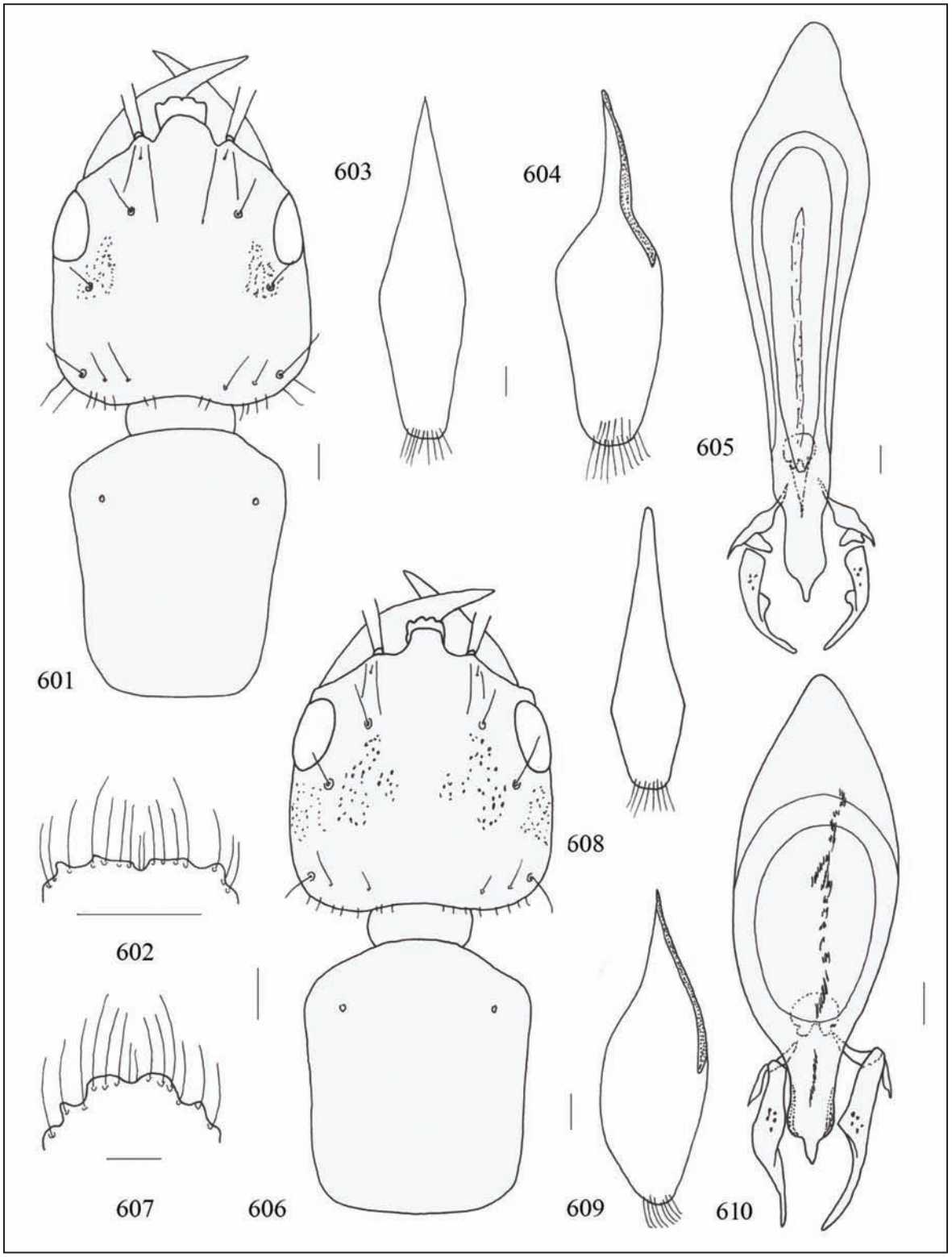
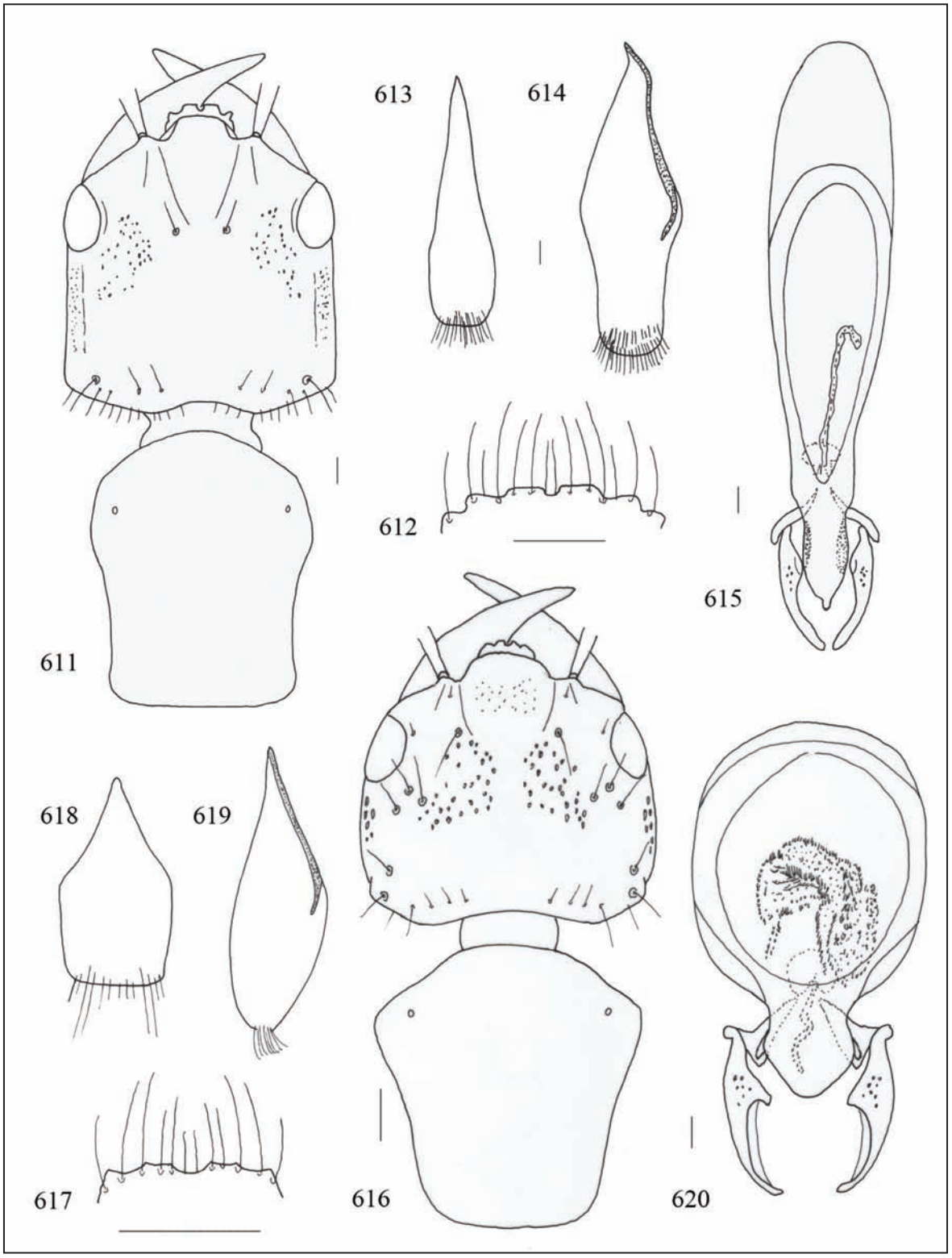


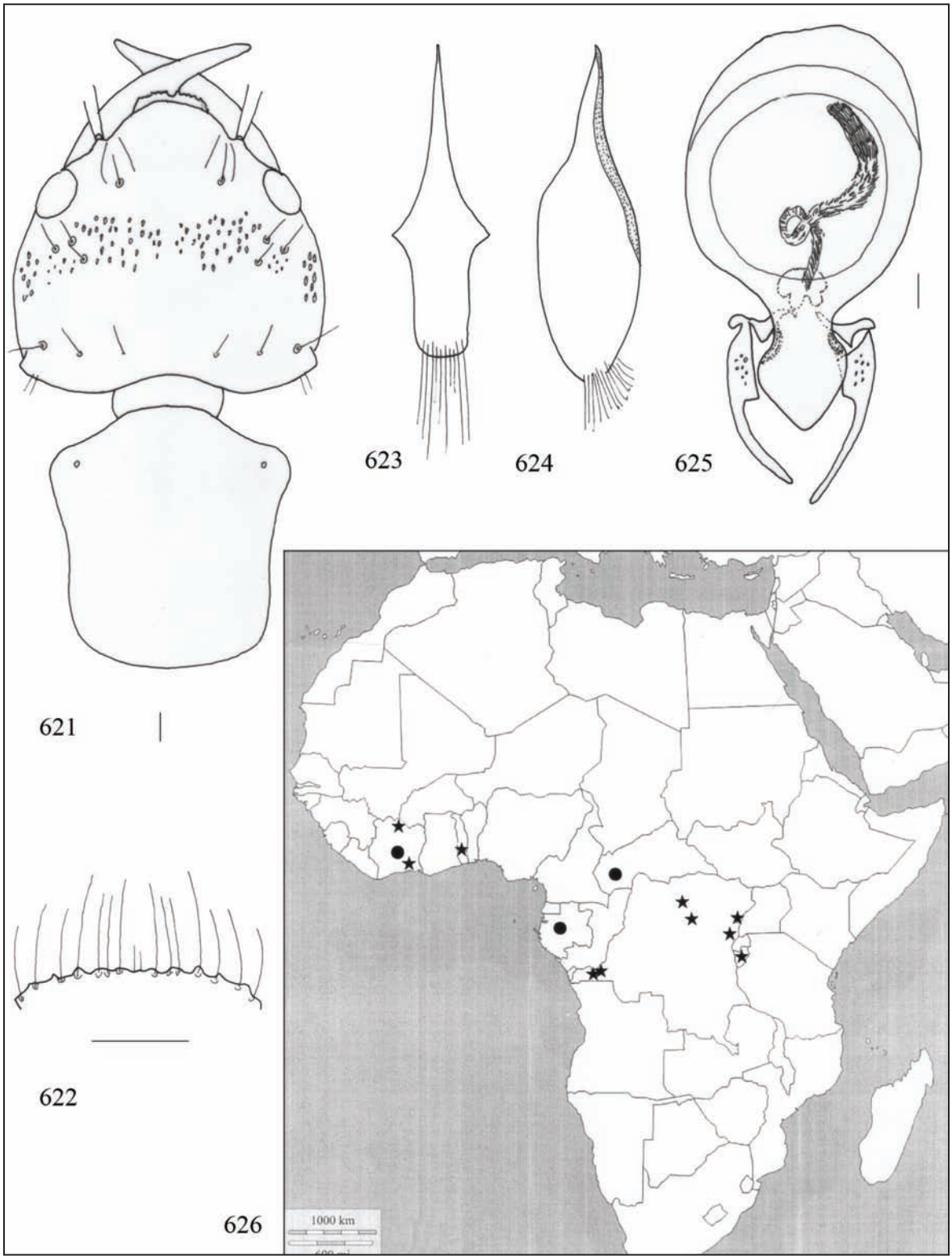
Figure 597–600. Fig. 597: distribution of *Thyreocephalus nairobiensis* sub-group: *T. manfredi* (square), *T. nairobiensis* (circle), *T. meridioafricanus* (triangle). Figs. 598–599. *Thyreocephalus minutus* n. sp.: head and pronotum (bar scale: 0.5 mm) (Fig. 598), labrum (bar scale: 1 mm) (Fig. 599). Fig. 600: distribution of *Thyreocephalus magnus* sub-group: *T. minutus* n. sp. (square), *T. magnus* (filled circle), *T. michaeli* (open circle), and *T. giganteus* sub-group: *T. giganteus* (triangle).



Figures 601–610. *Thyreocephalus magnus*: head and pronotum (bar scale: 0.5 mm) (Fig. 601), labrum (bar scale: 1 mm) (Fig. 602), tergite and sternite of the male genital segment, aedeagus (Figs. 603–605) (bar scale: 0.1 mm). *Thyreocephalus michaeli*: head and pronotum (bar scale: 0.5 mm) (Fig. 606), labrum (bar scale: 1 mm) (Fig. 607), tergite and sternite of the male genital segment, aedeagus (Figs. 608–610) (bar scale: 0.1 mm).



Figures 611–620. *Thyreocephalus giganteus*: head and pronotum (bar scale: 0.5 mm) (Fig. 611), labrum (bar scale: 1 mm) (Fig. 612), tergite and sternite of the male genital segment, aedeagus (Figs. 613–615) (bar scale: 0.1 mm). *Thyreocephalus fortepunctatus* n. sp.: head and pronotum (bar scale: 0.5 mm) (Fig. 616), labrum (bar scale: 1 mm) (Fig. 617), tergite and sternite of the male genital segment, aedeagus (Figs. 618–620) (bar scale: 0.1 mm).



Figures 621–626. *Thyreocephalus clypeatus* n. sp.: head and pronotum (bar scale: 0.5 mm) (Fig. 621), labrum (bar scale: 1 mm) (Fig. 622), tergite and sternite of the male genital segment, aedeagus (Figs. 623–625) (bar scale: 0.1 mm). Fig. 626: distribution of *Thyreocephalus clypeatus* sub-group: *T. fortepunctatus* n. sp. (circle), *T. clypeatus* n. sp. (star).

13. Genus ***Gyrohypnus*** Leach, 1819 (Figs. 627–655)

Gyrohypnus - Leach, 1819: 172; Mannerheim, 1831: 7 (ex parte); Mulsant & Rey, 1877: 74; Ganglbauer, 1895: 479; Casey, 1906: 386 (ex parte); Reitter, 1908: 17; 1909: 136; Johansen, 1914: 433; Scheerpeltz, 1926: 90; Porta, 1926: 88: Hansen, 1952: 15; Coiffait, 1956: 53; 1962: 390; 1972: 175; Smetana, 1958: 95; 1982: 187; Arnett, 1960: 247: 1968: 247 (ex parte); Palm, 1963: 45; Lohse, 1964: 161; Saiz, 1970: 383; Szujecki, 1976: 19; Outerelo, 1981: 125; Bordoni, 1982: 206; Toth, 1989: 16; Downie & Arnett, 1996: 400; Herman, 2001a: 3636; Bordoni, 2002: 616; 2005: 535; 2005a: 358

Xantholinus - Erichson, 1839a: 422; 1839: 306; LeConte, 1861: 65; LeConte & Horn, 1883: 96 (all ex parte, nec Dejean, 1821)

Hyponygrus - Tottenham, 1940: 49; Hatch, 1957: 233; Moore, 1963: 94; Moore & Legner, 1974: 557; 1979: 59 (all ex parte)

TYPE SPECIES OF *Gyrohypnus*: *Staphylinus fracticornis* O.F. Müller, 1776, fixed by Smetana, 1979: 47.

TYPE SPECIES OF *Hyponygrus*: *Staphylinus fracticornis* O.F. Müller, 1776, by Tottenham's original designation, 1940: 49.

DESCRIPTION. Body robust (Fig. 627). Head with obvious punctation posteriorly and on the sides. Head normally with a carina separating the ventral and lateral surfaces, usually with a more or less wide impunctate median band. Frontal grooves distinct, parallel or slightly convergent; ocular grooves indistinct. Folded part of the temples flattened, separated from the ventral surface of the head by a longitudinal protrusion ending in a tooth-like posterior protuberance. Antennae with the segments 2, 3 short, subequal. Labrum short, bilobate. Maxillary palpi with segments 2, 3 sub-equal in length, and the last segment slightly longer and narrower than the penultimate, sub-acute apex. Labial palpi with the last segment a little longer and narrower than the 2nd. Gular sutures contiguous. Pronotum with dorsal and lateral series of punctures. Upper epipleural line of the pronotum folded towards the prosternum a little before of the anterior angles and not joining the lower line. Metatibiae with two apical overlapping ctenidia (for all these characters cf. Bordoni, 2002). Sternite of the male genital segment reduced and asymmetrical (Fig. 629). Aedeagus with parameres thick, valviform, covered with pubescence on the inner side (Figs. 630, 637, 638). Female genital segment (Bordoni, 2002: fig. 89).

DISTRIBUTION. This genus is spread in the Olarctic region and in the western part of the Oriental one (Bordoni, 2002) and in the Australian Region (Bordoni, 2005). In New Zealand occurs an introduced species (Bordoni, 2005a). One native species and two introduced ones are known from North America (Smetana, 1982). In Africa it occurs in Ethiopia and central regions (Fig. 655).

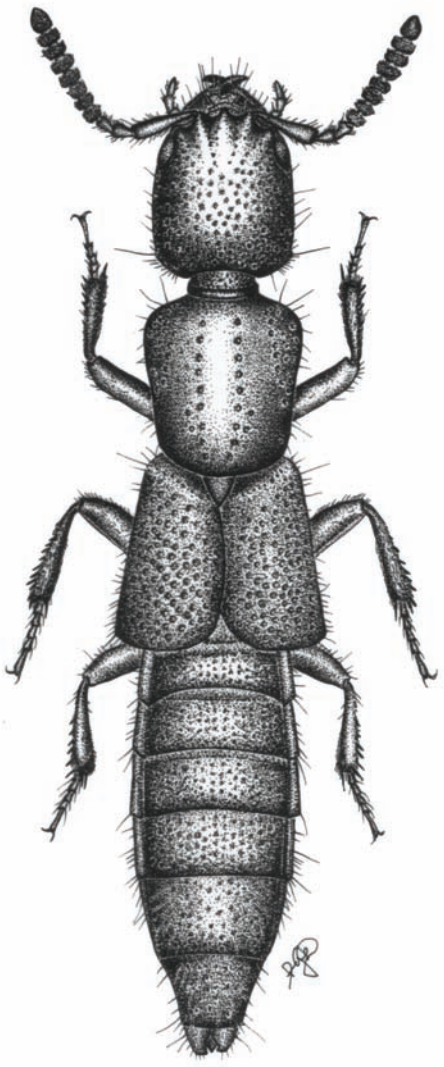


Figure. 627. Habitus of *Gyrohypnus* sp. (ex Bordoni, 2002).

BIONOMICS. The Olarctic species live on various decomposing substances, in debris and mosses of woods. The Oriental ones, according to the data in my hands, were collected in dead wood, leaf litter, mosses and dung, always in mountains between 1,800 and 2,800 m a.s.l. Pre-imaginal stages: some larvae ascrivable to this genus have been described, but maybe they cannot be attributed to one species with certainty (Bouché, 1834; Xambeu, 1891, 1911; Pototskaya, 1967).

KEY TO THE SPECIES

1. Pronotum with dorsal series of 14, 15 punctures and lateral series of 11, 12 punctures; head without visible lateral carina, separating the ventral and lateral surfaces; the lateral surface with a narrow strip without punctures; body robust, 10.5 mm long, black with brown elytra and abdomen; elytra with deep and dense punctation. Aedeagus as in figure 630. Ethiopia.....1. *G. rougemonti* n. sp.
-. Pronotum with dorsal series of very few punctures; head with lateral carina.....2

2. Dorsal series of pronotum of 1 anterior and 1 posterior punctures; lateral series absent, one puncture near the anterior angles. Body light reddish brown, 8 mm long; head with deep, irregular punctation forming some striae laterally; elytra with three series of punctures, one juxtasutural, one median and one lateral. Aedeagus as in figure 633. Rep. Congo.....2. *G. paramerum* n. sp.
-. Dorsal series of pronotum of 2 anterior and 1 posterior punctures.....3
-. Dorsal series of pronotum of 3 anterior and 1 or no posterior punctures.....6

3. Body 9.5 mm long, reddish brown with black head; head with deep, dense, regular punctation on almost all the surface, not forming striae; pronotum with lateral series of 2 punctures and 1 additional puncture near the anterior angles; elytra with fine punctation, arranged in few, spaced series. Aedeagus as in figure 637. Uganda.....3 *G. ugandensis* n. sp.
-. Body less than 9 mm long.....4
4. Body 6-7.5 mm long.....5
-. Body 5.4 mm long; dark reddish brown, with head blackish; head narrow anteriorly, with deep, not particularly dense punctation; pronotum shiny, with lateral series of 2 punctures and few additional punctures near the anterior angles; elytra with about three series of punctures, one (sometime two) juxtasutural, one median and one lateral; abdomen usually without microsculpture. Aedeagus of very characteristic shape (Fig. 642). Rwanda, Congo.....4. *G. tropicus* n. sp.

5. Body massive, 7 mm long, black, with pronotum reddish black and elytra reddish, anteriorly infuscate; head wider, with more rounded sides and finer punctation; pronotum with lateral series of 2 punctures and 2 additional punctures near the anterior angles; elytra with fine punctation arranged in three series, one juxtasutural, one median and one lateral. Aedeagus (as in figure 645. Tanzania.....5. *G. stercorosus* n. sp.
-. Body slender, 6 mm long, light reddish brown, with darker head and elytra; head narrower, with less rounded sides and coarser punctation; pronotum with lateral series of 2 punctures and 1 additional puncture near the anterior angles; elytra with fine punctation arranged in three series, one juxtasutural, one median and one lateral. Aedeagus as in figure 648. Kenya.....6. *G. shimba* n. sp.

6. Dorsal series of pronotum of 3 anterior and 1 posterior punctures; lateral series of 5 punctures, sometime forming a groove; body 7 mm long, reddish brown, more or less dark, with black head and red elytra; elytra with deep and fine punctation, arranged in numerous series. Aedeagus as in figure 651. Ethiopia, Kenya, Congo.....7. *G. remotus*
-. Dorsal series of pronotum of 3 widely spaced punctures; lateral series of 4 punctures and some additional punctures near the anterior angles; body dark reddish brown, with black head and blackish pronotum, 7.8 mm long; head sub-rectangular, with sub-rectilinear sides; surface with deep, dense punctation, apart from the median band; pronotum massive; elytra with fine, deep punctation arranged in 5, 6 series. Aedeagus as in figure 654. Congo.....8. *G. leopoldinus* n. sp.

1. ***Gyrohypnus rougemonti*** n. sp.

EXAMINED MATERIAL. Holotype male: Ethiopia, Arussi Prov., Hosaena Kambata, 2300 m, G. de Rougemont, 28.V.1974 (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 10.5 mm; from anterior margin of head to posterior margin of elytra: 5 mm. Fully winged and shiny. Black with bown elytra and brownish black abdomen. Antennae and legs brown. Head sub-quadrate, large, with slightly rounded sides, narrowly rounded posterior angles, without visible posterior tooth-shaped projections, and without visible lateral carina separating the ventral and lateral surfaces; the lateral surface with a narrow impunctate strip. Eyes medium-sized, not protruberent. Surface with deep, regular and dense punctation apart from a narrow median band. Pronotum as long as head, anteriorly dilated and there narrower than head, with oblique anterior margins. Surface with dorsal series of 14, 15 irregular punctures and lateral oblique series of 11, 12 smaller punctures; some other punctures near the anterior angles. Elytra sub-rectangular, not dilated posteriad, with slightly rounded sides and marked humeral angles. Surface with fine, deep and dense punctation arranged in numerous series. Abdomen with deep and dense punctation. Tergite and sternite of the male genital segment as in figures 628, 629; tergite partially membranous. Aedeagus 1.2 mm long (Fig. 630), oval, with distal portion dilated; parameres small, with pale setae; inner sac not visible.

ETYMOLOGY. Patronymic. Dedicated to the collector Guillaume de Rougemont, friend and colleague who also edited the text version in English.

DISTRIBUTION. The species is so far only known from the type locality (Fig. 655).

REMARKS. Female unknown.

2. ***Gyrohypnus paramerum*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Brazzaville, Lafinie reservation, Nanbouli river, Endrödy-Younga, 12.I.1964 (MTM); paratypes: same data, 3 females (MTM), 3 males, 3 females (cB).

DESCRIPTION. Length of body: 8 mm; from anterior margin of head to posterior margin of elytra: 3.8 mm. Fully winged and shiny. Reddish brown with head infuscate and paler abdomen. Head anteriorly narrowed, with narrowly rounded posterior angles and there with tooth-shaped projection. Eyes large and protruberent. Surface of head, apart the median band, with deep punctation forming striae on the sides. Pronotum longer and narrower than head, with slightly oblique anterior margins, largely rounded anterior angles. Surface with dorsal series of 1 anterior and 1 posterior punctures in an oblique line; without lateral series and with 1 additional puncture near the anterior angles. Elytra longer and wider than pronotum, dilated posteriad, with marked humeral angles and superficial punctation arranged in three series, one juxtasutural, one median and one lateral. Abdomen with fine and sparse punctation. Tergite and sternite of the male genital segment as in figures 631, 632. Aedeagus 1 mm long (Figs. 633, 634), with large characteristic parameres, furnished with setae on their inner sides; inner sac almost not visible. The aedeagus is narrower than that of *G. ugandensis* n. sp. and the parameres are very different in shape.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the shape of parameres (derived from the greek adjective parameres and so if latinized should probably be inflected *-meris -meres*).

DISTRIBUTION. The species is, at present, only known from the type locality in Rep. Congo (Fig. 655).

3. ***Gyrohypnus ugandensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Uganda, Fort Portal, 15 km W Sebitoli, 1400 m, M. Snizek, 23.XI–5.XII.1994 (cJ).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 9.5 mm; from anterior margin of head to posterior margin of elytra: 4.8 mm. Fully winged and shiny. Body dark reddish brown, with head black; antennae and legs testaceous. Body larger, more robust and darker than that of *G. paramerum* n. sp. Head quadrate, larger than that of paramerum,

slightly narrowed anteriorly, with scarcely rounded sides. Eyes similar to those of *G. paramerum* n. sp. Surface of head entirely covered with very dense, deep punctation forming striae on the sides; the punctation sparser on the median surface. Pronotum longer than that of *G. paramerum* n. sp., anteriorly dilated and as wide as that of *G. paramerum* n. sp., with oblique anterior margins and broadly rounded anterior angles; dorsal series of 2 anterior and 1 posterior punctures; lateral series of 2 anterior punctures, and 1 additional puncture near the anterior angles. Elytra large, much longer and wider than pronotum, dilated posteriad, with marked humeral angles. Surface with fine, very dense punctation arranged in a few series. Tergite and sternite of the male genital segment as in figures 635, 636. Aedeagus (Figs. 637, 638) 1 mm long, with large characteristic parameres, provided with setae on the inner side; inner sac not visible.

ETYMOLOGY. The specific epithet refers to Uganda.

DISTRIBUTION. The species is only known from the type locality (Fig. 655).

REMARKS. Female unknown.

4. ***Gyrohypnus tropicus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo (Zaire), Karisimbi. R. Lejeune, VII.1970 (MRAC); paratypes: same data, 1 male, 5 females (MRAC), 2 males, 4 females (cB); Ruanda, Rugege Wald, 2100 m, S. Graver, 1 ex. (MNB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.4 mm; from anterior margin of head to posterior margin of elytra: 3.3 mm. Fully winged and shiny. Reddish brown with head and elytra a little infuscate. Head (Fig. 639) robust, sub-rectangular, slightly dilated posteriad, with sub-rectilinear sides and rounded posterior angles, where it is furnished with a dentiform projection. Eyes medium-sized, protruberent. Surface of head, apart the median band, with irregular, ovoid punctation, mixed with some oblique striae. Ocular and frontal grooves very deep. Pronotum massive (Fig. 639), proportionately squat, anteriorly dilated, a little longer and wider than head, with sinuate sides and slightly oblique anterior margins, with very broadly rounded anterior angles. Surface with dorsal series of 2 anterior and 1 posterior punctures and lateral series of 2 oblique punctures and one additional puncture near the anterior angles. Elytra very large, much longer and wider than pronotum, dilated posteriad, with scarcely marked humeral angles. Surface with very fine punctation arranged in three series, one juxtasutural, one median and one lateral. Abdomen with traces of more or less polygonal micro-reticulation and fine and sparse punctation. Tergite and strnite of the male genital segment partially membranous, as in figures 640, 641. Aedeagus 1 mm long (Figs. 642, 1752), oval, with truncate distal margin; parameres very characteristic, furnished with setae on the outer side; inner sac with two large opposite structures, partially outside of the basal bulb, composed of comb-shaped spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is derived from the Latin *tropicus -a -um* (tropical).

DISTRIBUTION. Congo, Ruanda (Fig. 655).

REMARKS. The specimen of the Museum für Naturkunde in Berlin is in very poor conditions, lacking almost all of antennae and parts of legs.

5. ***Gyrohypnus stercorosus*** n. sp.

EXAMINED MATERIAL. Holotype male: Tanganyika, Mt Meru, E slope, 5700 ft., J. Szunyoghy, 1.II.1966 (MTM); paratypes: same data, 2 males, 2 females (MTM), 2 males (cB); same data, 26.I.1966, 1 female (MTM), 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 7 mm; from anterior margin of head to posterior margin of elytra: 4 mm. Body fully winged and shiny, massive. Head black, pronotum and elytra reddish brown, abdomen brownish black; antennae and legs brown. Head large, slightly narrowed anteriorly, with narrowly rounded posterior angles. Eyes large but not protruberent. Surface of head with deep and dense punctation on the sides and posterior half. Pronotum longer than head, dilated anteriorly where it is as wide as head, with narrowly rounded anterior angles; dorsal series of 2 anterior and 1 posterior punctures and lateral

series of 2 anterior punctures; 2 additional punctures near the anterior angles. Elytra as long as and broader than pronotum, dilated posteriad, with marked humeral angles. Surface with coarse, shallow punctation arranged in three series, one juxtasutural, one median, one lateral. Abdomen with punctation on the sides. Tergite and sternite of the male genital segment as in figures 643, 644. Aedeagus large (Fig. 645), 1.66 mm long, oval, with short parameres; inner sac with a cluster of fine spines distally.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is derived from the Latin *stercus -oris* (excrement), in reference to its bionomic data.

DISTRIBUTION. The species is only known from the type locality, in Tanzania (Fig. 655).

BIONOMICS. The specimens were collected in dung.

6. ***Gyrohypnus shimba*** n. sp.

EXAMINED MATERIAL. Holotype male: Kenya, Shimba for., T. Palm, 17.III.1970 (ZML); paratype: same data, 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Fully winged. Head black, pronotum and elytra reddish brown, abdomen brown, with last segments yellowish. Head quadrate, slightly narrowed anteriorly, with scarcely rounded sides, and almost right angled postero-lateral angles, where it bears a dentiform projection. Surface wrinkled, with traces of polygonal micro-reticulation and, apart a median band, with deep, large punctures forming striae on the sides. Pronotum massive, broad, longer than head, anteriorly dilated where it is almost wider than head, with broadly rounded anterior angles. Surface shiny, with dorsal series of 2 anterior and 1 posterior punctures and lateral series of 2 punctures and 1 additional puncture near the anterior angles. Elytra large, sub-rectangular, scarcely dilated posteriad, much longer and wider than pronotum, with sub-rectilinear sides and marked humeral angles. Surface with shallow punctation arranged in three series, one juxtasutural, one median, one lateral. Abdomen with traces of polygonal micro-reticulation and fine and sparse punctation. Tergite and sternite of the male genital segment as in figures 643, 644; the tergite short and membranous. Aedeagus large (Figs. 645, 1753), 1.1 mm long, oval, with short triangular parameres, with a characteristic proximal portion and with a small apical seta; inner sac very large and long, folded on itself and covered with partially rounded scales.

VARIABILITY. The paratype have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is only known from the type locality in Kenya (Fig. 655).

REMARKS. Female unknown.

7. ***Gyrohypnus remotus*** (Eppelsheim, 1895) comb. n.

Xantholinus remotus - Eppelsheim, 1895: 208; Bernhauer & Schubert, 1914: 307; Herman, 2001a: 3818

Xantholinus abessinus - Bernhauer, 1931: 582; Scheerpeltz, 1933: 1307; Herman, 2001a: 3779, syn. n.

Xantholinus aeneipennis - Bernhauer, 1934: 235; Herman, 2001a: 3779, syn. n.

Xantholinus tripunctatus - Tottenham, 1951: 399; Herman, 2001a: 3827, syn. n.

TYPE MATERIAL. The Museo civico di Storia naturale of Genova preserves 1 specimen labelled "*Arussi Galla / Ganale Guddà III-V.93/ V. Bottego*", "remotus / *Epp.*", "Xantholinus / remotus / *Epp. sp. n.*" (handwritten by Eppelsheim), "*Holotypus* (printed) / Xantholinus / remotus / *Eppelsheim*" (on orange label). It is a male, now bearing the label "Gyrohypnus remotus *(Epp.), Bordoni det. 2006*".

The Natural History Museum of London preserves 1 specimen labelled "*Type*" (printed on round label with red border), "*from excreta of / cattle and horses*", "*Abyssinia / Mt Chillalo / circa 10.000 ft. / 17.XI.1926 / Dr. H. Scott*", "Xantholinus / abessinus *Brnh. / Typus*". It is a male identical to

G. remotus that I choose as lectotype of the species; it have the label "*Lectotypus* Xantholinus abessinus *Bh., Bordoni des. 2006*" and the determination "Gyrohypnus remotus *(Epp.), Bordoni det. 2006*".

The Field Museum of Chicago, preserves 1 specimen with the same first two labels and "Xantholinus / abessinus *Brh. / Cotypus*", "abessinus / *Bernh. / Typus*". It is a male, identical to *G. remotus* that I choose as paralectotype of the species; it now bears the labels "*Paralectotypus* Xantholinus abessinus *Bh., Bordoni des. 2006*" and "Gyrohypnus remotus *(Epp.), Bordoni det. 2006*".

The Musée Royal de l'Afrique Centrale in Tervuren preserves 1 specimen labelled "*Type*" (printed on orange label), "*Mus. du Congo/ Kivu: Lulenga/ fin IX.1932/ L. Burgeon*" "Xantholinus / aeneipennis / *Brnh. Typ.*". It is a female identical to *G. remotus*.

The Natural History Museum in London, preserves 1 specimen labelled "*Type*" (printed on round label), "*Naro Moru / Jan. 1941*", "Xantholinus / tripunctatus / *Type Cam.*". It is a female identical to *G. remotus* that now bears the label "Gyrohypnus remotus *(Epp.), Bordoni det. 2006*".

EXAMINED MATERIAL. Ethiopia, Scioa, Antoto, Traversi, X.1885, 1 ex. (MCSNG); Arsi, Assella, 2400 m, S. Persson, 7.XII.1988, 2 males (ZML), 2 males (cB); Gojjam Prov., Mt Choke, 3200–3500 m, R. O. S. Clarke, 15–18.XII.1972, 1 male, 1 female (MRAC).

CITED MATERIAL (not examined). Thierwelt Deutsch-Ost-Africa (Fauvel, 1904).

DESCRIPTION. Length of body: 7 mm; from anterior margin of head to posterior margin of elytra: 3.5 mm. Fully winged and shiny on head and pronotum. Head black, pronotum reddish brown, elytra brown, reddish on the posterior half; abdomen brownish black, with visible abdominal segments 5 and 6 and genital segment reddish. Head subquadrate, scarcely dilated posteriad, slightly rounded sides and broadly rounded posterior angles, the lateral surface flat, separated from the ventral surface by a carina, ending in a dentiform projection. Eyes medium-sized, scarcely protruber-ent. Surface with very deep, dense punctation, apart a median band. Pronotum longer than head, anteriorly dilated where it is wider than head. Surface with dorsal series of 3 anterior and 1 posterior punctures and lateral oblique series of 4, 5 shallow punctures and some punctures near the anterior angles. Elytra large, longer and wider than pronotum, with scarcely marked humeral angles. Surface with very fine and deep polygonal microreticulation and coarse but shallow punctures arranged in three series, one juxtasutural one median, and one lateral. Abdomen with more or less polygonal micro-reticulation and fine punctation on the sides. Tergite and sternite of the male genital segment as in figures 649, 650; the tergite partially membranous, the sternite almost completly membranous. Aedeagus 1.5 mm long (Fig. 651), ovoid, narrowed in the distal portion; parameres of characteristic shape, small.

DISTRIBUTION. Ethiopia, Congo, Kenya (Fig. 655).

BIONOMICS. Cattle, horse excrement.

REMARKS. Three specimens are cited in the description of *Xantholinus abessinus* but I only found one. The specimens cited by Bernhauer (1913) from Abyssinia, Mt Chillalo and Jem Jem are perhaps attributable to this species.

8. ***Gyrohypnus leopoldinus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Burumbu, S.A.R. Prince Léopold (J. Ghesquière), VIII.1925 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 7.8 mm; from anterior margin of head to posterior margin of elytra: 4 mm. Fully winged. Body dark reddish brown with black head and blackish pronotum. Head sub-rectangular, with sub-rectilinear sides, not narrowed anteriorly. Eyes medium-sized and almost flat. Surface of head with deep, dense punctation, apart from the median band. Pronotum massive, longer and wider than head, with oblique anterior margins and rounded anterior angles. Surface shiny, with dorsal series of 3 widely spaced punctures and lateral series of 4 punctures not forming a groove, and some punctures near the anterior angles. Elytra large, longer and wider than pronotum, dilated posteriad, with marked humeral angles. Surface with fine, dense punctation arranged in 5, 6 series. Abdomen with transverse micro-striation and very fine punctation arranged

in 5, 6 series on each segment. Tergite and sternite of the male genital segment as in figures 652, 653. Aedeagus sub-spherical (Fig. 654), 1.3 mm long, with characteristically shaped parameres; inner sac tape-like, folded on itself and covered with scales.

ETYMOLOGY. The specific epithet refers to King Leopold of the Belgians.

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 655).

REMARKS. Female unknown.

14. Genus ***Alexyrea*** n. gen. (Figs. 656–682, 1708)

TYPE SPECIES. *Leptacinus mandibularis* Cameron, 1929.

DESCRIPTION. Similar to *Leptacinus* in the following characters: shape of labial palpi, gular sutures, upper epipleural line not joining the inferior line, antesternal plate divided, pronotum with dorsal and lateral series of punctures, anterior tarsi not dilated. The new genus differs from *Leptacinus* by the following characters: shape of the maxillary palpi with 2nd segment, longer, 3rd segment more globose and the last shorter and narrower (Fig. 657); frontal and ocular grooves very long and deep, deeply incising the cuticle; mandibles of very characteristic shape in the males, very large, wide, with an erect tooth on the left mandible (Fig. 659); head with a conspicuous, postero-lateral impression in the male; the posterior portion of head visibly convex and protruding so as to partially cover the neck; neck of characteristic shape when totally everted (Fig. 656); mesosternum with rounded and not acute posterior margin; elytra partially membranous; structure of the aedeagus; female genital segment (Fig. 661). Fully winged species.

ETYMOLOGY. Name of one of the lover of Hercules. Feminine gender.

DISTRIBUTION. Central Africa, but with one species lives in South Africa.

REMARKS. It is puzzling that Cameron did not notice the particular posterior structure of the head. The characteristic shape of the left mandible in the males my be merely a sexual character or it may be related to the as yet unknown habits.

KEY TO SPECIES

1. Body darker, 5–6.3 mm long.....2
-. Body paler, 4–4.6 mm long, light reddish brown with yellow elytra; head dilated posteriad, with sparse punctation; pronotum with sinuate sides. Aedeagus as in figure 664. Tanzania, Congo.....1. *A. ovaliceps*

2. Body 6.3 mm long, more or less dark reddish brown with black head and yellowish elytra, sometime infuscate posteriad; head large, strongly narrowed anteriorly, inflated posteriad, with very deep, sparse punctation; eyes large but almost flat; left male mandible without visible tooth; pronotum with scarcely sinuate sides. Aedeagus large (Fig. 668). Congo..... .....2. *A. zairensis* n. sp.
-. Body less than 6 mm long.....3

3. Body more robust and darker, black with testaceous elytra, more or less infuscate; head large, oval, with rounded sides and posterior angles and with coarse, deep punctation; posterior impression very deep; eyes smaller; pronotum massive, anteriorly wider than head. Aedeagus slender (Fig. 672). Tanzania..... .....3. *A. pholeophila* n. sp.
-. Body less robust and paler, 5.5 mm long; head sub-ovoid, with less rounded sides and posterior angles; shallower punctation; eyes larger; pronotum not massive.....4

4. Body larger, reddish brown with black head; head less quadrate Aedeagus (Fig. 677). Tanzania, Kenya, Congo.....4. *A. mandibularis*
-. Body slender, narrow, brown with lighter elytra; head more quadrate. Aedeagus as in figure 681. South Africa.....5. *A. transkeiana* n. sp.

1. ***Alexyrea ovaliceps*** (Bernhauer, 1937) comb. n.

Leptacinus ovaliceps - Bernhauer, 1937: 608; 1942c: 361; Herman, 2001a: 3680

TYPE MATERIAL. The Field Museum of Natural History of Chicago preserves 1 specimen labelled "*Nord Ulugara / 1400-1900 m / Febr. 14 leg. Methner*", "*Deutsch. Ost / Afrika*", "ovaliceps / *Brh. Typ.*

un.", "ovaliceps / *Bernh. Typus/ unic.* Leptacinus" (handwritten by Bernhauer).

EXAMINED MATERIAL. Congo, Massif Ruwenzori, Kalonge, Gite Ruwenzori, 2080 m, P. Vanschuybroek and J. Kekenbosch, 1.X.1952, 1 female (MRAC), 1 male (cB); (Zaire), P. N. Virunga, Volcan Sabinyo, Rutare, N Sabinyo, 2300 m, R.P. Celis, VII.1964, 1 male (cB).

CITED MATERIAL (not examined). Camerun, Mt Cameroun, 1800–2000 m; Mt Bamboato, 2000 m (Bernhauer, 1942).

DESCRIPTION. Length of body: 4–6.6 mm; from anterior margin of head to posterior margin of elytra: 2.3–2.6 mm. Fully winged and shiny. Light brown, with posterior half of elytra and legs yellowish. Head of characteristic shape, oval, with less rounded sides and broadly rounded posterior angles; posterior margin with the usual impression. Eyes large and protruberent. Mandibles as in figure 659. Surface of head with transverse micro-striation and coarse, dense and deep punctation bearing with long setae, apart from a median band. A series of confluent punctures on the lateral surface of head forms a sort of stria. Pronotum a little longer than head, anteriorly slightly dilated, where it is as wide as head, with oblique anterior margins and obsolete anterior angles. Surface with traces of transverse micro-striation; dorsal series of 5 punctures and lateral oblique series of 4 punctures. Elytra large, membranous, dilated posteriad, with less marked humeral angles. Surface with three series of large but shallow punctures, one juxtasutural, one median and one lateral. Abdomen with transverse micro-striation and fine punctation, especially on the sides. Tergite and sternite of the male genital segment as in figures 662, 663; sternite not filiform. Aedeagus very small (Fig. 664), 0.48 mm long, of characteristic shape, translucent, with median lobe sub-rectangular; parameres slender and arched; inner sac dilated in the proximal portion, with small sparse scales.

DISTRIBUTION. Tanzania, Congo (Fig. 682).

BIONOMICS. The specimen were collected in "*detritus près cases*" and "*sous bambous*".

2. ***Alexyrea zairensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo (Zaire), Karisimbi, R. Lejeune, VII.1970, 1 male (MRAC); paratypes: same data, 1 male, 2 females (MRAC), 1 male, 2 females (cB).

DESCRIPTION. Length of body: 6.2 mm; from anterior margin of head to posterior margin of elytra: 3.3 mm. Surface of head with traces of more or less transverse micro-striation. Similar to *A. mandibularis*, but larger, broader and more robust. Head much larger, more dilated posteriad; posterior margin with a salient median process. Frontal grooves very deep and long, convergent and followed by a narrow groove extending more than half of the length of head. Surface with coarser and sparser punctation than that of *A. mandibularis*. Mandible without or with a very small tooth, as in figure 665. Pronotum broader and longer and more dilated anteriorly than in *A. mandibularis*, with more oblique anterior margins; dorsal series of 7 punctures and lateral series of 4 punctures, all the punctures larger and deeper than that in *A. mandibularis*. Elytra longer, with more marked humeral angles and coarser and deeper punctation. Tergite and sternite of the male genital segment as in figures 666, 667. Aedeagus larger than that of *A. mandibularis* (Fig. 668) , 0.74 mm long, less narrow, with distal portion bilobed; inner sac longer, folded around itself, covered with fine scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Zaire.

DISTRIBUTION. The species is only known from the type locality, in Congo (Fig. 673).

3. ***Alexyrea pholeophila*** n. sp.

EXAMINED MATERIAL. Holotype male: Tanzania, (Tanganyika), Terr. Ngorongoro, 2400–2500 m, P. Basilewsky and N. Leleup, 14–17.VI.1957 19 exx. (MRAC), 13 exx. (cB); Tanzania, (Tanganyika), Terr. Mt Meru, Olkokola, vers. NO, 2800 m (Nat. Park Azusha), P. Basilewsky and N. Leleup, 8.VII.1957, 14 exx. (MRAC), 10 exx. (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.5 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Body black, with testaceous elytra, more or less infuscate; surface

with traces of evident, transverse micro-striation. Head oval, large, with rounded sides and posterior angles. Posterior impression very deep. Eyes less than medium-sized, almost flat. Left mandible as in figure 669. Surface of head with coarse, deep, sparse punctation, apart from the median band. Pronotum massive, strongly dilated anteriorly, as long and a little wider than head, with very oblique anterior margins and broadly rouned anterior angles. Surface with dorsal series of 7, 8 punctures and lateral series of 5, 6 punctures, all the punctures large and deep. Elytra long, longer and wider than pronotum, with marked humeral angles. Surface with fine punctation arranged in a few series. Tergite and sternite of the male genital segment as in figures 670, 671. Aedeagus very narrow (Fig. 672), 0.6 mm long, with short parameres and inner sac very narrow and short.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the Greek *pholeós* and *philèo* (living in burrows).

DISTRIBUTION. The species is only known from Tanzania (Fig. 682).

BIONOMICS. Many specimens were collected in "*terrier de* Tachyoryctes", rodents of the family Spalacidae. It maybe assumed that this species, or all its congeners, live in burrows of rodents. The particular shape of the mandibles may be related to the insects' habits.

4. ***Alexyrea mandibularis*** (Cameron, 1929) comb. n. (Figs. 1708, 1709)

Leptacinus mandibularis - Cameron, 1929: 4; Scheerpeltz, 1933: 1302; Cameron, 1933: 41; 1950: 28; Bernhauer, 1942c: 360; Herman, 2001a: 3678

TYPE MATERIAL. The Musée royal de l'Afrique centrale of Tervuren preserves 2 specimens, one labelled "*Holotype*" (printed on orange label with black border), "*Musée du Congo / Kivu: Burunga / 3.XII.1925 / Dr. H. Schouteden*", and the other "*Paratype*" (printed on orange label with black border), "*Musée du Congo / Kivu: Kibati / 5.XI.1925 / Dr. H. Schouteden*"; both bear the label "Leptacinus / mandibularis / *TYPE Cam.*". The first is a male that I choose as lectotype of the species; it now bears the label "*Lectotypus* Leptacinus mandibularis *Cam., Bordoni des. 2006*"; I choose the second as paralectotype of the species; it bears the label "*Paralectotypus* Leptacinus mandibularis *Cam., Bordoni des. 2006*".

The Natural History Musum of London preserves 1 specimen labelled "*Kivu: Lulenga / 23.XI.1925 / H. Schouteden*", "Leptacinus / mandibularis / *Cam.*"; I also designate this specimen paralectotype of the species; it bears the label "*Paralectotypus* Leptacinus mandibularis *Cam., Bordoni des. 2006*". I have affixed the determination "Alexyrea mandibularis *(Cam.), Bordoni det. 2006*" to all these specimens.

EXAMINED MATERIAL. Kenya, Nkubu, Meru, 1500 m, R. Mourglia, 1–10.IV.1987, 1 male (cB); Mt Elgon, Kaptega, 1980 m, T. Leiler, 23.I.1979, 1 male (cJ).

Congo, Itombwe, vall. Ruiss. Mugono, 2700 m, N. Leleup, I.1960, 1 male (cB).

Tanzania, (Tanganyika), Mt Meru, E slope, 5700 ft. S. Szunyoghy, 1.II.1966, 2 males, 2 females (MTM), 2 males, 1 female (cB), 1 ex. (without genital segment) (MTM).

CITED MATERIAL (not examined). Congo: Kanyabayongo (Kabasha), 1760 m (Cameron, 1950).

DESCRIPTION. Length of body: 5–5.5 mm; from anterior margin of head to posterior margin of elytra: 2.6–2.8 mm. Body black with more or less infuscate testaceous elytra; antennae and legs testaceous. Surface with traces of more or less evident transverse micro-striation. Head oval, with rounded sides, broadly rounded posterior angles, posterior impression very deep. Eyes medium-sized almost flat. Left mandible as in figure 674. Surface of head with large, deep, not dense punctation apart from a median band. Pronotum massive, as long as head, strongly dilated anteriorly where it is a little wider than head, with very oblique anterior margins and broadly rounded anterior angles; dorsal series of 7, 8 punctures and lateral series of 5, 6 punctures, all large and deep. Elytra long, longer and wider than pronotum, with marked humeral angles. Surface with fine punctation arranged in few series. Abdomen with very fine and dense punctation. Tergite and

sternite of the male genital segment as in figures 675, 676. Aedeagus small (Figs. 677, 1754), 0.6 mm long, ovoid very narrow, with sub-rectangular distal portion and short parameres; inner sac very narrow, short, covered with sparse and minute scales. Female genital segment as in figure 661.

DISTRIBUTION. Kenya, Tanzania, Congo, Rwanda (Figs. 673, 682).

BIONOMICS. Some specimens from Itombwe were collected "*dans rosettes de jeunes* Lobelia" (Campanulaceae). Other species were collected on flowers of *Lobelia* giant (*L. deckenii* Hemsl.), endemic to the Kilimanjaro and *L. lanuriensis* De Wild. in the areas of Kahuzi, Virunga and Ruwenzori (see below).

5. ***Alexyrea transkeiana*** n. sp.

EXAMINED MATERIAL. Holotype male: South Africa, Transkei, Dwesa, coast, 32.17S, 28.51E, Endrödy-Younga, 4.III.1985 (TMSA); paratypes: Cape Prov., Humansdorp distr., Wit Els bos, N. Leleup, I.1961, 1 male (cB); S Cape, Herkerville Forest, 34.045S, 23.10E, Endrödy-Younga, 7.XII.1976, 2 females (TMSA), 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.5 mm; from anterior margin of head to pos-terior margin of elytra: 2.8 mm. Head black, pronotum and abdomen dark reddish brown, elytra pale testaceous with posterior half light yellowish; antennae and legs light brown. Left mandibles as in figure 678. Similar to *A. ovaliceps* but a little larger; head more elongate and anteriorly narrowed, with slightly coarser and deeper punctation; pronotum more massive, with less obsolete anterior angles; dorsal series of 5, 6 punctures and lateral series of 4 punctures; elytra more sub-rectangular, narrower and proportionately longer, with fine punctation arranged in a few widely spaced series. Tergite and sternite of the male genital segment as in figures 679, 680. Aedeagus (Fig. 681) thin, translucent, 0.6 mm long; margin of the median lobe sub-rectilinear; parameres arcuate and slender; inner sac tubular, with small sparse scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Transkei (Fig. 682).

BIONOMICS. The specimens were colleted respectively in "*horse dung, share*" and "*humus*".

DISTRIBUTION. South Africa: Transkei, Cape Province.

15. Genus ***Belinga*** n. gen. (Figs. 683–701, 1710)

TYPE SPECIES. *Mitomorphus africanus*, Bernhauer, 1929.

DESCRIPTION. Body cylindrical (Fig. 683), convex, 5.5–6.5 mm long, fully winged. Maxillary palpi short with broad segments, the last as wide as the preceding one, with rounded apex (Fig. 684); labial palpi with narrow segments, sub-equal in length, with the last shorter and of the same width as the preceding one (Fig. 685); labrum bilobed (Fig. 686); antennae with the segments 2 and 3 elongate, the 2nd longer than the 3rd (Fig. 689); ocular and frontal grooves obsolete; mandibles narrow, with a small tooth and narrow prostheca (Fig. 687); gular sutures V-shaped and distally fused (Fig. 688); pronotum with dorsal and lateral series of punctures; sternum almost flat, with median apophysis less evident; upper epipleural line not joining the lower line; elytra with punctures arranged in three series, one juxtasutural, one median and one lateral; mesosternum with sub-rectilinear posterior margin (Fig. 691); metasternum short; elytra with three series of punctures; abdomen cylindrical; legs long and translucent; anterior tarsi not dilated (Fig. 690). Male genital segment of characteristic shape (Fig. 693), with sternite (Fig. 694) furnished with evident lateral apophyses, the apices acute and bearing two setae. Aedeagus (Fig. 695) translucent, membranous, with slightly sclerified encircling structures in dorsal and ventral view, composed of more connective strips; parameres a little asymmetrical; inner sac with very large, dark structures and in some areas covered with scales. Female genital segment as in figure 692.

DISTRIBUTION. Chiad, Gabon, Central African Rep., Rwanda, Uganda, Burundi, Congo, Angola, Zambia.

ETYMOLOGY. The epithet refers to the locality of Belinga in Gabon. Feminine gender.

KEY TO THE SPECIES

1. Body shorter, 5.5–6 mm long; narrower head, with less rounded sides, elytra less sub-rectangular, usually dilated posteriad. Aedeagus as in figure 695. Central Africa.....1. *B. africana*
-. Body longer, 6.5 mm long; wider head, with more rounded sides; elytra more sub-rectangular, not dilated posteriad. Aedeagus as in figure 700. Tchad.....2. *B. chadiana* n. sp.

1. ***Belinga africana*** (Bernhauer, 1929) comb. n.

Mitomorphus africanus - Bernhauer, 1929: 120; Scheerpletz, 1933: 1305; Herman, 2001a: 3705
Mitomorphus dubitans - Tottenham, 1956: 245; Herman, 2001a: 3706, syn. n.
Mitomorphus angolensis - Cameron, 1959: 114; Herman, 2001a: 3705, syn. n.
Mitomorphus evanescens - Tottenham, 1956: 247; Herman, 2001a: 3706, syn. n.
Mitomorphus gabonicus - Coiffait, 1968: 147; Herman, 2001a: 3707, syn. n.

TYPE MATERIAL. The Musée royal de l'Afrique Central of Tervuren preserves 5 specimens labelled "*Type*" (printed on orange label) and "*R. DET. / A / 876*". The first is labelled "*Musèe du Congo / Haut Uelé: Moto/ 1920/ L. Burgeon*", Mitomorphus / africanus *Brh./ Typ.*"; the second is labelled "*Haut Uelé / Watsa, XI-1919/ L. Burgeon*", the third "*Ituri / La Moto: Madyu / L. Burgeon*", the fourth "*Stanleyville a Kilo / L. Burgeon*", the fifth "*Tengo Katanta / Manyema 1918 / Dr. Gérard*". I choose the last, male, as lectotype of the species; it now bears the label "*Lectotypus* Mitomorphus africanus *Bh., Bordoni des. 2006*". I choose the others as paralectotypes of the species; these bear the label "*Paralectotypus* Mitomorphus africanus *Bh., Bordoni des. 2006*". All are identificated as "Belinga africana *(Bh.), Bordoni det. 2006*".

The Musée Royal de l'Afrique Centrale of Tervuren preserves 1 specimen labelled "*Holotype*" (printed on orange label), "*Coll. Mus. Congo / Ruanda: Mahembe / 1400 m. terr. Nyanza / P. Basilewsky 13-15.I.53*", "Mitomorphus / dubitans / *Tottenham / TYPE*" (handwritten by Tottenham). It is a male that bears the determination label "Belinga dubitans *(Tott.), Bordoni det. 2006*".

The Natural History Museum of London preserves 1 specimen labelled "*Type*" (on round label with red border), "*Museu do Dundo / Parque Carrisso / (Dundo) 20.VI.49 / Reg. ANG. 1519.10*", "Mitomorphus / angolensis / *TYPE Cam.*". It is a female, identical to *M. africanus*. I choose this specimen as lectotype of the species; it now bears the label "*Lectotypus* Mitomorphus angolensis *Bh., Bordoni des. 2006*" and the determination label "Belinga africana *(Bh.), Bordoni det. 2006*".

The Musée Royal de l'Afrique Centrale in Tervuren preserves 2 specimens; one labelled "*Holotype*" (printed on orange label), "*Coll. Mus. Congo / Ruanda: Gitarama / 1850 m, terr. Nyanza / P. Basilewsky 1-20.II.53*", "Mitomorphus / evanescens / *Tottenham / TYPE*" and the other with the date "*1.1953*" (this specimen is lacking the head). They are identical to *M. africana*.

The Muséum national d'Histoire Naturelle in Paris preserves about 50 specimens labelled "Belinga *50 / 2. 63 H. Coiffait*", "*Mission Biologique / au Gabon / P. P. Grasse Directeur*", "*Holotype*" (printed on red label), "Mitomorphus / gabonicus *Coiff. / H. Coiffait 1967*"; some others have date between 1.63 and 4.63, and the label "*Paratype*"; one specimen is labelled "*26.V.63*" and "*Allotype*". They are identical to *B. africana*.

All the last cited specimens bear the determination label "Belinga africana *(Bh.), Bordoni det. 2006*".

EXAMINED MATERIAL. Centrafican Rep, Massif Ruwenzori, Mont Ngulingo, c/o Nyamgaleke, 2500 m, P. Vanschuybroek and J. Kekenbosch, 6.VIII.1954, 1 male (cB); Massif Ruwenzori, Kirivata, Migeri, 1760 m, P. Vanschuybroek and J. Kekenbosch, 10–20.IV.1953, 1 female (MRAC).

Rwanda, P. N. Akagera, R. Jacqué, 16.XI.1985, 1 female (MRAC); Bugesera, Biharagu, Lac Tshohora, N. Leleup, 27.II.1960, 1 male (cB); Terr. Kibungu, 1400 m, N. Leleup, V.1954, 1 female (MRAC); Cyangugu, Nyakabuye, H. Mülhe, 1–3.IV.1983, 1 male (MNB).

Uganda, S Ruwenzori, Nsenyi, riv. Rwempya, 1275 m, R.P.M.J. Celis, V.1955, 1 female (MRAC).

Congo, Massif du Kundelung, 1750 m, N. Leleup, III.1950, 1 male (MRAC); Kibali-Ituri, Kilomines, C. Smoor, V.1957, 1 male (cB); Bendera, Terr. Albertville, source du Makokwe, 1000 m, N. Leleup, X.1958, 1 male (MRAC), 1 male (cB); Bendera. Terr. Albertville, 1000 m, N. Leleup, IX.1958, 1 male (MRAC); Kivu, Terr. Uvira, 800 m, N. Leleup, V.1951, 1 male, 1 female (MRAC), 1 male (cB); Kivu, Terr. Fizi, Itombwe Nord, 900 m, N. Leleup, IV.1951, 1 male, 2 females (MRAC), 1 male, 1 female (cB); Kivu, Fizi, Sud Uvira, 800 m, N. Leleup, III.1951, 1 female (MRAC), 1 female (cB); Kivu, Bas Itombwe, 800–900 m, N. Leleup, IV.1951, 1 female (MRAC), 1 female (cB); Kivu, Terr. Masisi, Mutakato, 800 m, N. Leleup, IX.1953, 1 female (MRAC); Kivu, Kitutu, terr. Mwenga, riv. Bilumanzi, tête de la source, 660 m, N. Leleup, 5.IV.1958, 1 male, (MRAC); Katongo, affl. Mubele, 1750 m, G. de Witte, 1.IV.1948, 1 male (MRAC), 1 female (cB); Katanga, Kundelungu, affl. Lualaba, Bassin L. Moëro, 1880 m, N. Leleup, 19.X.1951, 1 male (cB); Katanga, Reg. Kolwezi, Manika, V. Allard, 20.X.1962, Katanga, Reg. Kolwezi, Manika, V. Allard, 20.X.1962, 1 female (MNHNP); Katanga, Dikuluwe, A. Allard 17.III.1963, 2 males (cB); Kolwezi, H. Katanga, bord de la Musonoie, V. Allard, VIII.1953, 1 male (MNHNP); Kolwezi, H. Katanga, V. Allard, 1955, 1 male, 1 female (MNHNP); Kolwezi, H. Katanga, V. Allard, 1955, 1 male (MNHNP); Dikuluwe, A. Allard, 17.III.1963, 1 male (cB); Katanga, Kundelungu, 1725 m, N. Leleup, X.1951, 1 female (MRAC).

Burundi, NE Ruvubu Park, F. Arndt, 25–26.II.1992, 1 male (NME); Kago-Rutovu, F. Arndt, 20.III.1992, 1 female (cB).

Angola, Calunda (Alto Zambeze), Chutes Lulsavo, A. De Barros Machado, II.1955, 1 male (MRAC); Alto Cuilo, Cacolo, A. De Barros Machado, V.1954, 3 females (MRAC), 1 female (cB); 70 km SSE Dundo, route de Sombo, E. Luna de Carvalho, X.1953, 1 female (cB).

Zambia (N Rhodesia), Abercorn, galerie forestière de la Mwengo, 1800 m, N. Leleup, VII.1960, 11 females (MRAC), 1 female (cB).

DESCRIPTION. Length of body: 5.5–6 mm; from anterior margin of head to posterior margin of elytra: about 3 mm. Body shiny, without microsculpture. Light reddish brown, with yellowish antennae and legs. Head oval elongate, with rounded sides from eyes to neck, and with obsolete posterior angles. Eyes medium-sized, a little protruberent; the distance between punctures is equal to the length of the 2nd and 3rd antennomeres together. Surface of head with two series of punctures between the eyes and some other widely spaced punctures, especially on the sides. Pronotum sub-rectangular, longer and narrower than head, not dilated anteriorly, with very oblique anterior margins, obsolescent anterior angles, and almost scarcely sinuate sides; dorsal series of 6, 7 punctures and lateral series of 3, 4 punctures, all fine. Elytra large, longer and wider than pronotum, not dilated posteriad, with less marked humeral angles. Surface with fine widely spaced punctures arranged in the usual three series. Abdomen with transverse micro-striation and fine and dense punctation, especiallly on the sides. Sixth visible male tergite and sternite with the middle of the posterior margin slightly produced. Male genital segment with visibly arcuate pleura (Fig. 693), small and sub-triangular tergite with posterior margin furnished with dense setae; sternite (Fig. 694) of characteristic shape: large and thick lateral apophyses, with sub-acute apex bearing two long setae. Aedeagus 1.3 mm long (Figs. 695, 696, 1755), membranous, translucent, about 1 mm long; parameres of complex structure, similarly membranous, long and slightly asymmetrical; inner sac with some large dark structures and some areas covered with scales.

DISTRIBUTION. Gabon, Central African Rep., Rwanda, Uganda, Burundi, Congo, Angola, Zambia (Fig. 701).

BIONOMICS. Some specimens were collected in "*Vestig, for. scleroph.,* humus", "*tourbière*", "rive erbeuse lake", "*humus en galerie forestière*".

REMARKS. The specimen of *Mitomorphus angolensis* has label with a different locality from that indicated in the description: "*Dundo, forêt de la Luachimo, 20.VI.49 (type); Dundo, III.48, A. B. Mach. Coll.*".

A third specimen of *Mitomorphus evanescens* is cited, but I did not find it.

The species is variable in size; the disposition of the sclerotized structures of the inner sac of the aedeagus also a little varies.

The genus *Mitomorphus* Kraatz, 1859, typical of the Oriental and part of the Australian regions, does not occurs in Africa.

2. ***Belinga chadiana*** n. sp.

EXAMINED MATERIAL. Holotype male: Chad, Enneri Tegaham, Tibesti, 1000 m, piémont SW, Brunneau de Mirè, 24.IX.1958 (MNHNP).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.5 mm; from anterior margin of head to posterior margin of elytra: about 3.2 mm. Very similar to *B. africana* from which differs for the following characters: larger size, wider head, with more dilated sides; wider pronotum, more dilated anteriorly; elytra sub-rectangular, not dilated posteriad, with more marked humeral angles. Surface with finer punctation. Tergite and sternite of the male genital segment as in figures 698, 699. Aedeagus larger (Fig. 700), 1.3 mm long, with different inner sac.

ETYMOLOGY. The specific epithet refers to Chad.

DISTRIBUTION. The species is known only from the type locality in Chad (Fig. 701).

REMARKS. Female unknown.

16. Genus ***Aleutia*** gen. n. (Figs. 702–722, 729, 1711)

TYPE SPECIES. *Pachycorynus marginellus* Fauvel, 1905.

DESCRIPTION. Body flat (Fig. 702). Head large, sub-quadrangular; frontal grooves long and deep; ocular grooves very short; a groove from eyes to the posterior angles; ventral surface of head flat, separate from the lateral, flat portion by a carina; gular sutures united over a long distance; maxillary palpi with 2nd segment shorter than 3rd, the latter very long and last segment narrow and much shorter than the preceding (Fig. 703); labial palpi with 1st segment shorter than 2nd, the latter longer than the last (Fig. 704); labrum bilobed (Fig. 705); antennae with segments 2 and 3 elongate, the 2nd shorter than 3rd; mandibles large, with lateral groove and 2 small teeth and long and large prostheca (Fig. 706); antesternal plate divided; upper epipleural line present and not joining the lower line; pronotum with dorsal series of 3 anterior and 2 posterior punctures and lateral oblique series of 2-3 anterior punctures; elytra with some series of shallow and widely spaced punctures, among which are three series, one juxtasutural, one median and one lateral, bearing setae. Mesosternum as in figure 707. Male genital segment elongate with sternite of characteristic shape (Fig. 710); aedeagus oval, very elongate, with asymmetrical, large and partially membranous parameres (Figs. 714, 718, 719). Female genital segment as in figure 708.

DISTRIBUTION. Guinea, Ivory Coast, Gabon, St. Thomé Isl., Cameroon, Congo, Rwanda, Burundi, Kenya (Fig. 729).

ETYMOLOGY. *Aleutia* is other name of *Venus*. Feminine gender.

BIONOMICS. The species of this genus are probably sub-corticolous.

REMARKS. *Aleutia* differs from *Pachycorynus* in the following characters: superior epipleural line present, divided antesternal plate, shape of palpi, aedeagus, and female genital segment.

Aleutia luteipennis was described by Coiffait (l968) as *Pachycorynus* Motschulsky, 1858, probably because the approximately similar shape of the flat body and the presence of a lateral groove on the head. The genus *Pachycorynus* occurs only in the Oriental Region whit many species (Bordoni, 2002), in the Austro-Malayan subregion, New Guinea (Bordoni, 2010a), Australia and Norfolk Island with few species (Bordoni, 2005).

KEY TO THE SPECIES

1. Body of smaller size (8.6 mm long), brownish black. Aedeagus as in figure 711. St. Tomé Isl.....1. *A. insularis* n. sp.
-. Body of larger size (9–10 mm long).....2

2. Elytra with yellowish margins and suture.....3
-. Elytra reddish brown. Body about 10 mm long. Aedeagus as in figure 714. Central Africa .....2. *A. marginella*

3. Body smaller (9–9.5 mm long), Aedeagus large (2.2 mm long) with short and narrow parameres (Fig. 718). Central Africa.....3. *A. luteipennis*

-. Body larger (10 mm long). Aedeagus smaller (1.5 mm long) with long and broad parameres (Fig. 722). Kenya.....4. *A. kenyana* n. sp.

1. ***Aleutia insularis*** n. sp.

EXAMINED MATERIAL. Holotype male: St. Thomé Isl. (NMW).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 8.5 mm; from anterior margin of head to posterior margin of elytra: 4.6 mm. Fully winged. Brownish black. Similar to *A. montanella* but smaller. Head more quadrate with lateral grooves deeper and frontal grooves arcuate and more convergent; punctation deeper. Pronotum narrower. Elytra larger, longer and wider than that of *A. marginella*, with more rounded humeral angles and larger scutellum; punctation of elytra sparser. Tergite and sternite of the male genital segment as in figures 709, 710. Aedeagus small (Fig. 711), 1.2 mm long, narrowly oval, with very large parameres; inner sac short and very narrow, covered with fine and sparse scales.

ETYMOLOGY. The specific epithet refers to the Latin *insularis -e* (insular).

DISTRIBUTION. This species is only known from the type locality on the island of St. Tomé (Fig. 729).

REMARKS. Female unknown.

2. ***Aleutia marginella*** (Fauvel, 1905) comb. n.

Pachycorynus marginellus - Fauvel, 1905: 195; Bernhauer & Schubert, 1914: 295; Coiffait, 1968: 149 (as *Pachycorinus*); Scheerpeltz, 1971c: 169; Herman, 2001a: 3734

Pachycorynus conradsi - Bernhauer, 1937: 609; Herman, 2001a: 3732., syn. n.

TYPE MATERIAL. The Institut royal des Sciences naturelles in Brussels preserves 2 specimens labelled "*Ex typis" (red print), one with "Cameroon / Sept.*", "Pachycorynys marginellus *Fvl.*" , the second with "*Loango, Gabon*". They are two females. I choose the second as lectotype of the species and the first as paralectotype, so they now respectively bear the labels "*Lectotypus* Pachycorynus marginellus *Fvl., Bordoni des. 2011*" and "*Paralectotypus* Pachycorynus marginellus *Fvl., Bordoni des. 2011*" and the determination label "Aleutia marginella *(Fvl.), Bordoni det. 2011*".

The Field Museum of Natural History of Chicago preserves 1 specimen labelled "*D. O. Afrika / Ukerewe I. / Conrads*", "*Murun- / taguru*", "Conradsi / *Brnh. Typus / unic.* Pachycorynus". It is a female, identical to *A. marginella*.

EXAMINED MATERIAL. Gabon, Biafra, Cap Jean, 1 male (IRSNB); Libreville, 1 female (IRSNB).

Cameroon, Lolodorf, L. Conradt, 1895, 1 female (DEI); SO, Lolodorf, L. Conradt, 1 male (DEI); Joh.-Albrechtshöne, L. Conradt, 14.IX–6.X.1898, 1 female (MNB); R. Nyong, 1 female (NMW).

Congo, Mayumbe, Lundu, A. Collart, 11.VII.1925, 3 exx. (IRSNB); Mayumbe, Lundu, A. Collart, 11.VII.1926, 3 exx. (IRSNB), 1 ex. (cB).

Tanzania, Ukerewe, (Victoria Nyanza), Muruntuguru, 1 ex. (FMNH).

CITED MATERIAL (not examined). Gabon, Loando; Cameroon (Coiffait, 1968).

DESCRIPTION. Length of body: 10 mm; from anterior margin of head to posterior margin of elytra: 5 mm. Fully winged. Head with polygonal microreticulation; pronotum with more or less transverse micro-striation. Reddish brown with darker head. Head subquadrate, more or less dilated. Eyes medium-sized and very little protruberent. Surface of head with an evident lateral groove and large, oval, sparse puntures, especially on the sides. Pronotum shorter and narrower than head, with narrowly rounded anterior angles; dorsal series of 3 anterior and 2 posterior punctures and lateral series of 2 anterior punctures; all large and shallow. Elytra sub-rectangular, a little dilated posteriad, with narrowly rounded humeral angles. Surface with fine and dense punctation arranged in numerous series. Tergite and sternite of the male genital segment as in figures 712, 713. Aedeagus 1.2 mm long (Fig. 714), oval, narrow, with very long and broad parameres; inner sac translucent, long and broad, folded once on itself, apparently devoid of scales. Female genital segment as in figure 708.

DISTRIBUTION. Gabon, Cameroon, Rwanda, Congo, Kenya, Tanzania (Fig. 729).

3. ***Aleutia luteipennis*** (Coiffait, 1968) comb. n.

Pachycorynus luteipennis - Coiffait, 1968: 149; Herman, 2001a: 3734

TYPE MATERIAL. The Muséum national d'Histoire naturelle in Paris preserves the male holotype labelled "*Belinga 59 / 5.2.63/ H. Coiffait*", "*Mission Biologique / au Gabon / P. P. Grasse Directeur*", "*Holotype*" (printed on red label), "Pachycorynus / luteipennis *Coiff. / H. Coiffait 1967*".

EXAMINED MATERIAL. Gabon, Belinga, 1.3.63, H. Coiffait, 3 exx. (cB).

Cote d'voire, Divo, J. Decelle, 12.X.1962, 3 males, 1 female (cB).

Guinea, Ayene, Rio Bimbiles, Espaňola, J. Mateu, X.1948, 1 male (MRAC).

Uganda, Fort Portal, 15 km Sebitoli, 1400 m, M. Snizek, 23.XI–5.XII.1994, 1 male, 1 female (cJ), 1 male, 1 female (cB).

Kenya. Kakamega, Kisteni, 1330 m, T.E. Leiler, 7.II.1979, 1 male (cB); Nairobi, T.E. Leiler, 7.II.1979, 1 female (cJ); Mlaba forest, T.E. Leiler, 2.II.1979, 1 female (cJ).

Congo, Yangambi, J. Decelle, V.1960, 1 female (MRAC); Kivu, Kiniasi (Masisi), 2000–2500 m, A. Bertrand, X.1951, 1 female (MRAC); Massif Ruwenzori, riv. Lume (moyenne), affl. Semliki, 1830 m, P. Vanschuytbroeck, 29.VIII.1956, 1 female (MRAC); Massif Ruwenzori, Kalonge, 3065 m, P. Vanschuytbroeck, 23.XII.1957, 1 female (MRAC); Massif Ruwenzori, riv. Butaho, affl. Semliki, 1750 m, P. Vanschuytbroeck, 13.XII.1957, 1 female (MRAC).

Burundi, Crète du Congo Nil, S. N'Dant IV.1967, 1 female (MRAC).

DESCRIPTION. Length of body 9-9.5 mm; from anterior margin of head to posterior margin of elytra: 4.5–4.8 mm. Fully winged. More or less reddish brown, with darker head; humeral angles and suture of elytra yellowish; antennae and legs brown. Head quadrate (Fig. 715), with sub-rectilinear and sub-parallel sides, and very narrowly rounded posterior angles, almost right-angled. Eyes medium-sized and a little protruberent. Surface of head with more or less longitudinal micro-striation, in some parts with very fine and dense, polygonal micro-reticulation. Frontal grooves sub-parallel, long and deep, ending with a puncture; ocular grooves very short, ending with a puncture; the first grooves followed by a median, oblique series of 3 punctures. A groove along the internal margin of the eyes up to the posterior angles of head composed of confluent punctures. A series of 3 punctures is located between the aforementioned oblique series and the sub-ocular groove. Pronotum as long as head, slightly dilated anteriorly where it is narrower than head, with oblique anterior margins, rounded anterior angles and sides not sinuate. Surface with more or less transverse, fine and dense micro-striation; dorsal series of 3 anterior and 2 posterior punctures and lateral oblique series of 2 anterior punctures. Elytra large, longer and wider than pronotum, dilated posteriad, with marked humeral angles. Surface shiny, with coarse but superficial and widely spaced setiferous punctures arranged in three series, one juxtasutural, one median and one lateral, Abdomen with transverse micro-striation and fine and sparse punctation, especially on the sides. Sixth visible male tergite and sternite with rounded posterior margins; the tergite membranous. Male genital segment elongate, tergite and sternite of the same as in figures 716, 717. Aedeagus oval (Figs. 718), narrow and very elongate, 2 mm long; parameres asymmetrical and partially membranous, as can be seen in ventral view (Fig. 719).

DISTRIBUTION. Ivory Coast, Guinea, Gabon, Congo, Burundi, Uganda, Kenya (Fig. 729).

BIONOMICS. Under bark of dead trees.

4. ***Aleutia kenyana*** n. sp.

EXAMINED MATERIAL. Holotype male: Kenya, Kakamega For., Udo's Bandas, 00° 21' 38.2"S, 34° 51' 24.9"E, V. Grabennikov, 9–11.XI.2001 (FMNH); paratypes: same data, 1 female (FMNH); Kenya, Mt Elgon, 2452 m, T. Palm, 7.II.1979, 1 male (ZML); Rwanda, Cyangugu Prov., Nyakabuye, H. Mühle, 1–30.XII.1982, 1 male, 28.XII.1985, 1 male (MNB); Congo Belge, Uluku (Buhunde), A. Collart, 24.IX.1929, 1 male (IRSNB).

DESCRIPTION. Length of body: 10 mm; from anterior margin of head to posterior margin of elytra: 5 mm. Head and pronotum black, elytra brown with yellowish margins and sutura, abdomen light brown; antennae and legs brown. Head squat, with

sub-rectlinear and sub-parallel sides. Eyes medium-sized. Surface of head shiny but with fine and superficial more or less transverse micro-striation, two large punctures in place of the ocular grooves, three median punctures in an oblique series, and some punctures near the posterior angles. A groove from the eyes to the posterior angles, within some puntures; an other shorter internal groove parallel to the previous. Pronotum a little longer and narrower than head, with very oblique anterior margins and marked anterior angles. Surface similar to that head, with dorsal series of 3 anterior and 2 posterior punctures; lateral series of 3 punctures. Elytra large, longer and wider than pronotum, with marked humeral angles. Surface with some series of fine, widely spaced punctures. Abdomen with fine and very dense transverse micro-striation and fine and sparse punctation. Tergite and sternite of the male genital segment as in figures 720, 721. Aedeagus large (Figs. 722, 1756), 1.6 mm long, narrowly oval, with very long and broad parameres; inner sac short and very narrow, covered with fine sparse scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Kenya.

DISTRIBUTION. This species is actually known from Kenya, Rwanda and Congo.

REMARKS. This species differs from *A. marginella* in the colouration, punctation of head, pronotum longer than head, with different lateral series, punctation of elytra and the aedeagus.

17. Genus ***Capesia*** n. gen. (Figs. 723–736, 1712)

TYPE SPECIES. *Nudobius rudebecki* Scheerpeltz, 1974.

DESCRIPTION. Similar in general features to *Linosomus* (Fig. 723) which clearly differs for almost roundish head, with distinctly flat, almost concave clypeus and in the shape of the maxillary palpi. Labrum, gular sutures, antesternal plate, upper epipleural line, anterior tarsi as in *Linosomus*. It differs also in the following characters: obsolete ocular grooves (sometimes replaced by two punctures) and frontal grooves, maxillary palpi with sub-equal segments 2 and 3 and last segment long, longer than that of *Linosomus*, but shorter than the preceding one (Fig. 724); labial palpi with broad sub-equal segments 1 and 2 and the last segment much longer than the preceding one (Fig. 725); mandibles with very long prostheca (Fig. 726); mesosternum with a median, sub-acute and long, posterior lobule (Fig. 727); male genital segment (Fig. 730) with pleura fused in the proximal portion; aedeagus (Fig. 732) more or less round, with long slender parameres and with two short, lateral and one median long distal apophyses; inner sac everted in the examined males. Female genital segment as in figure 728.

ETYMOLOGY. The epithet refers to the Cape Province.

DISTRIBUTION. South Africa: Cape Province (Fig. 736).

REMARKS. This genus seems composed of coastal species.

KEY TO THE SPECIES

1. Body larger, 8.5 mm long, black with brown abdomen; head sub-rectangular, with sparser punctation; pronotum narrower, with dorsal series of 6, 7 small punctures and lateral series of 1 anterior and 1 posterior punctures; elytra longer, with denser punctation. Aedeagus as in figure 732. South Africa.....1. *C. amatolensis* n. sp.
-. Body smaller, 6 mm long, entirely reddish brown; head narrowed anteriorly, with denser punctation; pronotum wider, with dorsal series of 8, 9 punctures and lateral series of 4 punctures and some other punctures near the anterior angles; elytra shorter, with finer and sparser punctation. Aedeagus as in figure 735. South Africa.....2. *C. rudebecki*

1. ***Capesia amatolensis*** n. sp. (Figs. 1712, 1757, 1758)

EXAMINED MATERIAL. Holotype male: Cape, Amatole, Isidenge For. St., 32.41S, 27.14E, Endrödy-Younga, 15.II.1987 (TMSA); paratypes:

same data, 1 male, 2 females (TMSA), 2 males, 2 females (cB).

Description of Holotype. Male. Length of body: 8.5 mm; from anterior margin of head to posterior margin of elytra: 4.5 mm. Body shiny, black, with brown abdomen, antennae and legs. Head subrectangular, with rounded sides and broadly rounded posterior angles. Eyes small and not very protruberent. Surface of head with fine and sparse punctation. Pronotum longer and narrower than head, with oblique anterior margins, narrowly rounded anterior angles, and feebly sinuate sides. Surface with fine and dense, transverse micro-striation; dorsal series of 6, 7 small punctures and indistinct lateral series bearing an anterior and a posterior punctures. Elytra sub-rectangular, longer and wider than pronotum, with marked humeral angles. Surface with fine and dense punctation arranged in numerous series. Abdomen with traces of transverse micro-striation and very fine and sparse punctation. Sixth visible male sternite with a feeble posteromedian lobule. Male genital segment as in figure 730; sternite oval, narrow in the proximal portion (Fig. 731). Aedeagus very characteristic (Fig. 732), 1.4 mm long; parameres very long and slender; the basal bulb gives two short translucent apophyses; between these is a large elongate lobule; inner sac everted in the examined males, composed of an arcuate part covered in small scales and a group of large spines.

Variability. The paratypes have no substantial morphological differences with the holotype described.

Etymology. The specific epithet refers to the type locality.

Bionomics. The specimens were collected in mushrooms on a tree stump.

Distribution. South Africa: Cape Province (Fig. 736).

2. ***Capesia rudebecki*** (Scheerpletz, 1974) comb. n.

Nudobius rudebecki - Scheerpletz, 1974: 125; Herman, 2001a: 3730

Type material. The Zoological Museum of Lund preserves 2 specimens; the first is labelled "*S. Afr. Cape Prov. / Tzitzikama Forest / Stormsrivierpiek / 13.I.51 No 137*", "*Swedish South Africa / Expedition / 1950-1951 / Brinck-Rudebeck*", "Nudobius / Rudebecki *sp. n.*" (handwritten by Scheerpeltz), "*Holotype*" (hanwritten on red label), "*Typus* / Nudobius / Rudebecki / *O. Scheerpeltz*" (on red label), "Nudobius / Rudebecki / *sp. n. / det. Scheerpeltz 1968*", "*Type No 622.1-2*" / *Zool. Mus. Lund. Sweden / Staphylinidae*", "♀" (sic). It is a male. The second is labelled "*S. Afr. Cape Prov. / Tzitzikama Forest / Stormsrivierpiek / 13.I.51 No 137*", "*Swedish South Africa / Expedition / 1950-1951/ Brinck-Rudebeck*", "*Cotypus* / Nudobius / Rudebecki / *O. Scheerpeltz*" (on rose label). It is a female.

The Naturhistorisches Museum in Vienna preserves 1 specimen bearing the same labels. It is a female.

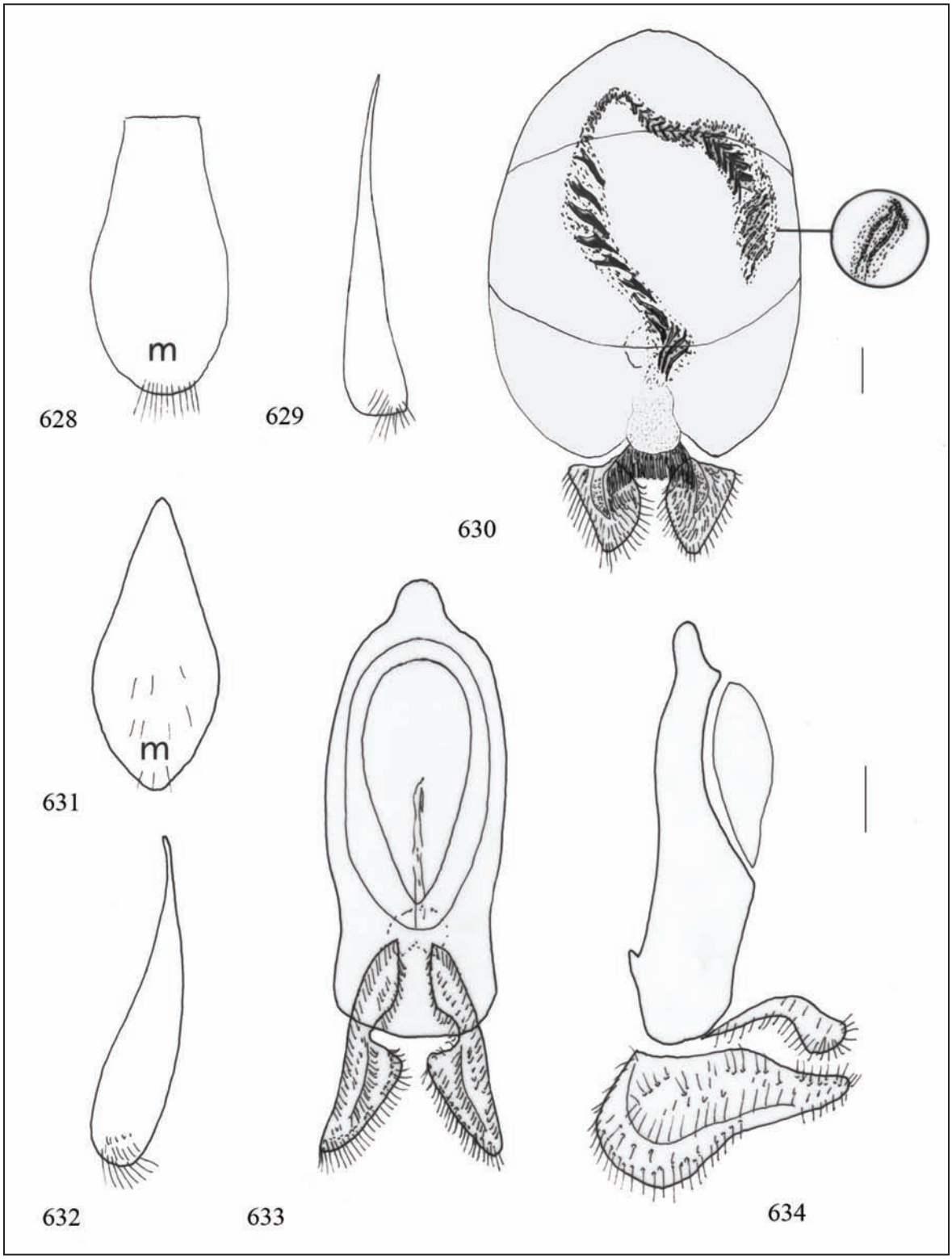
I have affixed the determination label "Capesia rudebecki *(Scheerp.), Bordoni det. 2007*" to these specimens.

Examined Material. South Africa, SW Cape, Pearly Beach, 5 km NE, 34.38S, 19.33E, Endrödy-Younga and Pernith, 27.VIII.1983, 1 ex. (TMSA); S Cape, Keurboomatrand, 34.00S, 23.27E, Endrödy-Younga, 15.XI.1976, 1 ex. (TMSA), 1 ex. (cB); S Cape, Knysna Forest, 33.56S, 23.08E, Endrödy-Younga, 19.IX.1973, 2 exx. (cB).

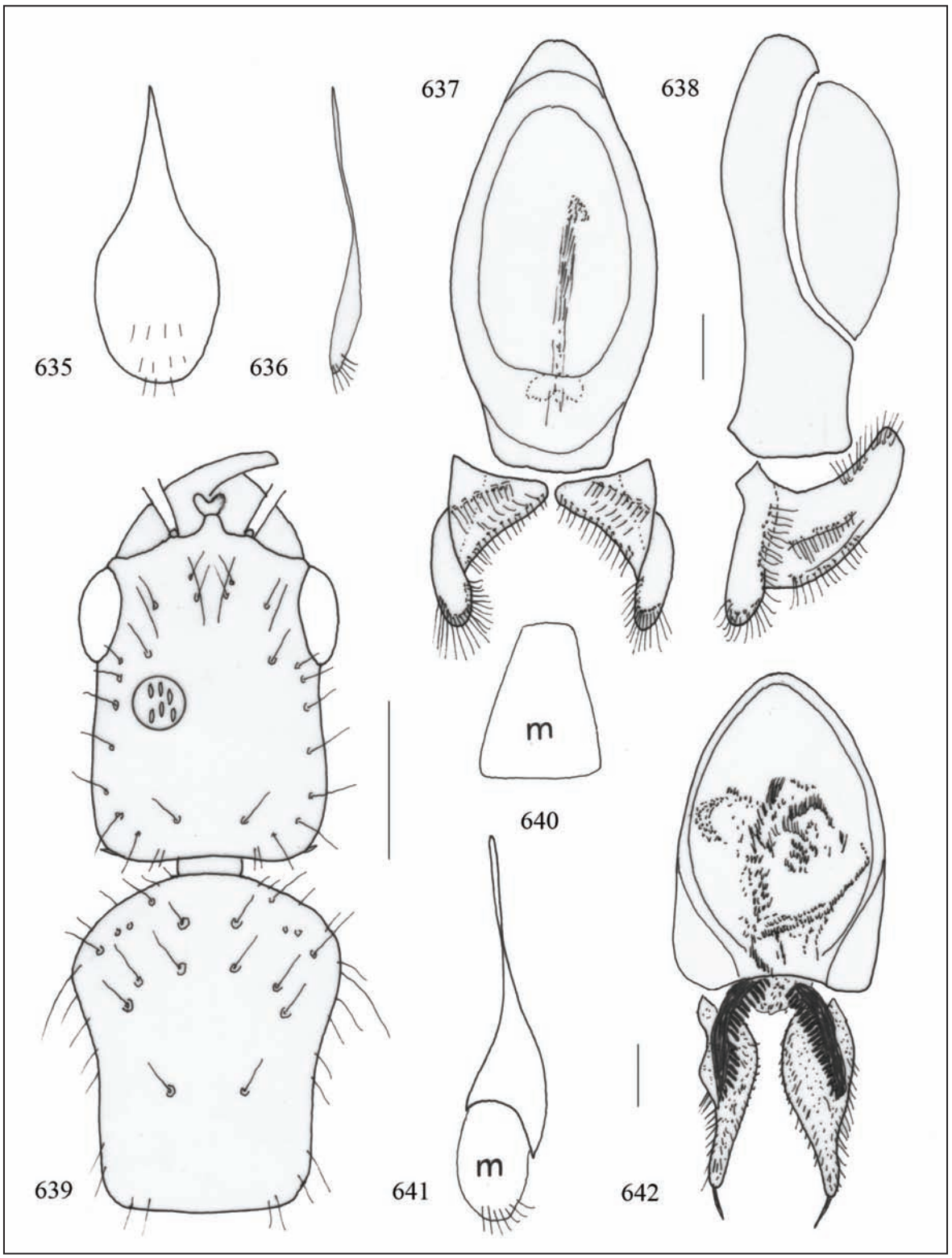
Description. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Entirely reddish brown. Similar to *C. amatolensis* n. sp. but much smaller; head narrower anteriorly, with slightly denser punctation; pronotum wider than the head, with dorsal series of 8, 9 punctures and lateral series of 4 punctures and some other punctures near the anterior angles; elytra much shorter and proportionately wider, with much finer and sparser punctation. Tergite and sternite of the male genital segment as in figures 733, 734. Aedeagus smaller (Fig. 735) than that of *C. amatolensis* n. sp., 0.80 mm long; parameres long and slender; distal apophyses and inner sac of different shape.

Distribution. South Africa: Cape Province (Fig. 736).

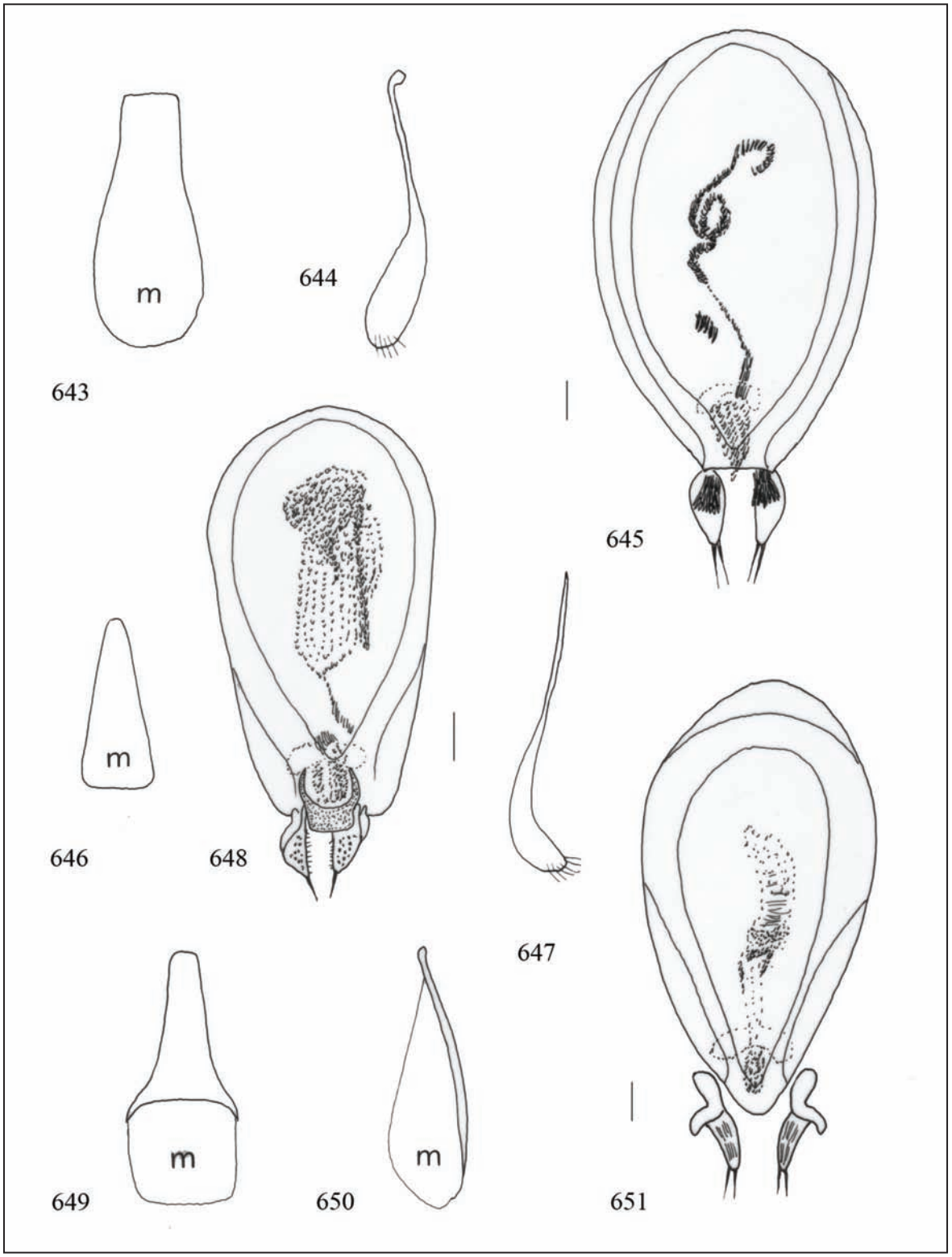
Remarks. It is incomprehensible how Scheerpeltz (1974) should attribute these specimens to the genus *Nudobius*, that has very different generic characters.



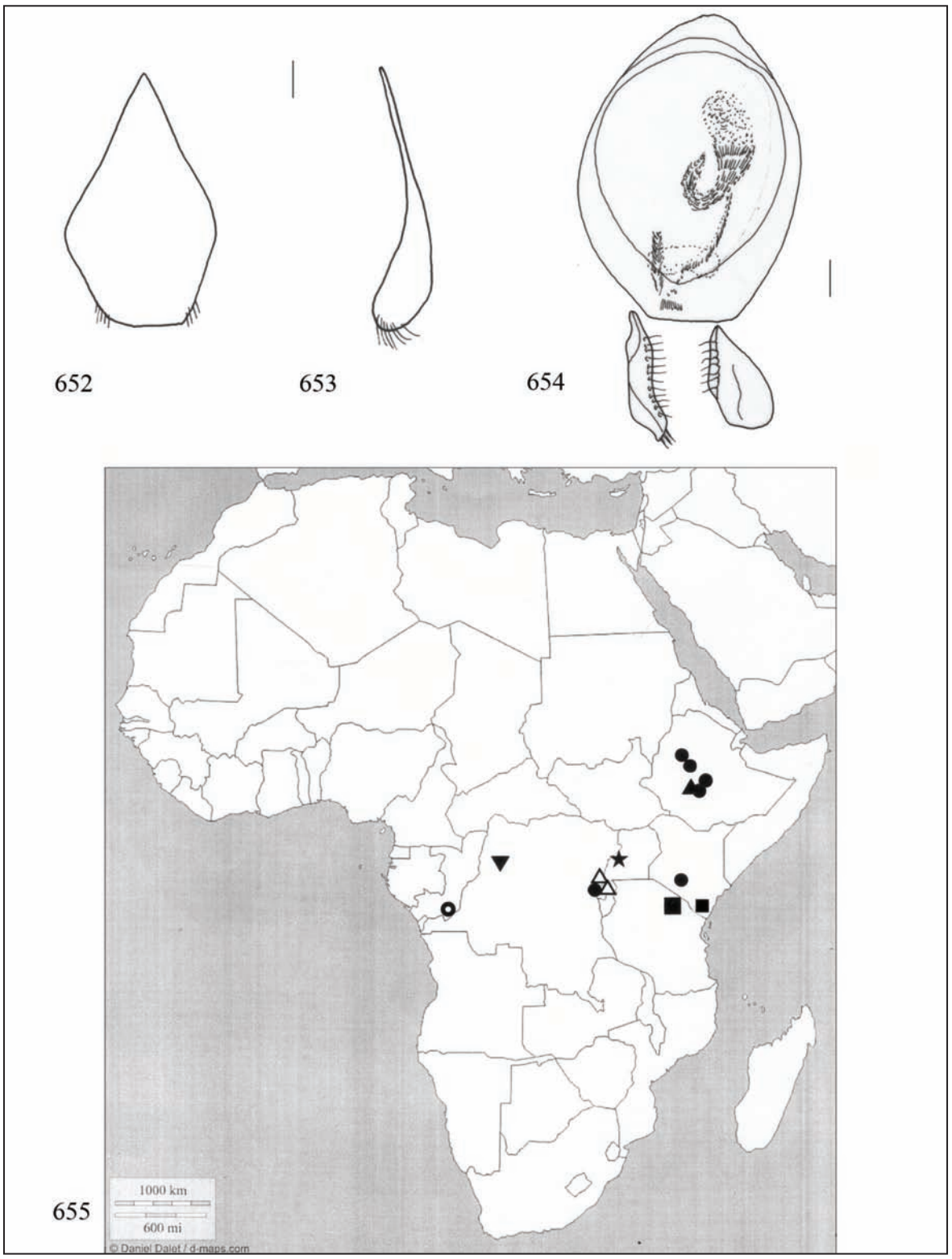
Figures 628–634. Tergite and sternite of the male genital segment, aedeagus of *Gyrohypnus rougemonti* n. sp. (Figs. 628–630), and *G. paramerum* n. sp. (Figs. 631–633: median lobule omitted), with aedeagus in lateral view (Fig. 634) (bar scale: 0.1 mm).



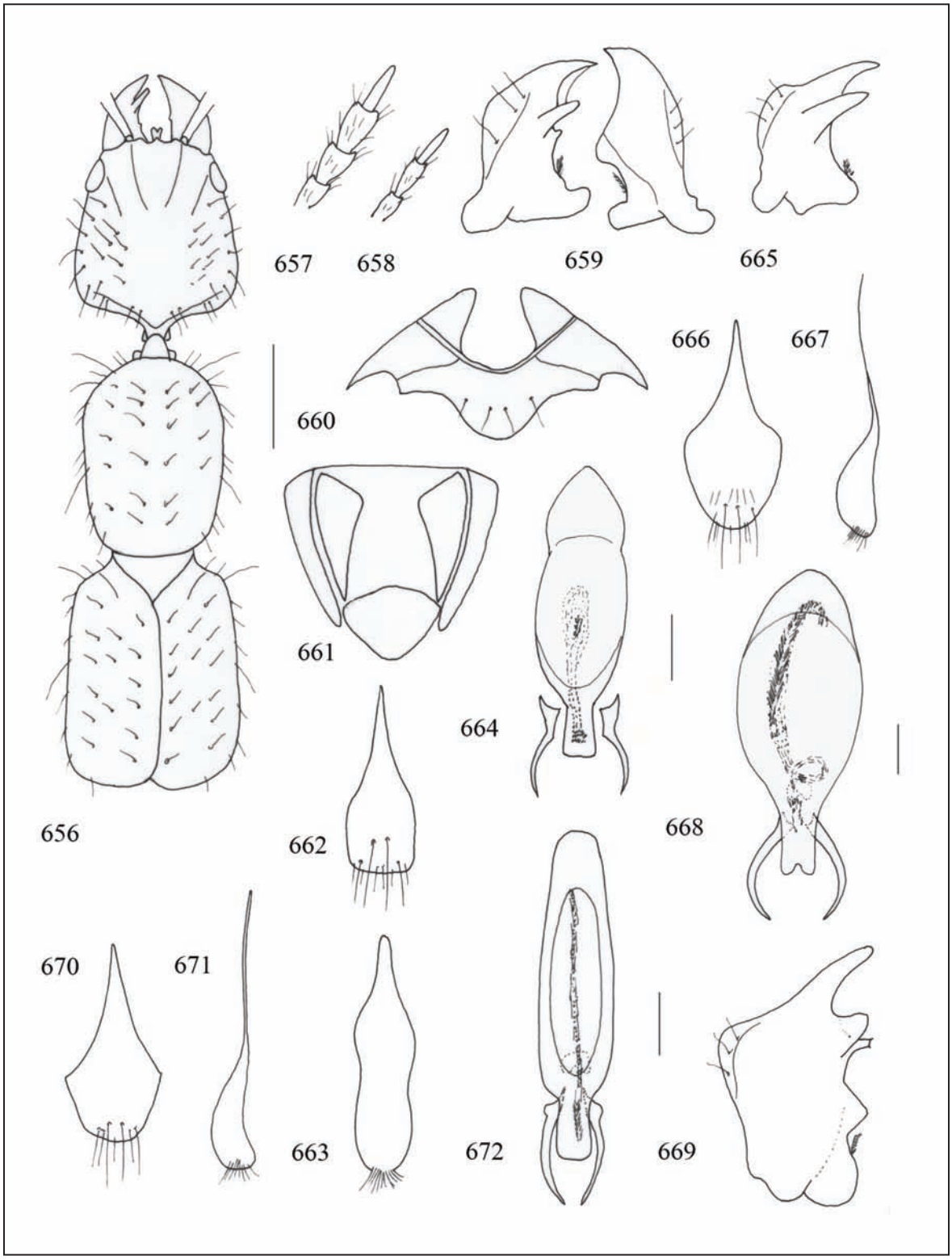
Figures 635–642. Tergite and sternite of the male genital segment, aedeagus of *Gyrohypnus ugandensis* n. sp. (Figs. 635–637), the aedeagus also in lateral view (Fig. 638) (bar scale: 0.1 mm). *Gyrohypnus tropicus* n. sp.: head and pronotum (bar scale: 0.1 mm) (Fig. 639), tergite and sternite of the male genital segment, and aedeagus (Figs. 640–642) (bar scale: 0.1 mm) (m= membranous portion).



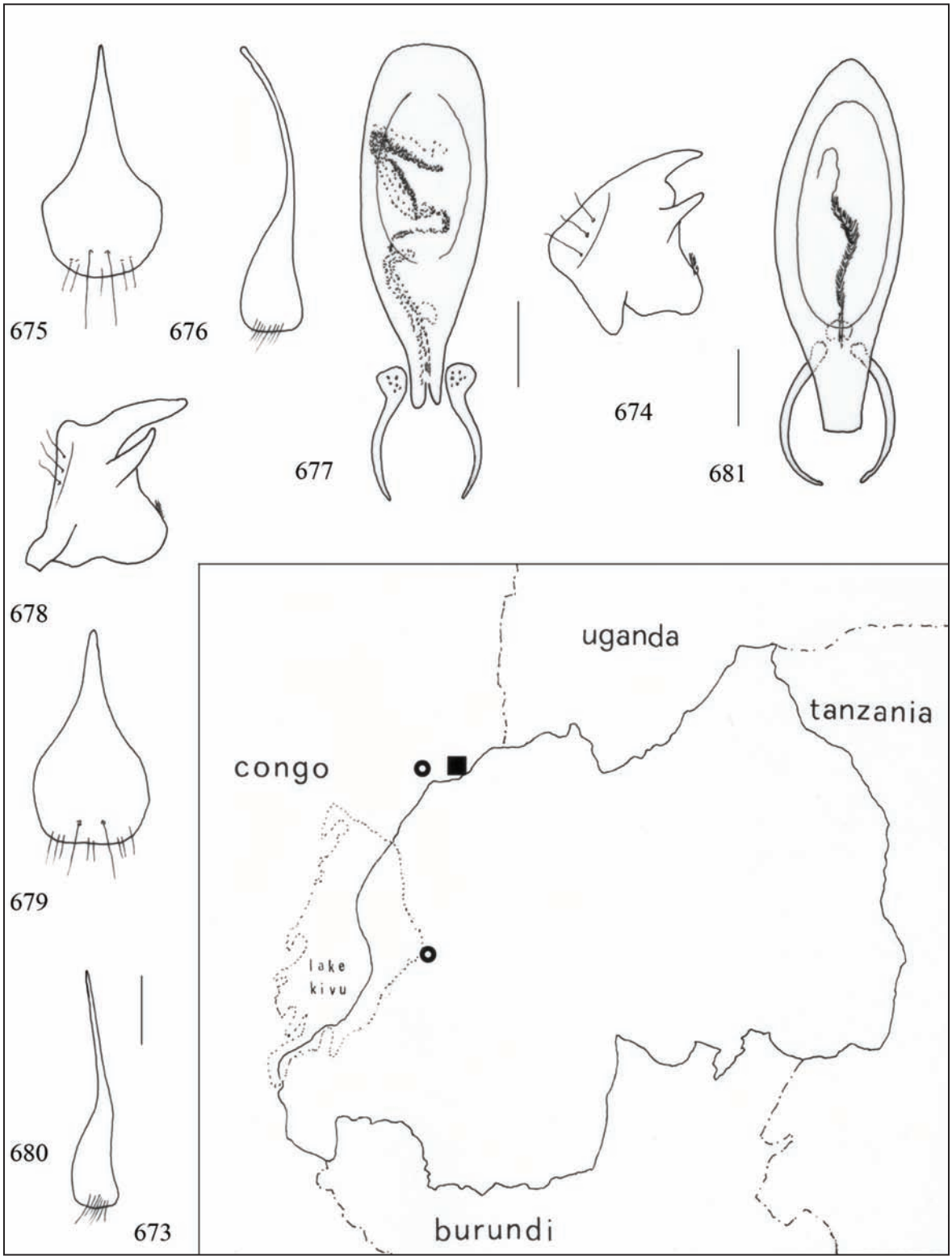
Figures 643–651. Tergite and sternite of the male genital segment, aedeagus of *Gyrohypnus stercorosus* n. sp. (Figs. 643–645), and *Gyrohypnus shimba* n. sp. (Figs. 646–648) (bar scale: 0.1 mm) (m= mebranous portion). Tergite and sternite of the male genital segment, aedeagus of *Gyrohypnus remotus* (Figs. 649–651).



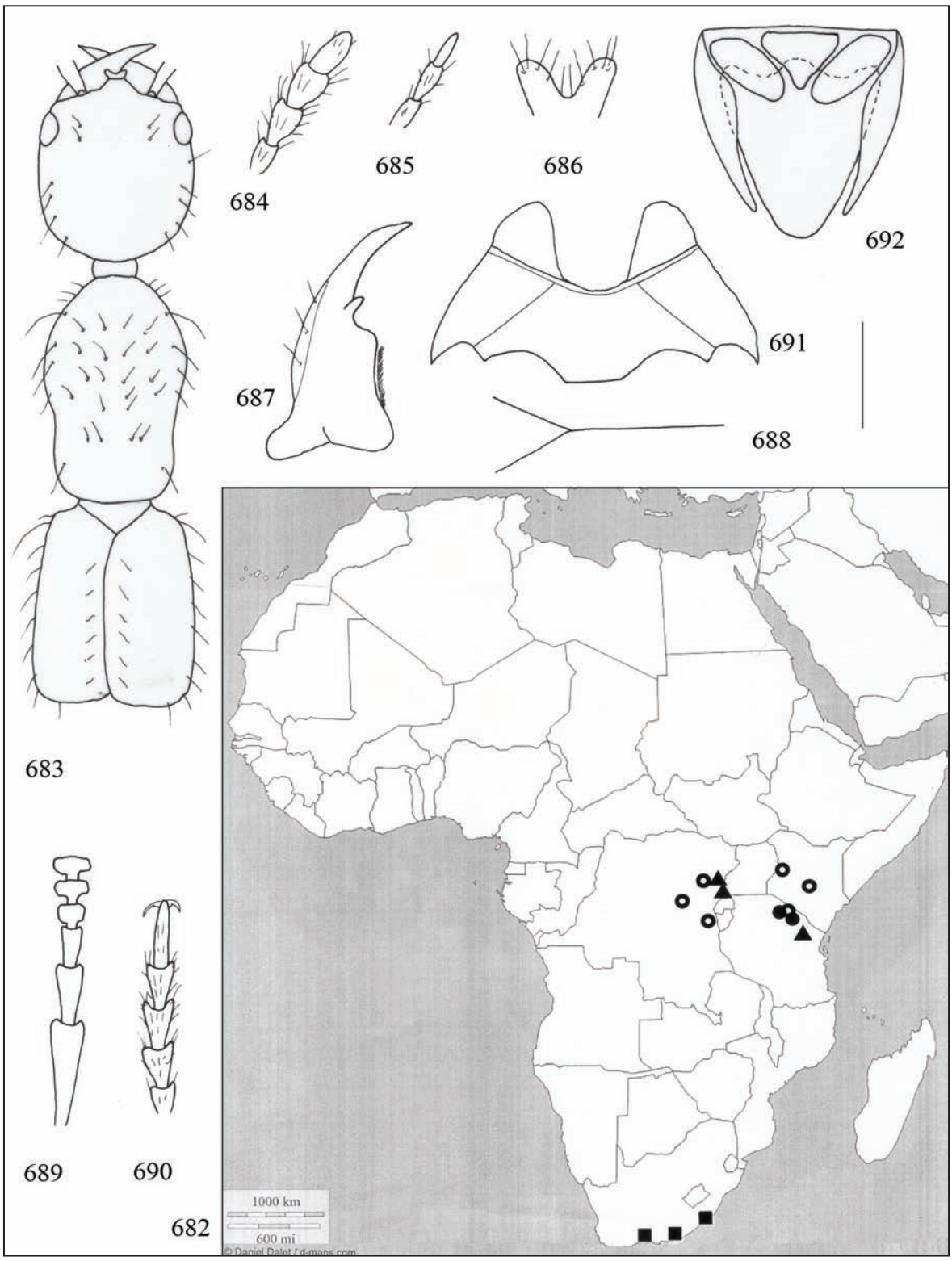
Figures 652–655. Tergite and sternite of the male genital segment and aedeagus of *Gyrohypnus leopoldinus* n. sp. (Figs. 652–654) m = membranous portion. Fig. 655: distribution of the genus *Gyrohypnus*: *G. rougemonti* n. sp. (filled triangle), *G. paramerum* n. sp. (open circle), *G. ugandensis* n. sp. (star), *G. tropicus* n. sp. (open triangle), *G. stercorosus* n. sp. (big square), *G. shimba* n. sp. (small square), *G. remotus* (filled circle), *G. leopoldinus* n. sp. (inverted triangle).



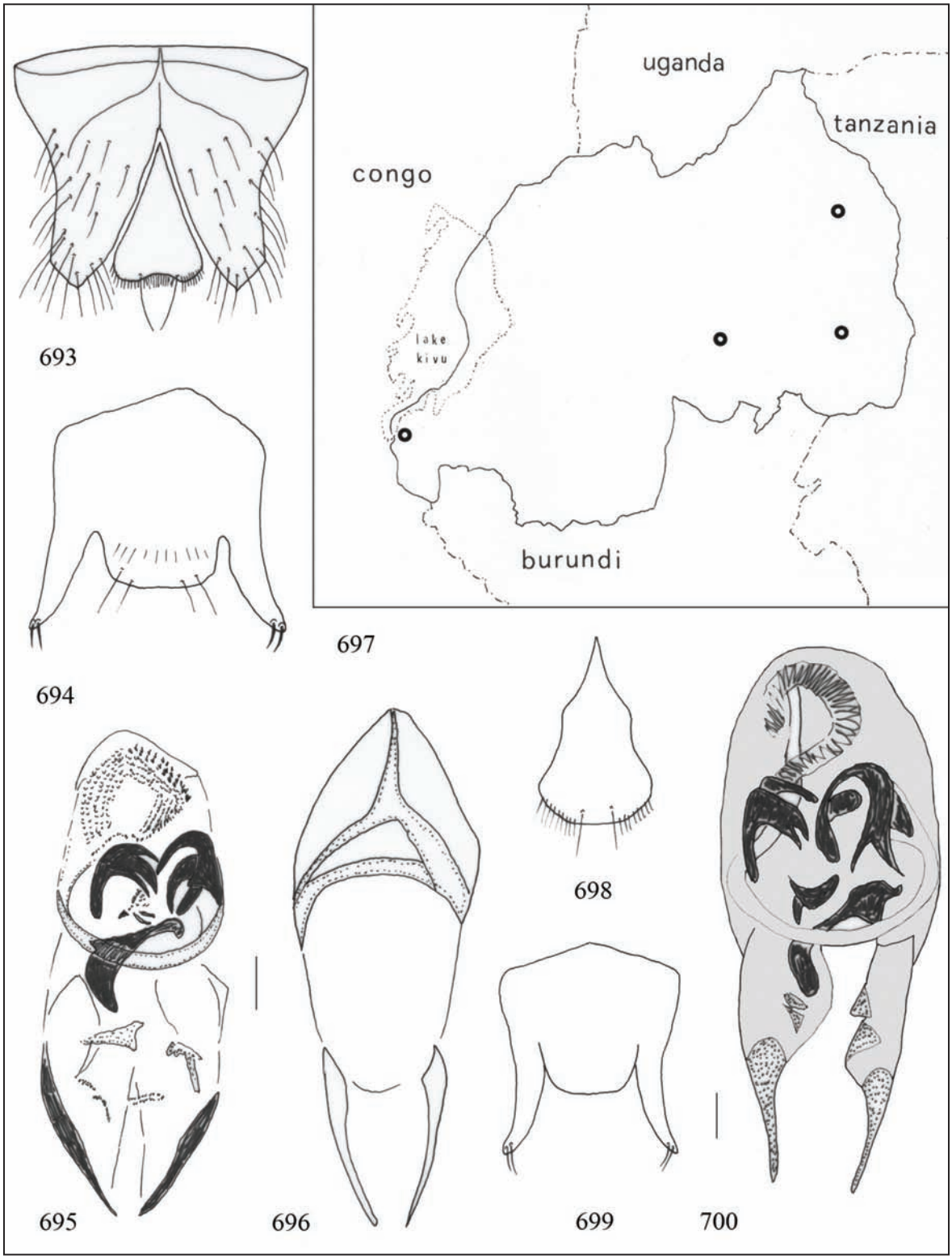
Figures 656–672. *Alexyrea ovaliceps*: fore-body (bar scale: 0.5 mm) (Fig. 656), maxillary and labial palpi (Figs. 657, 658), mandibles (Fig. 659), mesosternum (Fig. 660), female genital segment (Fig. 661), tergite and sternite of the male genital segment, aedeagus (Figs. 662–664) (bar scale: 0.1 mm). Left mandible, tergite and sternite of the male genital segment, aedeagus of *Alexyrea zairensis* n. sp. (Figs. 665–668) and *Alexyrea pholeophila* n. sp. (Figs. 669–672).



Figures 673–681. Fig. 673: distribution of the genus *Alexyrea* in Congo and Rwanda: *A. zairensis* n. sp. (square), *A. mandibularis* (oper circle). Figs. 674–681. Left mandible, tergite and sternite of the male genital segment, aedeagus of *Alexyrea mandibularis* (Figs. 674–677) and *Alexyrea traskeiana* n. sp. (Figs. 678–681).



Figures 682–692. Fig. 682: distribution of the genus *Alexyrea*: *A. ovaliceps* (triangle), *A. mandibularis* (oper circle), *A. pholeophila* n. sp. (filled circle), *A. transkeiana* n. sp. (square). Figures 683–692. *Belinga africana*: fore-body (bar scale: 0.5 mm) (Fig. 683), maxillary and labial palpi (Figs. 684, 685), labrum (Fig. 686), mandible (Fig. 687), gular sutures (Fig. 688), first antennomeres (Fig. 689), anterior tarsus (Fig. 690), mesosternum (Fig. 691), female genital segment (Fig. 692).



Figures 693–700. *Belinga africana*: male genital segment (Fig. 693) and related sternite (Fig. 694), aedeagus in dorsal (Fig. 695) and ventral (Fig. 696) view (bar scale: 0.1 mm). Fig. 697: distribution of *Belinga africana* in Rwanda. Figs. 698–700. *Belinga chadiana* n. sp.: tergite, sternite of the male genital segment and aedeagus (bar scale: 0.1 mm).

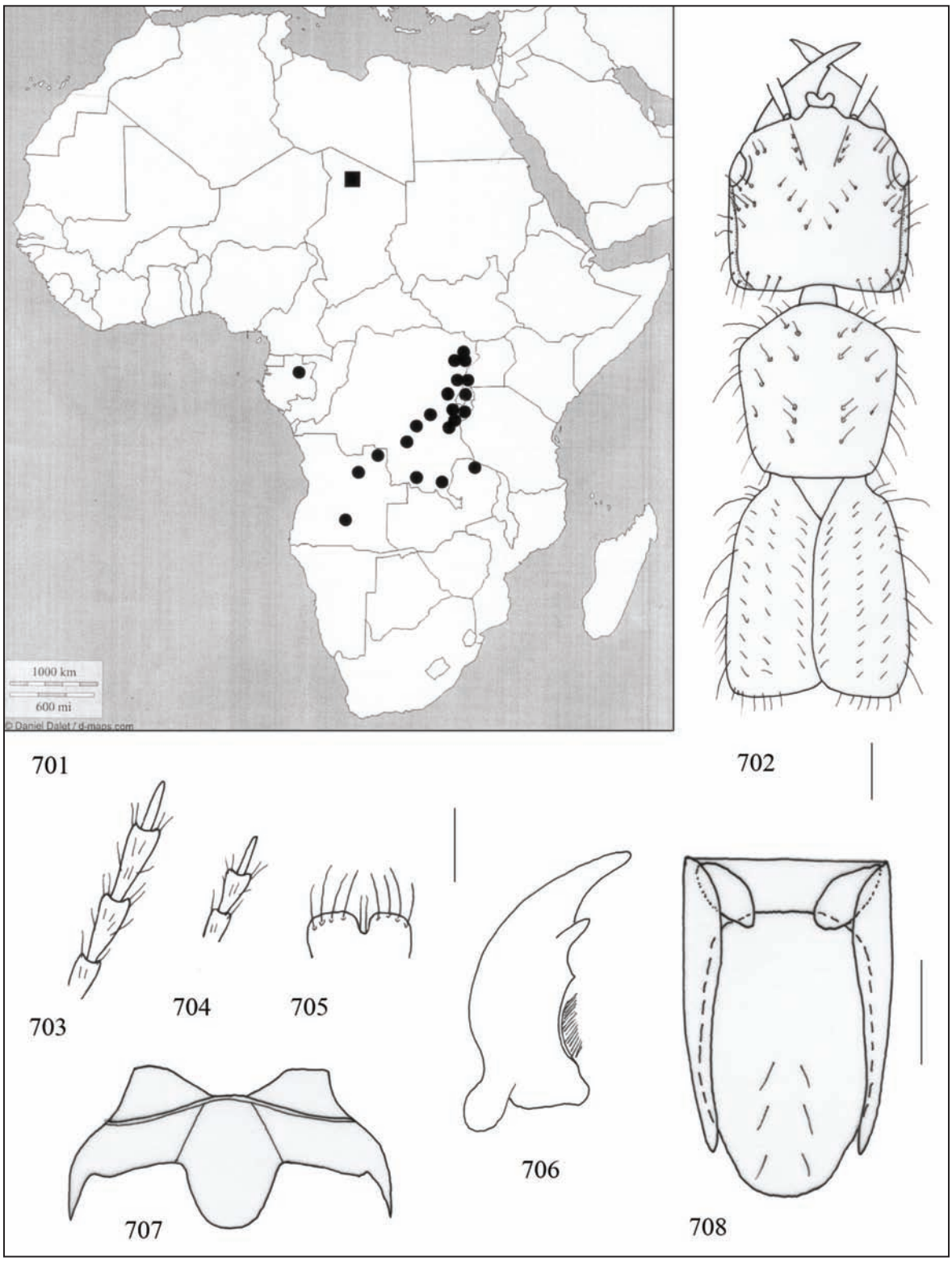
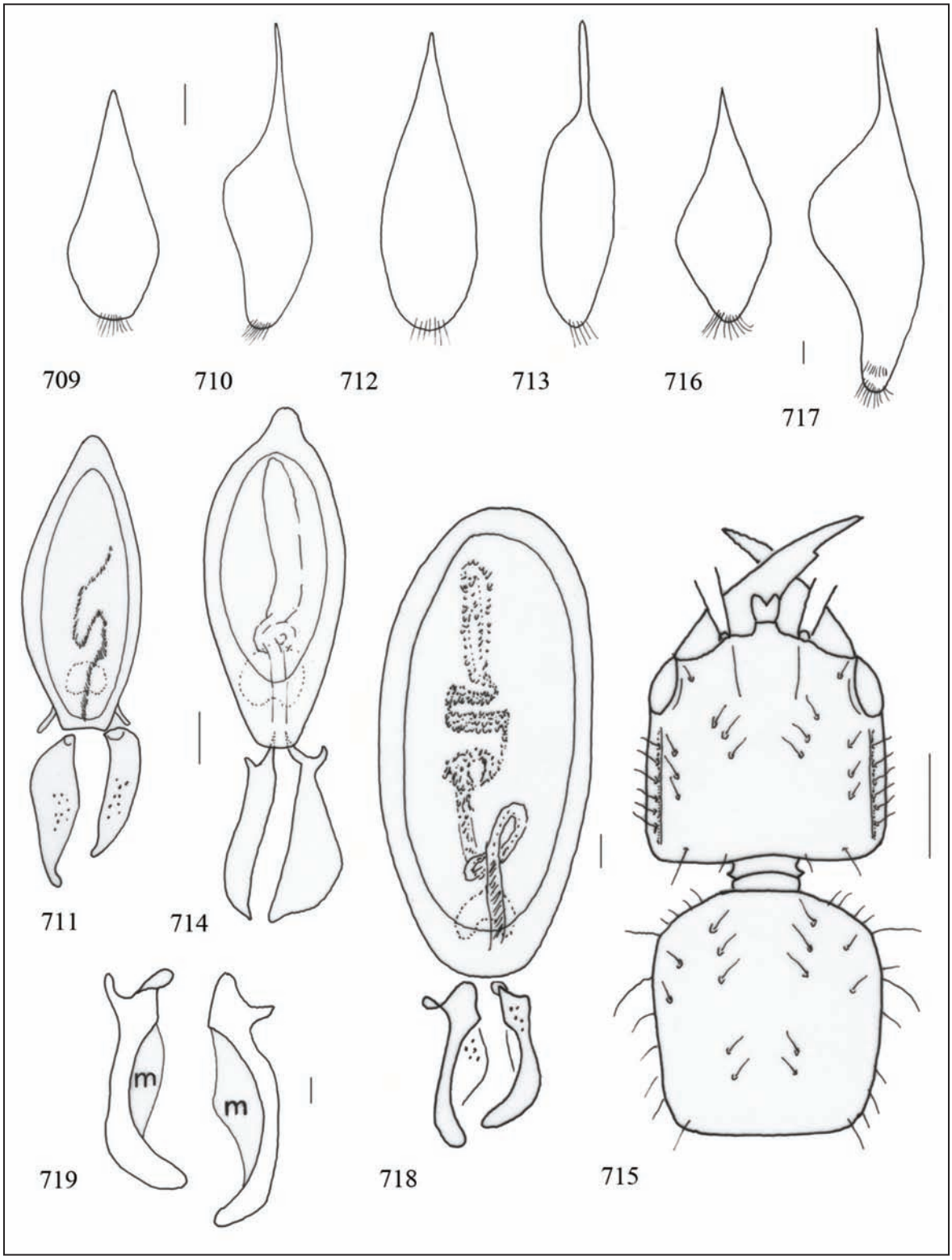
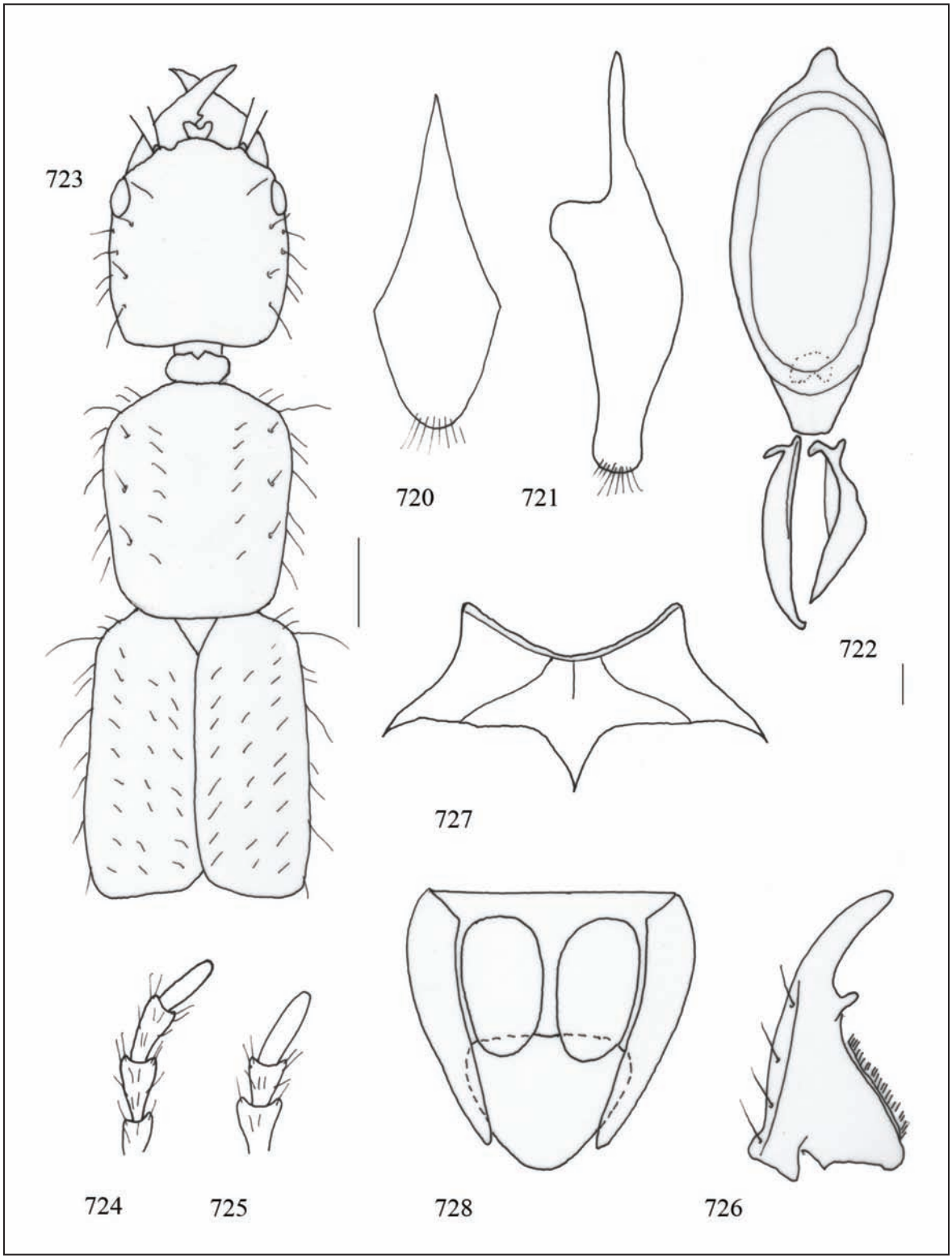


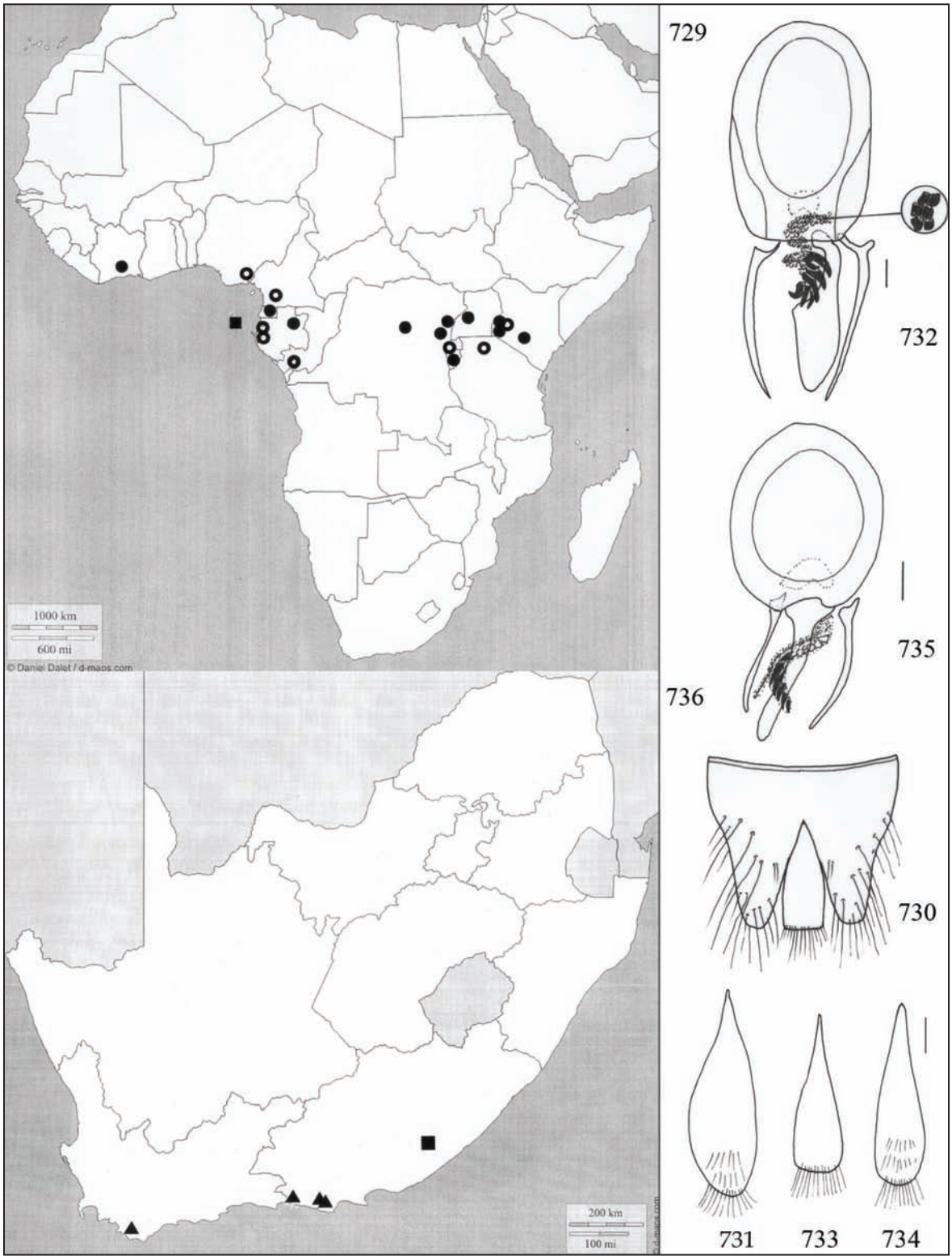
Figure 701–708. Fig. 701: distribution of the genus *Belinga*: *B. africana* (circle), *B. chiadiana* n. sp. (square). Figs. 702–708. *Aleutia marginella*: fore-body (bar scale: 0.5 mm) (Fig. 702), maxillary and labial palpi (Figs. 703, 704), labrum (Fig. 705), mandible (Fig. 706), mesosternum (Fig. 707), female genital segment (Fig. 708).



Figures 709–719. *Aleutia insularis* n. sp.: tergite and sternite of the male genital segment, aedeagus (Figs. 709–711). *Aleutia marginella*: tergite and sternite of the male genital segment, aedeagus (Figs. 712–714). *Aleutia luteipennis*: head and pronotum (bar scale: 0.5 mm) (Fig. 715), tergite and sternite of the male genital segment, aedeagus (Figs. 716–719, with parameres in lateral view (Fig. 719) (bas scale: 0.1 mm) (m= membranous portion).



Figures 720–728. *Aleutia kenyana* n. sp.: tergite and sternite of the male genital segment, aedeagus (Figs. 720-722). *Capesia amatolensis* n. sp.: fore-body (bar scale: 0.5 mm) (Fig. 723), maxillary and labial palpi (Figs. 724, 725), mandible (Fig. 726), mesosternum (Fig. 727), female genital segment (Fig. 728).



Figures 729–736. Fig. 729: distribution of the genus *Aleutia*: *A. insularis* n. sp. (square), *A. marginella* (open circle), *A. luteipennis* (filled circle). Figs. 730–736. Male genital segment, related sternite, aedeagus of *Capesia amatolensis* n. sp. (Figs. 730–732). Tergite and sternite of the male genital segment, aedeagus of *C. rudebecki* (Figs. 733–735) (bar scale: 0.1 mm). Fig. 736: distributionof the genus *Capesia*: *C. amatolensis* n. sp. (square), *C. rudebecki* (triangle).

18. Genus ***Notolinopsis*** Casey, 1906 (Figs. 737–860, 1713, 1714)

Notolinopsis - Casey, 1906: 371 and 377; Bernhauer & Schubert, 1914: 300 (subgen. of *Xantholinus*); Cameron, 1932: 22 (subgen. of *Xantholinus*); Steel, 1949: 268 (syn. of *Linosomus*); Blackwelder, 1952: 263 (syn. of *Linosomus*)

Linosumus - Kraatz, 1857: 647, sensu auct.; Gemminger & Harold, 1868: 605; Bernhauer & Schubert, 1914: 296; Blackwelder, 1952: 221; Herman, 2001a: 3691

Echdysia - Bordoni, 2007: 67 (= *Elgonia* Bordoni, 2001:168, n. preocc.), syn. n.

TYPE SPECIES. *Notolinopsis capensis* Casey, 1906: 379, by subsequent designation of Blackwelder, 1943: 474.

DESCRIPTION. Similar to *Linosomus* in the general features: dilated anterior tarsi, brown colouration, labial palpi and superior epipleural line. *Notolinopsis* differs from *Linosomus* in the following characters: maxillary palpi (Fig. 739) with last segment conical, with base as wide as the preceding segment and not clearly narrower and much shorter than it; 3rd segment much longer than 2nd segment; labial palpi as in figure 740. very widely spaced gular sutures for almost their entire length, distally convergent but not fused, instead of being V-shaped for less than half of their length and fused posteriorly; pronotum with dorsal and lateral series of irregular punctures, usually between other surrounding punctures and near the anterior angles; very short elytra (apart from *N. nidorum* n. sp.), with obsolete humeral angles, fully winged species (apart from a few taxa), metasternum with flat posterior margin, instead prolonged in a narrowly rounded lobule (Fig. 744); antesternal plate of medium length, with evident suture and not short, with shallow suture; sternum long and flat; mesosternum very short and flat instead of normal length and a little convex; more dilated anterior tarsi (Fig. 743) densely covered with setae; male genital segment with elongate pleura; the short tergite and sometimes very narrow and elongate sternite (Fig. 804); aedeagus of characteristic shape, sub-circular, with long and narrow parameres and one or two distal apophyses between the parameres (Figs. 748, 853). Female genital segment with a large ventral sternite, without additional sclerites (Fig. 745).

DISTRIBUTION. Congo, Kenya (apterous taxa) (Figs. 760, 786); Zimbabwe, South Africa (winged taxa) (Figs. 796, 860).

BIONOMICS. Bernhauer wrote (1939): "*lisière inférieur de la forêt*" (2470 m) and "*prairies alpines de l'Elgon, bord des torrents*" (3900–4000 m). Humus in forest of bamboo and *Hagenia*.

REMARKS. Kraatz (1857) described the genus *Linosomus* for the group "Leptacinus *Fam. IV*". Erichson (1839a) states that it is composed of only one species (*tenuicornis* Nordmann, 1837). The description is summary and very short but the only useful named character is the shape of the last segment of the maxillary palpi, defined as "*sabulatum*", i.e. in the form of awl. Gemminger & Schubert (1914) designated *tenuicornis* as type species of *Linosomus*. The study of the type of *L. tenuicornis* shows that the specimens do not correspond to the characters assigned to the genus *Linosomus* but to those of *Notolinus*, in particular in the shape of the last segment of the maxillary palpi, labrum and aedeagus, and in the punctation of pronotum. *Notolinus* was described by Casey (1906) who designated *fumipennis* Casey, 1906 as type species.

Casey (1906) had also described the genus *Notolinopsis*, until now regarded as a synonym of *Linosomus*. It follows that *Notolinus* falls in synonymy of *Linosomus*, which includes the species until now related to *Notolinus*, and that *Notolinopsis* is good genus that includes the species until now attributed to *Linosomus*.

The species of this genus can be divided in two groups, the first composed of apterous taxa (Fig. 737) with small and flat eyes and more or less yellowish colouration (*N. crateris* group), the second composed of fully winged taxa (Fig. 738), with evident eyes and more or less dark brown colouration (*N. capensis* group). The first occurs especially in the mountains of Kenya and Congo, the second especially in South Africa.

KEY TO SPECIES GROUPS

1. Apterous species, with body more or less yellowish brown; eyes small and flat, elytra short.....1. *N. crateris* group
-. Winged species, with body more or less dark brown, evident eyes and normally shaped elytra.....2. *N. capensis* group

1. *Notolinopsis crateris* group

The species of this group are very similar to one another in size, punctation and colouration, almost all more or less light brown; all are apterous and all have very small and flat eyes and short elytra. For these reasons the characters of the aedeagus and in particular the shapes of the parameres and distal lobule, are very important.

This group can be divided in two sub-groups, the first with inner sac clearly visible, covered with scales and sclerotised structures (*N. bambusianus* sub-group) and the second with inner sac invisible (*N. uncinatus* sub-group).

Comparisons between species are not necessarily related to species of the same sub-group.

KEY TO SUB-GROUPS

1. Species with aedeagus furnished with visible inner sac, with spines or scales.....1. *N. bambusianus* sub-group
-. Species with aedeagus devoid of visible inner sac.....2. *N. uncinatus* sub-group

1. *Notolinopsis bambusianus* sub-group

KEY TO THE SPECIES

1. Body larger, 8.7 mm long, dark brown; head narrow, long, with sub-rectilinear sides; pronotum massive, wider than head (Fig. 750). Aedeagus with inner sac devoid of median spines (Fig. 748). Mt Elgon (Kenya).....1. *N. afromontanus* n. sp.
-. Body smaller, less than 8.7 mm long, yellowish brown.....2

2. Body about 8 mm long (but also 6.5–7 mm), brown; head oval, with rounded sides; pronotum slightly wider than head (Fig. 749). Aedeagus with some evident median spines (Fig. 753). Mt Elgon (Kenya).....2. *N. crateris*
-. Body 8 mm long, yellowish, head sub-rectangular, narrowed anteriorly, with sub-rectilinear sides; pronotum slightly narrower than head. Male unknown. Tanzania.....3. *N. microps*
-. Body 6.4–7.2 mm long.....3

3. Body 7.2 mm long, reddish brown; head sub-rectangular, with slightly rounded sides; pronotum sub-rectangular, as wide as head. Aedeagus large, sub-spherical, with heart-shaped distal lobule and short inner sac (Fig. 756). Congo.....4. *N. bambusianus* n. sp.
-. Body 7.1 mm long, reddish brown; head sub-quadrate, with sub-rectilinear sides; pronotum sub-rectangular, slightly narrower than head. Aedeagus sub-oval, narrow in the distal portion, with very long parameres and long, sub-triangular distal lobule; inner sac short, narrow, covered with scales (Fig. 759). Congo.....5. *N. montanus* n. sp.
-. Body 6.4 mm long, yellowish orange; head rounded and slightly flat (fig.); pronotum a little narrower than head. Aedeagus sub-oval, enlarged medially, narrow proximally and distally, with arcuate parameres and inner sac long, very narrow, covered with scales (Fig. 764). Congo.....6. *N. afrus* n. sp.

1. ***Notolinopsis afromontanus*** n. sp.

Examined material. Holotype male: Kenya, Mt Elgon, Mbale, Caldera, 3700–3800 m, Geginat, 23.XII.1994 (cJ); paratypes: same data, 1 female (cJ), 1 male, 1 female (cB); Kenya, Mt Elgon, A. Holm, 1 male (NMW).

Description of Holotype. Male. Length of body: 7 mm; from anterior margin of head to posterior margin of elytra: 3.8 mm. Apterous. Body dark brown. Surface with transverse micro-striation. Similar to *N. crateris* in punctation, but darker, longer, narrower, with head narrower and longer and pronotum massive, visibly wider than head. Tergite and sternite of the male genital segment as in figures 746, 747. Aedeagus 1.48 mm long (Figs. 748, 1760), with parameres, distal lobule and inner sac similar to those of *N. crateris* but without the median spines.

Variability. The paratypes have no substantial morphological differences with the holotype described. Length of body: 6–8 mm; from anterior margin of head to posterior margin of elytra: 3.6–4 mm.

Etymology. The specific epithet is derived the Latin *afrus -a -um* and *montanus -a -um* (mountains of Africa).

DISTRIBUTION. This species is only known from the type locality in Kenya (Fig. 760).

BIONOMICS. The specimens were collected in "*krater int., im unter steinen humus Gesiebe*".

2. ***Notolinopsis crateris*** (Bernhauer, 1939) comb. n. (Figs. 1714; 1759)

Xantholinus crateris - Bernhauer, 1939: 80
Notolinus crateris - Jeannel & Jarrige, 1949: 373; Herman, 2001a: 3719
Elgonia crateris - Bordoni, 2001: 168
Echdysia crateris - Bordoni, 2007: 67 (n. n. for *Elgonia*, n. preoc.)

TYPE MATERIAL. The Field Museum of Natural History in Chicago preserves 3 males labelled "*Kenya / Cratère de l'Elgon / Pied du Koitobbos / 4000 m*", "*Muséum de Paris / Mission de l'Omo / C. Arambourg / P. A. Chappuis & R. Jeannel / 1932-33*". I choose the first as lectotype and the other as paralectotypes of the species. The first now bears the label "*Lectotypus* Xantholinus crateris *Bh., des. Bordoni 2000*"; the others the label "*Paralectotypus* Xantholinus crateris *Bh., Bordoni des. 2000*" (Bordoni, 2001). All the specimens bear the determination label "Notolinopsis crateris (*Bh.), Bordoni det, 2012*".

EXAMINED MATERIAL. Kenya, Mt Elgon Nat. P., nr Kimothon River, 3200 m, P. Merkl, 14.I.1992, 3 males (MTM), 2 females (cB); Mt Elgon, vers. E, 2600 m, N. Leleup, 9.XII.1953, 1 male (MRAC), 1 female (cB); Mt Elgon, vers. E, 2900 m, N. Leleup, 10.XII.1953, 1 male, 2 females (MRAC), 1 male, 1 female (cB); Mt Elgon, vers. E, 3000 m, N. Leleup, 8.XII.1953, 1 male, 5 females (MRAC), 1 male, 3 females (cB); Mt Elgon, vers. E, 3100 m, N. Leleup, 7.XII.1953, 3 females (MRAC); Mt Elgon, 3000 m, N. Leleup, 8.XII.1953, 3 exx. (MRAC); Mt Elgon, cratère, 3800–4000 m, N. Leleup, XII.1953, 3 females (MRAC), 1 male (cB); Mt Elgon, cratère, Maji Ya Moto, 3460 m, N. Leleup, XII.1953, 3 males, 8 females (MRAC), 2 males, 4 females (cB); Mt Elgon, Kitale, Kimilili val., 3300–3700 m, Geginat, 3.IX.1990, 1 male (cJ); Mt Elgon, Mbale, Caldera, 3700–3800 m, Geginat, 23.XII.1994, 1 female (cB); Mt Elgon, A. Holm, 1 male (NMW), 1 male (cB); Mt Elgon, Camp III, 3500 m, 2 males (MNHNP).

DESCRIPTION. Length of body: 6–8 mm; from anterior margin of head to posterior margin of elytra: 3.6–4 mm. Apterous. Reddish brown. Head and pronotum with transverse micro-striation. Similar to *N. bambusianus* n. sp., but with head more oval, more broadly rounded, almost obsolete posterior angles. Pronotum longer than that of *N. bambusianus* n. sp., with more obsolescent anterior angles; punctation irregular, among which are a scarcely distinguishable dorsal series of 8 punctures and a lateral series of 4, 5 irregular punctures, apart an impuctate median band. Elytra wrinkled, short, sub-rectangular, with more evident humeral angles and denser punctation. Tergite and sternite of the male genital segment as in figures 751, 752. Aedeagus very large (Fig. 753), 1.3–1.5 mm long, oval, with long and very narrow parameres; inner sac with some evident spines in the median portion, over a large rounded structure, followed by long, ribbon-like sac, curled up on itself, and covered with scales.

DISTRIBUTION. Kenya: Mt Elgon (Fig. 760).

BIONOMICS. The specimens were collected in "*ravin boisé*", "*fond ravin humide, humus*", "*ravin boisé feuilles mortes et mousses*"; "*Prairies alpines, bord des torrents*" (Bernhauer & Chapman, 1939).

REMARKS. This species is variable in dimensions. The aedeagus is also variable in size, but all the males have an identical inner sac with median, large spines.

3. ***Notolinopsis microps*** (Fauvel, 1907) comb. n.

Xantholinus microps - Fauvel, 1907: 35; Bernhauer & Schubert, 1914: 305; Herman, 2001a: 3812

TYPE MATERIAL. The Institut royal des Sciences naturelles of Bruxelles preserves 1 specimen labelled "*Kibosch 3000 m / pâturage prés forêt / Kilimanjaro*", "microps *Fvl*" (handwritten by Fauvel), "*ex typis*" (printed). It is a female that I chose as lectotype of the species. The specimen now have the labels "*Lectotypus* Xantholinus microps *Fvl., Bordoni des. 2011*" and "Notolinopsis microps *(Fvl.), Bordoni det. 2011*".

CITED MATERIAL (not examined). (Tanzania), Kilimandjaro, Meru (Eichelbaum, 1910, sub. *Xantholinus*).

DESCRIPTION. Length of body about 8 mm; from anterior margin of head to posterior margin of elytra: 4 mm. Apterous. Body yellowish. Head and pronotum with transverse micro-striation. Head sub-rectangular, narrow anteriorly, with sub-rectilinear sides, largely rounded posterior angles. Eyes small and flat. Surface of head with fine and deep punctation. Pronotum a little longer than head, anteriorly dilated and there scarcely narrower than head, with less oblique anterior margins, strictly rounded anterior angles, sub-rectilinear sides; dorsal series of 7, 8 fine and spaced punctures and lateral oblique series of 6, 7 punctures; some other punctures around. Elytra longer and wider than pronotum, slightly dilated posteriad, with less marked humeral angles. Surface with very fine punctation, arranged in numerous series. Male unknown.

DISTRIBUTION. This species is actually known only from Tanzania.

REMARKS. Only the study of the male may indicate the systematic position of the species that is temporarily included in this group.

4. ***Notolinopsis bambusianus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Terr. Uvira, Lubuka, 2780 m, N. Leleup, 4.IX.1951 (MRAC); paratypes: same data, 4 males, 6 females (MRAC), 4 males, 3 females (cB); Kivu, Itombwe, tête de source Kahlolo, 2800 m, N. Leleup, I.1960 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 7.2 mm; from anterior margin of head to posterior margin of elytra: 3.5 mm. Apterous. Reddish brown. Head and pronotum with transverse micro-striation. Head sub-rectangular, with slightly rounded sides and broadly rounded posterior angles. Eyes very small and flat. Surface of head with very fine and sparse punctation. Ocular grooves deep and almost horizontal. Pronotum sub-rectangular, longer and wider than head, with oblique anterior margins and broadly rounded anterior angles. Surface with very fine, widely spaced, irregular punctation, apart from an impuctate median band, among which are scarcely distinguishable dorsal series of 12, 13 punctures. Elytra short, shorter and narrower than pronotum, with obsolete humeral angles. Surface with fine and sparse punctation arranged in a few series. Posterior margin of sixth visible sternite concave in the middle. Tergite and sternite of the male genital segment as in figures 754, 755. Aedeagus (Fig. 756) large, 1.85 mm long, sub-spherical, with symmetrical parameres; distal lobule sub-triangular; inner sac covered with fine scales and with 3, 4 large sub-triangular scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the habitat collection: forest of bamboo.

DISTRIBUTION. This species is only known from Kivu region in Congo (Fig. 760).

BIONOMICS. The specimens were collected in "*humus en forêt de bambous*".

5. ***Notolinopsis montanus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Terr. Uvira, Haute Sange, 2900 m, N. Leleup, II.1961 (MRAC); paratype: same data, Lac Lungwe, 2700 m, N. Leleup, 19.II.1952, 1 male (cB).

DESCRIPTION. Length of body: 7.1 mm; from anterior margin of head to posterior margin of elytra: 3.3 mm. Apterous. Reddish brown. Head with more or less transverse micro-striation; pronotum with polygonal micro-reticulation. Similar to *N. polygonalis* n. sp., but more robust, longer. Head more dilated, subquadrate, with sparser punctation. Pronotum larger and dilated, not dilated anteriorly, sub-rectangular, with denser and finer punctation than that of *N. polygonalis* n. sp. Elytra very short, shorter than that of *N. polygonalis* n. sp. Tergite and sternite of the male genital segment as in figures 757, 758. Aedeagus (Fig. 759) large, 1.77 mm long, sub-oval, with long narrow parameres and a sub-triangular distal lobule; inner sac ribbon-like, short, covered with fine scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the Latin *montanus -a -um* (mountain).

DISTRIBUTION. This species is actually known only for the type locality, in Congo (Fig. 760).

BIONOMICS. The specimen was collected in "*terreau de bambous*", "*humus for. bambous*".

REMARKS. Female unknown.

6. ***Notolinopsis afrus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Terr. Uvira, Hte Luvubu, 2650 m, N. Leleup, II.1952 (MRAC); paratype: same data, 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.4 mm; from anterior margin of head to posterior margin of elytra: 3.1 mm. Apterous. Head and pronotum with more or less polygonal micro-reticulation. Body reddish yellow. Head almost rounded (Fig. 761), narrowed posteriad, with rounded sides until neck. Eyes small and flat. Surface of head with coarse but shallow and very sparse punctation. Pronotum (Fig. 761**)** a little longer than head (Fig. 761**)**, slightly dilated anteriorly where it is a little narrower than head, with broadly rounded anterior angles; surface with fine and not dense punctation, apart a median impunctate band. Elytra short, dilated posteriad, shorter and a little wider than pronotum posteriad, with obsolete humeral angles. Surface with very fine and sparse punctation, arranged in some widely spaced series. Abdomen with more or less, fine and dense transverse micro-striation and fine punctation, especially on the sides. Tergite and sternite of the male genital segment as in figures 762, 763. Aedeagus large (Fig. 764), 1.5 mm long, sub-spherical, with a short, small distal lobule; parameres symmetrical, narrow and long; inner sac very narrow, almost filiform, with sparse, small scales, especially in the proximal portion.

VARIABILITY. The paratype have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the Latin *afrus -a -um* (African).

DISTRIBUTION. This species is actually known only for the type locality, in Congo (Fig. 760).

BIONOMICS. The specimens was collected in "*forêt bambous*".

REMARKS. Female unknown.

2. *Notolinopsis uncinatus* sub-group

This sub-group is composed of species very similar one another in colouration, shape and micro-sculpture. Also the aedeagus is uniformly shaped, sub-oval, elongated with distal portion narrower and truncate; the parameres are very long and usually asymmetrical.

KEY TO THE SPECIES

1. Body more robust, 7–8.5 mm long.....2
-. Body less robust, 5–6.8 mm long; head and pronotum with polygonal micro-reticulation.....5

2. Head oval.....3
-. Head subquadrate; body 7.2 mm long.....4
-. Head narrow in front and dilated posteriad, with sparse punctation; pronotum strongly dilated anteriorly, with sub-rectilinear anterior margins; body 7 mm long. Aedeagus sub-spherical, with short parameres and distal lobule, as in figure 767. Lesotho.....1. *N. lesotho* n. sp.

3. Body 8.5 mm long, reddish brown; head narrow in front and dilated posteriad; pronotum longer and wider than head. Aedeagus sub-spherical, with long, asymmetrical parameres and distal lobule as in figure 770. Congo: Uvira.....2. *N. submontanus* n. sp.
-. Body 7.7 mm long. Aedeagus long, with asymmetrical parameres and distal lobule of characteristic shape (Fig. 773). Congo: Uvira.....3. *N. uncinatus* n. sp.

4. Body broader; pronotum more massive, a little wider than head. Aedeagus with very long parameres and distal lobule as in figure 776. Congo: Mwenga.....4. *N. lungweianus* n. sp.
-. Body narrower; pronotum less massive, more or less as wide as head. Aedeagus with short, arcuate parameres and distal lobule as in figure 779. Congo: Uvira.....5. *N. congoanus* n. sp.

5. Body 6.8 mm long, more robust and broader; pronotum proportionately narrow, a little narrower than head. Aedeagus larger, with long parameres and distal lobule as in figure 782. Congo: Kivu.....6. *N. polygonalis* n. sp.
-. Body 5–5.6 mm long, less robust and broad; pronotum less narrow, as wide as head. Aedeagus small, with arcuate parameres and sub-triangular distal lobule (Fig. 785). Congo..... .....7. *N. uviranus* n. sp.

1. ***Notolinopsis lesotho*** n. sp.

Examined material. Holotype male: South Africa, E Lesotho, Hodson's Peak, 3000 m, 29.32S, 29.17E, Endrödy-Younga, 11.III.1976 (TMSA); paratypes: same data, 2 exx. (TMSA), 1 ex. (cB).

Description. Length of body: 7 mm; from anterior margin of head to posterior margin of elytra: 4 mm. Reddish brown. Similar to *N. meridionalis* n. sp. but with less oval head, narrower anteriorly and dilated posteriad, and with smaller and flatter eyes. Surface with sparser punctation. Pronotum narrower, anteriorly more dilated, with sub-rectilinear anterior margins and more sinuate sides. Elytra much shorter. Tergite and sternite of the male genital segment as in figures 765, 766. Aedeagus 1.33 mm long (Fig. 767), wide, with prominent distal portion; parameres squat and wide, converging at the apex; distal lobule with rounded apex; inner sac ribbon-like, narrow, folded on itself and covered on the margins with small spines, and distal portion covered with fine spinulae, as in *N. meridionalis* n. sp.

Variability. The paratypes have no substantial morphological differences with the holotype described.

Etymology. The specific epithet refers to Lesotho.

Distribution. Lesotho.

Bionomics. The specimens were collected "*under stone*".

Remarks. This species is temporarily placed in this group.

2. ***Notolinopsis submontanus*** n. sp.

Examined material. Holotype male: Congo, Kivu, Terr. Uvira, Lubuka, 2780 m, N. Leleup, 4.IX.1951 (MRAC).

Description of Holotype. Male. Length of body: 8.5 mm; from anterior margin of head to posterior margin of elytra: 3.9 mm. Apterous. Reddish brown. Surface of head and pronotum with polygonal micro-reticulation. Head oval, narrow in front and dilated posteriad. Eyes very small and flat. Surface of head with fine, sparse punctation. Pronotum longer and wider than head, dilated anteriorly, with almost rectilinear sides. Surface with fine punctation apart from the median band. Elytra shorter and a little wider than pronotum, with obsolete humeral angles and shallow punctation, arranged in some series. Tergite and sternite of the male genital segment as in figures 768, 769. Aedeagus 1 mm long (Fig. 770), sub-spherical, with long, asymmetrical parameres and distal lobule little and short.

Etymology. The specific epithet refers to the Latin *sub-montanus -a -um* (sub-montane).

Distribution. This species is only known from the type locality in Congo (Fig. 786).

Bionomics. The specimen was collected in "*humus forêt avec bambous*".

Remarks. Female unknown.

3. ***Notolinopsis uncinatus*** n. sp.

Examined material. Holotype male: Congo, Kivu, Terr. Uvira, Hte Kaholoolo, 2800 m, N. Leleup, I.1960 (MRAC); paratype: same data, 1 male (cB).

Description of Holotype. Male. Length of body: 7.7 mm; from anterior margin of head to posterior margin of elytra: 2.4 mm. Apterous. Reddish brown. Head with polygonal micro-reticulation; pronotum with transverse micro-striation. Similar to *N. bambusianus* n. sp. Head anteriorly narrow, with more rounded sides. Eyes smaller than those of *N. bambusianus* n. sp. Surface of head with denser punctation. Pronotum wider, with largely rounded anterior angles. Surface with much denser punctation. Elytra wider and shorter than those of *N. bambusianus* n. sp., with denser punctation. Tergite and sternite of the male genital segment as

in figures 771, 772. Aedeagus 1.2 mm long (Fig. 773), narrow, with very long, narrow and arched parameres; distal lobule characteristic; inner sac apparently not visible.

VARIABILITY. The paratype has no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the Latin *uncinatus -a -um* (hook-shaped), in relation to the shape of parameres.

DISTRIBUTION. This species is only known from the type locality in Congo (Fig. 786).

BIONOMICS. The specimen was collected in "*forêt de montagne avec bambous*".

REMARKS. Female unknown.

4. ***Notolinopsis lungweianus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Terr. Mwenga, Lac Lungwe, 2700 m, N. Leleup, VIII.1953 (MRAC); paratypes: same data, 1 male, 3 females (MRAC), 3 males (cB); same data, 19.II.1952, 1 male (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 7.2 mm; from anterior margin of head to posterior margin of elytra: 2.2 mm. Apterous. Reddish brown. Head and pronotum with transverse microstriation. Similar to *N. bambusianus* n. sp., but more robust, wide. Head longer and wider than that of *N. bambusianus* n. sp., with more broadly rounded posterior angles and denser punctation. Pronotum massive, wider and more dilated anteriorly, with more oblique anterior margins and almost obsolete anterior angles. Surface with a slightly coarser and denser punctation than that of *N. bambusianus* n. sp. Elytra shorter, with coarser and denser punctation. Tergite and sternite of the male genital segment as in figures 774, 775. Aedeagus (Fig. 776) 1.1 mm long, sub-oval, with asymmetrical, very long parameres; distal lobule characteristic; inner sac not visible.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality.

DISTRIBUTION. This species is only known from the type locality in Congo (Fig. 786).

BIONOMICS. The specimen was collected in "*humus, forêt de bambous et* Hagenia".

5. ***Notolinopsis congoanus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Terr. Uvira, Lubuka, 2780 m, N. Leleup, 4.IX.1951 (MRAC); paratypes: same data, 3 males, 6 females (MRAC), 4 males, 6 females (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 7.2 mm; from anterior margin of head to posterior margin of elytra: 2.2 mm. Apterous. Reddish brown. Head and pronotum with more or less transverse micro-striation. Similar to *N. bambusianus* n. sp. Head narrower than that of *N. bambusianus* n. sp., with sub-rectilinear sides. Pronotum narrower. Surface with very fine, irregular punctation, apart a median strip, in which are distinguished with difficulty a dorsal series of 10, 11 punctures and lateral series of 6-7 punctures. Elytra narrower, with more wrinkled surface. Posterior margin of sixt visible sternite slightly rounded. Tergite and sternite of the male genital segment as in figures 777, 778; sternite very large, projecting below the tergite. Aedeagus 0.95 mm long (Fig. 779), sub-ovoid, with symmetric, large and arched parameres; distal lobule characteristic; inner sac apparently not visible.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Congo.

DISTRIBUTION. This species is actually known only for the type locality, in Congo (Fig. 786).

BIONOMICS. Some specimens were collecte in "humus *for. bambous*".

6. ***Notolinopsis polygonalis*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Itombwe, Vall. Ruiss. Mugono, 2700 m, N. Leleup, I.1960 (MRAC); paratypes: same data, 2 males, 1 female (MRAC), 2 females (cB); Kivu, Terr. Uvira, Ht Luvuba, 2750 m, N. Leleup,

V.1954, 1 male, 3 females (MRAC), 1 male, 1 female (cB).

Description of Holotype. Male. Length of body: 6.8 mm; from anterior margin of head to posterior margin of elytra: 2.3 mm. Apterous. Reddish brown. Head (partially) and pronotum with very evident polygonal micro-reticulation. Similar to *N. bambusianus* n. sp., but head narrower and more oval, narrow anteriorly, with more rounded sides and finer and denser punctation than that of *N. bambusianus* n. sp. Pronotum longer and narrower than that of *N. bambusianus* n. sp., with very oblique anterior margins, almost obsolete anterior angles and very fine and sparse punctation, apart from the median band. Elytra longer, with finer punctation. Tergite and sternite of the male genital segment as in figures 780, 781. Aedeagus small (Fig. 782), 0.9 mm long, narrowly oval, and long slender parameres, with large proximal portion; distal lobule elongate, sub-triangular; inner sac not visible.

Variability. The paratypes have no substantial morphological differences with the holotype described.

Etymology. The specific epithet refers to the micro-reticulation on head and pronotum.

Distribution. This species is actually only known from the type locality in Congo (Fig. 786).

Bionomics. The specimens were collected in "humus *for. mont. avec bambous*".

7. ***Notolinopsis uviranus*** n. sp.

Examined material. Holotype male: Congo, Kivu, Terr. Mwenga, Lac Lungwe, 2700 m, N. Leleup, II.1952 (MRAC); paratypes: same data, 1 female (MRAC); Terr. Uvira,. Lubuka, 2780 m, N. Leleup, 4.IX.1951, 2 males, 8 females (MRAC), 3 males, 4 females (cB); same data, Itombwe, Vall. Ruiss. Mugono, 2700 m, N. Leleup, I.1960, 2 males, 2 females (MRAC), 3 males, 2 females (cB); Kivu, Mont Muhi, ruiss. Isale, 3025 m, N. Leleup, VIII.1955, 1 male, 1 female (MRAC).

Description of Holotype. Male. Length of body: 4.9 mm; from anterior margin of head to posterior margin of elytra: 2.2 mm. Apterous. Light reddish brown. Head and pronotum with polygonal micro-reticulation. Body slender. Head oval, narrow anteriorly, with very broadly rounded posterior angles. Eyes small. Surface of head with fine and very sparse punctation. Pronotum a little longer than head, slightly dilated anteriorly where it is as wide as head, with very oblique anterior margins and very broadly rounded anterior angles. Surface with fine and sparse punctation, apart from the median band. Elytra very short, shorter than pronotum, with obsolete humeral angles. Surface with fine punctation arranged in some series. Tergite and sternite of the male genital segment as in figures 783, 784. Aedeagus small (Fig. 785), 0.77 mm long, with parameres sickle-shaped; distal lobule sub-triangular, arcuate; inner sac not visible.

Variability. The paratypes have no substantial morphological differences with the holotype described.

Etymology. The specific epithet refers to the Uvira region.

Distribution. This species is only known from Kivu region in Congo (Fig. 786).

Bionomics. The specimens were collected in "humus*, for. mont. avec bambous*".

2. *Notolinopsis capensis* group

This group is composed by winged species, more or less dark brown, with evident eyes and not short elytra.

KEY TO THE SPECIES

1. Body large, 11.5-13 mm long; head and pronotum black, elytra reddish, abdomen brown. Aedeagus with long, sinuate and pointed distal lobule (Fig. 789). Lesotho; South Africa: Mpumalanga, Transvaal, Natal, Cape Prov..... .....1. *N. hanstroemi*
-. Body smaller.....2

2. Body 10-11 mm long.....3
-. Body 7.5-9.5 mm long.....4

3. Body brownish black; head narrow in front, with sub-rectilinear sides; pronotum larger; elytra

longer. Aedeagus (Fig. 792) with large distal lobule. South Africa: Cape Prov.....
.....2. *N. reticulatus* n. sp.
-. Body, brown with darker head; head not particularly narrow in front, with rounded sides; pronotum smaller; elytra shorter. Aedeagus (Fig. 795) with short, narrow distal lobule. South Africa: Cape Prov.....3. *N. oosthuizeni* n. sp.

4. Body 8–9.5 mm long.....5
-. Body less than 8 mm long.....9

5. Body entirely brown.....6
-. Body brown with black head.....7
-. Body reddish brown.....8

6. Body dark brown, 7.5–8 mm long; head visibly narrowed in front; pronotum with more oblique anterior margins. Aedeagus (Fig. 799) smaller, with very characteristic distal lobule. South Africa: Cape Prov.....4. *N. fallax*
-. Body light brown, 8.5–9 mm long; head not visibly narrowed in front; pronotum with less oblique anterior margins. Aedeagus (Fig. 802) larger, with short, narrow parameres and sub-rectangular distal lobule. Zimbabwe, Lesotho, South Africa: Cape Prov., Transvaal, Namaqualand, Transkei.....5. *N. brunneus* n. sp.
-. Body brown, 9.5 mm long; head narrow in front and dilated posteriad; pronotum massive, with transverse micro-striation. Aedeagus (Fig. 805) large, spherical, with large, curved parameres and very small, sub-triangular distal lobule. South Africa: Cape Prov.....
.....6. *N. sphaericus* n. sp.

7. Body 9.6 mm long, black with brown elytra and abdomen; head dilated posteriad, with broadly rounded posterior angles. Aedeagus (Fig. 808) smaller, narrow and long, with bifurcate distal lobule. South Africa: Transvaal.....
.....7. *N. bispinosus* n. sp.
-. Body black, with brownish black abdomen, 9 mm long; head with polygonal micro-reticulation; elytra with obsolete humeral angles. Aedeagus (Fig. 811) larger, sub-oval, narrow distally, with rounded distal lobule. South Africa: Swartberg.....8. *N. niger* n. sp.
-. Body light brown, with darker head, 9 mm long; head sub-quadrate, with sub-rectilinear sides. Aedeagus (Fig. 814) even larger, spherical, with short, sub-rectangular distal lobule. South Africa: Namaqualand.....9. *N. magnus* n. sp.

8. Body more robust, darker, 8.7 mm long; head more long, with sub-rectilinear sides; eyes smaller and more flat; pronotum more massive. Aedeagus (Fig. 818) with very characteristic distal lobule. South Africa: Transkei.....
.....10. *N. nquadu* n. sp.
-. Body less robust, lighter, 7.5–8 mm long; head shorter, with slightly rounded sides; eyes larger and a little protruberent; pronotum less massive. Aedeagus (Fig. 822) with sub-rectangular distal lobule. Lesotho; South Africa: Cape Prov., Natal.....11. *N. meridionalis* n. sp.

9. Body about 7 mm long.....10
-. Body less than 7 mm long.....13

10. Body light reddish brown; head sub-rectangular.....11
-. Body darker.....12

11. Head wider, with slightly rounded sides; pronotum wider and more dilated anteriorly; elytra shorter; body 7.2 mm long. Aedeagus (Fig. 825) short, with large, curved distal lobule. South Africa: Cape Prov.....12. *N. peninsularis* n. sp.
-. Head narrower, with sub-rectilinear sides; pronotum narrower and less dilated anteriorly; elytra longer. Body 7 mm long. Aedeagus (Fig. 828) with very particular right paramere. South Africa: Cape Prov.....13. *N. oceanicus* n. sp.

12. Body slender, narrower, brownish black with reddish brown elytra, 7.2 mm long; head and pronotum narrower; pronotum not dilated anteriorly; elytra wider. Aedeagus (Fig. 831) sub-spherical, with heart-shaped distal lobule. Congo.....14. *N. nidorum* n. sp.
-. Body larger and broader, paler, 7 mm long: head and pronotum wider; pronotum dilated anteriorly; elytra narrower. Aedeagus sub-rectangular, with distal lobule of characteristic shape (Fig. 835). Angola.....15. *N. angolanus* n. sp.

13. Body about 6.5 mm long.....14
-. Body less than 6 mm long; head sub-quadrangular.....15

14. Body light brown, narrow.....15
-. Body reddish brown; head sub-oval, dilated posteriad; pronotum massive, wider than head. Aedeagus (Fig. 838) sub-spherical, with left paramere very large and long. South Africa: Cape Prov.....16. *N. capensis*
-. Body dark brown.....16

15. Body less robust; head sub-rectangular, less narrow in front; eyes larger; pronotum larger, with less oblique anterior margins. Aedeagus (Fig. 841) sub-spherical, with characteristic right paramere and distal labule. South Africa: Cape Prov.....17. *N. finisterrae* n. sp.
-. Body more robust; head narrower in front; eyes smaller; pronotum smaller, with more oblique anterior margins. Aedeagus sub-rectangular, with bifurcate distal lobule (Fig. 844). South Africa: Swartberg....18. *N. swartbergensis* n. sp.

16. Body dark brown, with black head; head sub-spherical; pronotum massive, dilated anteriorly. Aedeagus (Fig. 847) sub-spherical, with long parameres. South Africa: Havequas Mts..... .....19. *N. hawequas* n. sp.
-. Body dark brown, with black head and dark reddish elytra; head sub-rectangular; pronotum less massive, a little dilated anteriorly and a little longer and wider than head; elytra sub-rectangular. Aedeagus (Fig. 850) with characteristic parameres and distal lobule. South Africa: Cape Prov.....20. *N. latitarsis*
-. Body reddish dark brown, with darker elytra, 6 mm long; head sub-quadrate. Aedeagus (Fig. 853) sub-oval, with long parameres and distal lobule. South Africa: Cape Prov..... .....21. *N. spinosus* n. sp.

17. Body 5.7 mm long, reddish brown with red elytra; head a little narrowed anteriorly; pronotum longer and wider than head. Aedeagus (Fig. 856) with very particular, large parameres and distal lobule. South Africa: Natal; Lesotho.....22. *N. silvestris* n. sp.
-. Body 5.5 mm long, entirely reddish orange with infuscate elytra; head not narrowed anteriorly; pronotum longer than but as wide as head. Aedeagus (Fig. 859) with long parameres and very small distal lobule. South Africa: Transvaal.....23. *N. twello* n. sp.

1. ***Notolinopsis hanstroemi*** (Scheerpeltz, 1974) comb. n.

Xantholinus hanstroemi - Scheerpeltz, 1974: 127; Herman, 2001a: 3798

Type material, The Museum of Zoology in Lund preserves 2 specimens, one labelled "*S. Afr. Natal / Karkloff / Oct. 1948 / B. Hanström*", "Xantholinis / Hanstoemi *sp. n.*", "*Holotype*" (handwritten on red label), "*Typus* / Xantholinus hanstroemi / *O. Scheerpeltz*" (on red label), "*1978/279*", "Xantholinus / Hanstroemi / s*p. n. / det. Scheerpeltz 1968*", "Xantholinus / turneri *Bernh. / P. M. Hammond/ det. 1978*" (with MS in red). "*Type n°. 623.1.2 / Zool. Mus. Lund Sweden / Staphylinidae*", "*1991/142*", "Linosomus / hanstroemi *(Scheerp.) / J. Janak det. 2006*", "*ZML 2007/122*". It is a male. The other specimen is labelled "*S. Afr. Natal / Royal Natal National / Park. Tugela Valley. / 3.IV.51 No. 258*", "*Swedish South Africa / Expedition / 1950-1951 / Brinck-Rudebeck*", "Xantholinus / Hanströmi *sp. n.*", "*Allotype*" (handwritten on red label), "*Typus /* Xantholinus / Hanströmi / *O. Scheerpeltz*", "*1978/280*", "*Type No. / 623.2*", "*1991/143*", "Linosomus hanstroemi *(Scheerp.) / J. Janak det. 2006*", "*ZML- 2007/129*". It is a female.

These specimens now bear the determination label "Notolinopsis hanstroemi *(Scheerp.), Bordoni det. 2006*".

Examined Material. South Africa, E Transvaal, Berlin, 25.32S, 30.44E, Endrödy-Younga, 10.XII.1986, 2 exx. (TMSA), 3 exx. (cB); Transvaal, Uitsoek, Grootkloof, ind. for., 25.15S, 30.33E, Endrödy-Younga, 26.X.1986, 6 exx. (TMSA), 4 exx. (cB); 18.XII.1988, 1 ex. (TMSA); Transvaal, Nelshoogte, Knuckles rochs for., 25.47S, 30.50E, Endrödy-Younga, 24.X.1986, 3 exx. (TMSA); Transvaal, Chrissie (whit the determination "*Type* Xantholinus transvaalensis *Scheerpeltz*", in litt.), 1 ex. (NMW); E Transvaal, Pilgrims Rest, 1400 m, S. Peck, 31.XII.1985 m, 1 ex. (cB); E Transvaal, 30 km W Trichardtsdal, Down Podocarp for., S. Peck, 30.XII.1985, 1 ex. (cB); Transvaal, Barberton distr., Twello Forest, 4500 ft., N. Leleup, X.1961, 2 exx. (MRAC); Transvaal, Pretoria, J. Smith, V.1958, 3 exx. (MRAC), 1 ex. (cB); Transvaal, Soutpangsberg distr., Hangliphoa Forest, N. Leleup,

VIII.1960, 1 male (light specimen, probably teneral) (MRAC); Pretoria, S. Straneo, XII.1954, 1 ex. (cB); Ug. Johannesbg., Zumpt, XII.1948, 1 ex. (MNB); Mpumalanga, Middelburg to Stoffberg, 43.5 km after middelburg, P. Schüle, 16.XI.2001, 1 ex. (SMNS); Natal, Middld. Northington, 1420 m, 29.28S, 30.01E, Endrödy-Younga, 12.XII.1989, 5 exx. (TMSA), 2 exx. (cB); Natal, Weza, Bangeni forest, 30.38S, 29.39E, Endrödy-Younga and Klimaszewsky, 21.XI.1989, 1 ex. (cB); Natal, 75 km WSW Escourt, Cathedral Peaks For. Sta., 1500 m, S.and J. Peck, 7–31.XII.1979, 29 exx. (FMNH), 10 exx. (cB); Natal, Drakensberg, Moks Cowl, 1450 m, 29.03S, 29.24E, river cascade, B.& M. Uhlig, 9.XI.1993, 2 exx. (MNB); Natal, Central Drakenberg Monks Cowl., 29.03S, 29.24E, B. & M. Uhlig, 19.XI.1996, 1 ex. (MNB), 1 ex. (cB); Natal, Kwa Zulu. Kokstad, J. Jenis, 15-16.XII.1997, 1 ex. (cJ); Natal, Underberg-Mkomazana, Lodge 1400–1800 m, 29.37S, 29.25E, R. Fencl, 11.XI.2001, 1 ex. (cB).

E Cape, Amatole, Isidenge For. St., 32.41S, 27.25E, Endrödy-Younga, 16.XI.1987, 2 exx. (TMSA), 1 ex. (cB).

South Africa, Cape Prov., Baufort distr., Katberg, N. Leleup, I.1961, 5 exx. (MRAC), 3 exx. (cB).

Lesotho, 30 km NW Sani Pass, Mpwere, 2400 m, 29.23S, 29.05E, R. Fencl, 12.XI.2001, 2 exx. (cJ), 2 exx. (cB); Liphophung, 35 km N Butha-Buthe, 28.42S, 28.20E, J. Janak, 14.XI.2001, 1 ex. (cJ).

DESCRIPTION. Length of body: 11.5–13 mm; from anterior margin of head to posterior margin of elytra: 6–7 mm. Head and pronotum black, elytra reddish brown, abdomen brown. Body very robust. Head sub-rectangular, sub-rectilinear and sub-parallel sided. Eyes small and flat. Surface of head with very fine and dense but superficial transverse micro-striation and deep, dense punctation, apart from a median band. Pronotum longer than head, anteriorly dilated, with dorsal series of 7, 11 punctures and lateral series of 5, 6 punctures among numerous other punctures. Elytra sub-rectangular, sub-rectilinear and sub-parallel sided, with marked humeral angles. Surface shiny, though a little rugose, with very dense punctation arranged in numerous close series. Abdomen with fine and dense, transverse micro-striation and fine and dense punctation, especially on the sides. Tergite and sternite of the male genital segment as in figures 787, 788. Aedeagus very characteristic (Fig. 789), large, 1.5 mm long, oval, with long parameres; the left paramere, in dorsal view, with T-shaped proximal portion; distal lobule large, as long as the parameres; inner sac everted in all the examined males, tubular, with minute sclerified structures.

DISTRIBUTION. Lesotho, S Africa: Mpumalanga, Transvaal, Natal, Cape Province (Fig. 796).

BIONOMICS. The specimens were collected in "*forest litter*", "litter betw. rocks", "Quercus *forest litter*", "Quercus-Eucaliptus *fungi*", "*litter in revine w/hyphae*", "humus *in forest*".

REMARKS. The specimens from Estcourt are smaller, with more quadrate and flatter head, but the aedeagus is identical to those of other examined specimens. This species seems occurs in Eastern South Africa.

2. ***Notolinopsis reticulatus*** n. sp.

EXAMINED MATERIAL. Holotype male: South Africa, Cape, Amatole, Isidenge For. St., 32.41S, 27.15E, Endrödy-Younga, 16.XI.1986 (TMSA); paratypes: same data, 1 ex. (TMSA); Cape, Cederberg, jeep track, 1130 m, 32.28S, 19.14E, Endrödy-Younga, 7.XI.1983, 1 ex. (cB); Cape, Wilderness N. P., Eilandvlei, 33.59S, 22.38E., B. and M. Uhlig, 30.XII.1996, 1 male (NMB), 1 male (cB); Cape, Wildrness N. P., Rondevlei, 33.59S, 22.43E, B. and M. Uhlig, 29.XI.1996, 1 male (cB); Cape, Hoop Vlei, 34.27S, 20.24E, B. and M. Uhlig, 9.XI.1997, 1 male, 2 females (MNB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 11 mm; from anterior margin of head to posterior margin of elytra: 5.6 mm. Characterised by the very fine and dense, polygonal micro-reticulation on the head. Head very narrow anteriorly, sub-rectlinear sided, with narrowly rounded posterior angles. Eyes small and almost flat. Surface of head with minute and dense punctures; the distance between the punctures is equal or one and a half times their diameter. Pronotum longer and wider than head, anteriorly dilated, with strongly sinuate

sides. Surface with fine and dense, more or less transverse micro-striation, with dorsal series of 7, 8 punctures and lateral series of 5, 6 punctures and other punctures around them. Elytra sub-rectangular, clearly shorter than pronotum, a little dilated posteriad, with obsolete humeral angles. Surface wrinkled, with traces of transverse micro-striation but shiny, with fine and dense punctation. Abdomen with polygonal micro-reticulation and very fine and dense punctation on the sides. Sixth visible male sternite with a median posterior emargination. Tergite and sternite of the male genital segment as in figures 790, 791. Aedeagus 1.48 mm long (Fig. 792), spherical, characterised a by a very large, sub-rectangular distal lobule; parameres very large and long; left paramere serrate; inner sac everted in all the examined males, covered with fine scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the Latin *reticulatus -a -um* (grid), referring to the surface of head.

DISTRIBUTION. South Africa: Cape Province (Fig. 815).

BIONOMICS. The specimens were collected in "Quercus-Eucaliptus *fungi*", "*marsh shore*", "Phragmites *belt sievings*"

3. ***Notolinopsis oosthuizeni*** n. sp.

EXAMINED MATERIAL. Holotype male: South Africa, Cape-Karroo, Zwartskraal farm, 33.10S, 22.32E, R. Oosthuizen, 18.III.1980 (TMSA); paratypes: same data, 1 ex. (TMSA), 2 males (cB); SW Cape, Stanford, 5 km S, 34.29S, 19.26E, Endrödy-Younga and Penrith, 27.VIII.1983, 1 ex. (TMSA).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 10.5 mm; from anterior margin of head to posterior margin of elytra: 5 mm. Dark reddish brown with black head. Similar to *N. magnus* n. sp. but larger, of different colouration; head more oval and elongate, with more rounded sides and denser punctation; pronotum larger and wider, with more marked and protruberent anterior angles, shiny, without sculpture; dorsal series of 8 punctures and lateral series of 5, 6 punctures, among other punctures; longer elytra. Tergite and sternite of the male genital segment as in figures 793, 794. Aedeagus large but smaller than that of *N. magnus* n. sp. (Fig. 795), 1.88 mm long, oval instead sub-spherical; parameres longer, in ventral view as in fig.; distal lobule longer, without an apico-median incision; inner sac ribbon-like, covered with spinules and scales and folded several times on itself.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. Patronymic. Dedicated to the first collector.

DISTRIBUTION. South Africa: Cape Province (Fig. 815).

4. ***Notolinopsis fallax*** (Sachse, 1852) comb. n.

Xantholinus fallax - Sachse, 1852: 125; Bernhauer & Schubert, 1914: 302; Herman, 2001a: 3794
Xantholinus capensis - Boheman, 1858: 27; Bernhauer & Schubert, 1914: 302, syn. n.

TYPE MATERIAL. The Deutsches Entomologisches Institut in Müncheberg preserves 1 specimen labelled "*Cap. b. Esp.*", "fallax *Sachse*", "*Syntypus*" (printed on red label). It is a male that I choose as lectotype of the species. It bears the labels "*Lectotypus* Xantholinus fallax *Sachse, Bordoni des. 2006*".

The Swedish Museum of Natural History in Stockholm preserves 1 specimen labelled "*Cap / b. Sp.*", "*Kinb.*", "*Type*" (printed on white label), "capensis". It is a female identical to *N. fallax* that I choose as lectotype of the species. It bears the label "*Lectotypus* Xantholinus capensis *Boh., Bordoni des. 2006*".

I have affixed the determination label "Notolinopsis fallax *(Sachse.), Bordoni det. 2006*" to both specimens.

EXAMINED MATERIAL. South Africa, SW Cape, Heuningnes Riv., 34.42S, 20.02E, Endrödy-Younga leg., 28.X.1983, 3 exx. (TMSA), 2 exx. (cB).

DESCRIPTION. Length of body: 7.5–8 mm; from anterior margin of head to posterior margin of

elytra: 4.4–4.8 mm. Uniformly more or less dark brown. Similar to *N. capensis* but larger, more massive, darker; head more sub-rectangular, with more acute, less rounded posterior angles; slightly larger eyes; surface of head with coarser punctation; elytra proportionately longer, with more marked humeral angles and more evident punctation. Male genital segment with asymmetrical pleura; the left pleura, in dorsal view, with an apical emargination. Tergite and sternite of the same segment as in figures 797, 798; sternite with some series of pubescence. Aedeagus 1.1 mm long (Figs. 799, 1761), very characteristic, sub-spherical, with basal bulb prolonged distally on the left part into a long and sinuate lobule furnished with a pre-apical tooth; parameres asymmetrical, broad and long; inner sac covered with small scales and with a series of convergent spines.

DISTRIBUTION. South Africa: Cape Province (Fig. 815).

BIONOMICS. Some specimens were collected in "*shore washing*".

5. ***Notolinopsis brunneus*** n. sp.

EXAMINED MATERIAL. Holotype male: South Africa, Namaqualand, Mesklip, 29.49S, 17.52E, Endrödy-Younga, 26.VIII.1977 (TMSA); paratypes: same data, 1 ex. (TMSA), 1 ex. (cB); Namaqualand, Vogelklip, 29.50S, 12.48E, Endrödy-Younga, 27.VIII.1977, 1 ex. (TMSA); Namaqualand, Kameskroon, 30.11S, 18.03E, Endrödy-Younga, 26.VIII.1977, 1 ex. (TMSA), 1 ex. (cB); Cape, Wilderness NP, Langviei, 33.59S, 22.40E, B. and M. Uhlig, 30.X.1996, 4 exx. (MNB), 2 exx. (cB); Cape Prov., Muizenberg, R. Legg VI.1989, 1 male (MRAC); Cape-Karroo, Zwartskraal forest, 33.10S, 22.32E, Endrödy-Younga, 8.V.1980, 1 ex. (cB); SW Cape, Verlorevlei farm, 32.19S, 18.22E, Endrödy-Younga, 28.VIII.1981, 1 ex. (TMSA); SW Cape, Zuurefontein farm, 32.50S, 18.34E, Endrödy-Younga, 31.VIII.1981, 1 ex. (TMSA); Transvaal, Berlin F. S., Sinkhole, 25.31S, 30.46E, Endrödy-Younga, 4.II.1987, 1 ex. (TMSA), 2 exx. (cB); Transvaal, Uitsoek, Grootkloof ind. for., 25.15S, 30.33E, Endrödy-Younga, 26.X.1986, 3 exx. (TMSA), 2 exx. (cB); Transvaal, 11 km SE Pilgrims Rest., S. Peck, 19-26.XII.1985, 1 ex. (FMNH); Transkei, Snezeewood forest, 30.15S, 28.35E, Endrödy-Younga, 10.III.1985, 1 ex. (TMSA); Lesotho, Ha Marakabei, 1650 m, 10 km NE of Butha-Buthe, 28.44S, 28.17E, R. Fencl, 14.XI.2001, 1 ex. (cJ); Zimbawe, Nyanga NP, Pongwe-George, Pungwe River, 18.27S, 32.47E, M. Uhlig, 7.XII.1993, 1 ex. (NMB); Australia, QLD. Kuranda Rain Forest, G. Minet, 18.VIII.1988, 1 male (NHMB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 8.8 mm; from anterior margin of head to posterior margin of elytra: 4.1 mm. Uniformly brown. Similar to *N. meridionalis* n. sp. but larger; head sub-rectangular, with less rounded sides; eyes smaller; pronotum less dilated anteriorly; elytra proportionately shorter. Tergite and sternite of the male genital segment as in figures 800, 801. Aedeagus larger than that of *N. meridionalis* n. sp. (Fig. 802), 1.6 mm long; parameres more squat; distal lobule short; inner sac very long, with different sclerotised structures.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described. Length of body: 8.5–9 mm; from anterior margin of head to posterior margin of elytra: 4–4.2 mm.

ETYMOLOGY. The specific epithet refers to the Latin *brunneus -a -um* (brown), in reference to the colour of the body.

DISTRIBUTION. Zimbabwe, Lesotho, South Africa: Namaqualand, Cape Prov., Transvaal, Transkei (Fig. 815). *Notolinopsis brunneus* n. sp. was collected furthermore in Australia in an inland sub-equatorial forest.

BIONOMICS. The specimens were collected in "*forest litter*", "Pinus *bark*", "*ground trap*", "*Malachite bird hide,* Juncus krausi *bush litter*".

REMARKS. Due to the difficulty of identification of single females, next to this species must be placed perhaps *Leptacinus multipunctatus* described on a female labelled "*S. Afr. Natal / Royal Natal National / Park. Tugela Valley. / 3.IV.51 No. 258*", "*Swedish South Africa / Expedition/ 1950-1951/ Brinck-Rudebeck*", "Leptacinus / multipunctatus / *sp. n.*" (handwritten by Scheerpeltz), "*Holotype*" (handwritten on red label), "*Typus* / Leptacinus / multipunctatus / *O. Scheerpeltz*" (on red label), "Leptacinus / multipunctatus / sp. n. / *det.*

Scheerpeltz 1968", "T*ype N° 614.1 / Zool. Mus. Lund Sweden / Staphylinidae*".

To this species might be referred a female from Natal, Drakensberg, Royal National Park, 28.43S, 28.53E, M. Uhlig, 9.II.1994 (NMB). The collection of this species in Queensland is interesting. Other species from Sout Africa are present also in Australia, as *Linosomus socius* which may be an introduced species, but also represent a case of Neoaustral distribution.

6. ***Notolinopsis sphaericus*** n. sp.

EXAMINED MATERIAL. Holotype male: South Africa, SW Cape, Velddrif, 3 km S, 32.48S, 18.08E, Endrödy-Younga, 22.VIII.1983 (TMSA).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 9.5 mm; from anterior margin of head to posterior margin of elytra: 4.8 mm. Uniformly brown. Similar to *N. magnus* n. sp. but a little smaller; head shorter, strongly dilated posteriad and narrow anteriorly, with more broadly rounded posterior angles; eyes slightly larger; surface of head with much sparser and superficial, transverse micro-striation; pronotum masssive, more robust than that of *N. magnus* n. sp., with coarser punctation; elytra shorter. Sixth visible male sternite with concave posterior margin. Tergite and sternite of the male genital segment as in figures 803, 804. Aedeagus large but smaller than that of *N. magnus* n. sp. (Fig. 805), 1.66 mm long, sub-spherical; parameres robust and short, symmetrical; distal lobule very short, with an apico-median emargination; inner sac tube-like, narrow, folded on itself several times, the margins covered with small scales.

ETYMOLOGY. The specific epithet is derived from the Latin *sphaericus -a -um* (spheric), referring to the shape of the aedeagus.

DISTRIBUTION. South Africa: Cape Province (Fig. 815).

REMARKS. Female unknown.

7. ***Notolinopsis bispinosus*** n. sp.

EXAMINED MATERIAL. Holotype male: South Africa, Transvaal, Nelshougte, Knuckles grassvald, 25.47S, 38.40E, Endrödy-Younga, 26.IX.1986 (TMSA).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 9.5 mm; from anterior margin of head to posterior margin of elytra: 4.8 mm. Black with brown elytra and abdomen. Similar to *N. oosthuizeni* but smaller and darker; head more dilated posteriad, with more broadly rounded posterior angles. Eyes smaller and less protruberent. Surface of head with finer and denser punctation; pronotum shiny despite the fine and dense, transverse micro-striation, with fine but deep punctation; elytra narrower, with sparser punctation. Tergite and sternite of the male genital segment as in figures 806, 807. Aedeagus similar to that of *N. swartbergensis* but narrower and longer (Fig. 808), 1 mm long, with longer distal lobule, clearly bifurcate at the apex; inner sac narrower and covered with finer and sparser small scales.

ETYMOLOGY. The specific epithet refers to the Latin *bifurcactus -a -um* (bifurcate), in reference to the shape of the aedeagus.

DISTRIBUTION. South Africa: Transvaal (Fig. 815).

REMARKS. Female unknown.

8. ***Notolinopsis niger*** n. sp.

EXAMINED MATERIAL. Holotype male: South Africa, Swartberge, Blesberg W, 1820 m, 33.25S, 22.40E, Endrödy-Younga, 17.XII.1978 (TMSA).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 9 mm; from anterior margin of head to posterior margin of elytra: 4.5 mm. Black with abdomen dark brown. Similar to *N. reticulatus* n. sp. in the fine and dense, polygonal micro-reticulation of head. Body considerably smaller and narrower. Head much less narrowed anteriorly, oval, the sides rounded, with more broadly rounded posterior angles. Eyes smaller. Surface of head with denser punctation. Pronotum proportionately shorter, with more oblique anterior margins; dorsal series of 8, 9 punctures and lateral series of 3, 4 punctures, both surrounded by a few other punctures. Elytra as long as pronotum, proportionately longer than that of *N. reticulatus* n. sp., with obsolete humeral angles and finer, shallower punctation. Tergite and sternite of the male genital segment as in figures 809, 810. Aedeagus oval (Fig. 811), 1.18 mm long,

with narrow median lobe; parameres very asymmetrical, narrow and long; distal lobule long and broad; inner sac ribbon-like, short, covered with small scales.

ETYMOLOGY. The specific epithet is the Latin *niger -a -um* (black), referring to the colour of the body.

DISTRIBUTION. South Africa: Swartberge, Natal (Fig. 815).

REMARKS. Female unknown.

9. ***Notolinopsis magnus*** n. sp.

EXAMINED MATERIAL. Holotype male: South Africa, Namaqualand coast, Buffelsrivier, 29.55S, 17.39E, Endrödy-Younga, 28.VIII.1977 (TMSA).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 9 mm; from anterior margin of head to posterior margin of elytra: 4.5 mm. Light brown with darker head. Similar to *N. brunneus* n. sp. but larger and more massive, with more quadrate head, sub-rectilinear sided. Eyes proportionately smaller. Surface of head with coarser and denser punctation. Pronotum more dilated anteriorly, with denser punctation; elytra proportionately shorter. Tergite and sternite of the male genital segment as in figures 812, 813. Aedeagus large (Fig. 814), 1.92 mm long, sub-spherical; parameres short, in ventral view as in fig.; distal lobule short, with an apico-median emargination; inner sac ribbon-like, wide, covered with minute scales and folded once on itself.

ETYMOLOGY. The specific epithet is the Latin *magnus -a -um* (large), alluding to the body size.

DISTRIBUTION. South Africa: Namaquqland (Fig. 815).

REMARKS. Female unknown.

10. ***Notolinopsis nquadu*** n. sp.

EXAMINED MATERIAL. Holotype male: South Africa, Transkei, Umtata, Nquadu Mt, 31.25S, 28.45E, Endrödy-Younga, 21.XII.1979 (TMSA).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 8.7 mm; from anterior margin of head to posterior margin of elytra: 4.8 mm. Reddish brown. Similar to *N. meridionalis* n. sp. but more robust, darker, with much more elongate head with sub-rectilinear and sub-parallel sides and narrowly rounded posterior angles. Eyes proportionally smaller and flat. Surface of head more rugose, with larger punctures. Pronotum more massive, much more dilated anteriorly, with dorsal and lateral series of 5, 6 punctures among other, surrounding punctures. Elytra very short, shorter than pronotum, sub-rectangular, with less marked humeral angles. Surface very rugose, with polygonal micro-reticulation and large, shallow and not dense punctation. Abdomen with polygonal micro-reticulation and fine and sparse punctation. Tergite and sternite of the male genital segment as in figures 816, 817. Aedeagus 1.1 mm long (Figs. 818, 819), remarkable in the presence of a very large distal lobule furnished with three long apophyses, as can be see in lateral view; parameres sinuate, with pointed apex; everted inner sac, ribbon-like, with fine and sparse scales.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. South Africa: Transkei (Fig. 815).

REMARKS. Female unknown.

11. ***Notolinopsis meridionalis*** n. sp. (Fig. 1713)

EXAMINED MATERIAL. Holotype male: South Africa, SW Cape, Struisbaai, 13 km NW, 33.37S, 20.01E, Endrödy-Younga, 29.X.1983 (TMSA); paratypes: same data, 27 exx. (TMSA), 14 exx. (cB); SW Cape, Zuurefontein farm, 32.50S, 18.34E, Endrödy-Younga, 31.VIII.1981, 7 exx. (TMSA), 3 exx. (cB); SW Cape, Pearly Beach, 5 km NE, 34.36S, 19.33E, Endrödy-Younga, 27.VIII.1983, 2 exx. (cB); Natal, Bergville distr., Drakensberg, Ogalweni For., 1800 m, N. Leleup, X.1980, 1 male (MRAC); Natal, Bergville distr., Drakensberg, Mhiwazeni Riv., 1200 m, N. Leleup, X.1960, 1 male (cB); Lesotho, 20 km N Tlokoeng, 2800 m, 29.07S, 28.57E, R. Fencl, 13.XI.2001, 2 exx. (cJ), 2 exx. (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 7.8 mm; from anterior margin of head to

posterior margin of elytra: 3.5 mm. Reddish brown with slightly darker head. Head sub-rectangular, slightly longer than wide, with sub-parallel sides, sometimes a little rounded, and with broadly rounded posterior angles. Eyes large and not very protruberent. Surface of head with fine and very dense, transverse micro-striation and fine, sparse punctation. Pronotum massive, broad, wider than head, anteriorly dilated, with slightly oblique anterior margins, broadly rounded anterior angles, and scarcely sinuate sides. Surface shiny, with traces of transverse micro-striation and coarser punctation than that of head, more or less visibly, arranged in dorsal series of 5, 6 punctures and lateral series of 4, 5 punctures, other punctures between these series and near the anterior angles. Elytra longer than pronotum, dilated posteriad, with well rounded humeral angles. Surface feebly rugose, with fine and dense punctation. Abdomen with much fine and dense, transverse micro-striation and fine and dense punctation on the sides. Tergite and sternite of the male genital segment as in figures 820, 821. Aedeagus smaller (Fig. 822) than that of *N. brunneus* n. sp., 1.22 mm long; thinner and longer parameres; inner sac ribbon-like, shorter and narrower, than that of *N. brunneus* n. sp., folded several times on itself, covered with scales and by fine, thickened spinules in the distal portion.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described. Length of body: 7.5–8 mm; from anterior margin of head to posterior margin of elytra: 3.5 mm. Female genital segment as in figure 745.

ETYMOLOGY. The specific epithet is the Latin *meridonalis -e* (southern), living in the southern part of Africa.

DISTRIBUTION. Lesotho, South Africa: Cape Province (Fig. 860).

BIONOMICS. Usually collected "*under stone*".

12. ***Notolinopsis peninsularis*** n. sp.

EXAMINED MATERIAL. Holotype male: South Africa, Cape Prov., Peninsula, Muizenberg, Kalkbaal, N. Leleup, I.1961 (MRAC); paratypes: same data, 2 males (MRAC), 2 males (cB); W Cape, Kogelberg NR, Oudebos, 100 m, 34.20S, 19.01E, Geginat, 1.XII.2002, 1 males (NMB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 7.2 mm; from anterior margin of head to posterior margin of elytra: 3.3 mm. Winged. Entirely reddish orange with infuscate elytra. Head sub-rectangular, with a little rouded sides; head and pronotum with transverse micro-striation. Surface with wide, deep and sparse punctation. Pronotum sub-rectangular, dilated forward, longer than head and anteriorly as wide as head, with deep, wide punctation, apart a median strip. Elytra longer and wider than pronotum, dilated posteriad, with fine punctation, arranged in some series. Tergite and sternite of male genital segment as in figures 823, 824. Aedeagus small (Figs. 825), 0.88 mm long, with long asymmetrical parameres and distal lobule large and curved; inner sac not visible.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality.

DISTRIBUTION. The species is known from South Africa: Cape Province (Fig. 860).

13. ***Notolinopsis oceanicus*** n. sp.

EXAMINED MATERIAL. Holotype male: South Africa, Cape Prov., Clanwilliam distr., Cederberg, 500–1100 m, N. Leleup, VII.1962 (MRAC); paratypes: same data, 11 males, 17 females (MRAC), 11 males, 9 females (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 7 mm; from anterior margin of head to posterior margin of elytra: 3.2 mm. Similar to *N. finisterrae* n. sp. but longer, paler, reddish brown, with slender body, narrower forebody, shorter elytra, sparser punctation on head, finer punctation on elytra. Tergite and sternite of the male genital segment as in figures 826, 827. Aedeagus (Figs. 828, 1762), sub-oval, 1.4 mm long, with right paramere evidently longer, of different shape; the distal lobule is also different, very narrow; inner sac much shorter, with smaller scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the Ocean overlooked by the Cape (Fig. 860).

BIONOMICS. The species was collected in humus, in mountain area.

DISTRIBUTION. South Africa: Cape Province.

14. ***Notolinopsis nidorum*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo (Katanga), Kundelungu, 1750 m, N. Leleup, 30.III.1950 (MRAC); paratype: same data, 24.II.1950, 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 7.2 mm; from anterior margin of head to posterior margin of elytra: 3.4 mm. Winged. Head with transverse micro-striation; pronotum with polygonal micro-reticulation. Head black; elytra, abdomen, antennae and legs brown. Head oval, slightly elongate, more or less narrowed anteriorly, with scarcely rounded sides and rounded posterior angles. Eyes small and almost flat. Surface of head with deep and dense round punctures apart from the narrow median band. Pronotum sub-rectangular, with sub-parallel, slightly rounded sides, a little longer than head, anteriorly dilated where it is as wide as head; less oblique anterior margins and very narrowly rounded anterior angles. Entire surface with deep and dense round punctures. Elytra long, but scarcely shorter than pronotum, wider than the latter, with rounded humeral angles. Surface with punctation similar to that of head and pronotum, very dense, arranged in very numerous series. Abdomen with polygonal, fine and dense micro-reticulation, and fine punctation. Tergite and sternite of the male genital segment as in figures 829, 830. Aedeagus 1.1 mm long (Fig. 831), sub-spherical, with asymmetric parameres; distal lobule short and large; inner sac with some parallel series of small scales ans spinulae.

VARIABILITY. The paratype has no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the Latin *nidus -i* (nest), in relation to the habitat collection.

DISTRIBUTION. This species is at present only known from the type locality in Congo (Fig. 760).

BIONOMICS. The holotype was collected in "*prairie marecageuse, nid de* Cryptomys"; the paratype in "*gal. forestiére*".

REMARKS. Female unknown. *Cryptomys* Gray, 1864 is a genus of mole rats of the family Bathyergidae. Kundelungu is a national park in southern Congo.

15. ***Notolinopsis angolanus*** n. sp.

EXAMINED MATERIAL. Holotype male: Angola, Bimbi, leg ?, X.1932 (NMW).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 7 mm; from anterior margin of head to posterior margin of elytra: 3.5 mm. Fully winged. Reddish brown. Head and pronotum with transverse micro-striation. Similar to *N. crateris* but narrower. Surface with fine, irregular punctation, apart a median band. On either side of this there is a scarcely visible dorsal series of 9, 10 punctures and lateral series of 6, 7 punctures. Elytra long, a little dilated posteriad, with marked humeral angles. Surface with visible, very dense punctation arranged in numerous regular series. Posterior margin of sixth visible sternite as in figure 832. Tergite and sternite of male genital segment as in figures 833, 834. Aedeagus 1.1 mm long (Fig. 835), sub-oval, but with acute posterior margin; parameres large, long, asymmetrical; distal lobule very characteristic; inner sac ribbon-like, large, covered with scales.

ETYMOLOGY. The specific epithet refers to Angola.

DISTRIBUTION. This species is only known from the type locality in Angola (Fig. 760).

REMARKS. Female unknown. Bimbi is situated in the Malanje Prov, northern Angola, at about 1200 m. altitude.

16. ***Notolinopsis capensis*** Casey, 1906

Notolinopsis capensis - Casey, 1906: 379; Bernhauer & Schubert, 1914: 301 (sub *Xantholinus*)
Linosomus capensis - Herman, 2001a: 3692
Notolinopsis diligens - Casey, 1906: 379 syn. n.

TYPE MATERIAL. The National Museum of Natural History of Washington preserves 2 specimens; one of these, a male, is labelled "*Cape / Town*" (printed), "*Casey / bequest / 1925*", "*Type USNM / 48191*" (on red label), "♂", "capensis *Csy*" (handwritten by Casey) and the other, a female, labelled "*Cape / Town*" (printed), "*Casey determin. /* capensis". I choose the first as lectotype and the second as paralectotye of the species. They respectively have the labels "*Lectotypus* Notolinopsis capensis *Csy, Bordoni des. 2006*" and "*Paralectotypus* Notolinopsis capensis *Csy, Bordoni des. 2006*".

The Washington Museum also preserves 1 female specimen, identical to *N. capensis*, labelled "*Cape/ Town*" (printed), "*Casey/ bequest/ 1925*", "*Type USNM/ 48192*" (on red label), "diligens / *Csy*" (handwritten by Casey) that I choose as lectotype of the species. It have affixed the label "*Lectotypus* Notolinopsis diligens *Csy, Bordoni des. 2006*".

All these specimens bear the determination "Notolinopsis capensis *Csy, Bordoni det. 2006*".

EXAMINED MATERIAL. South Africa, Cape Town, coll. Casey, 3 exx. (USNM), 1 ex. (cB); SW Cape, Cederberg, 32.22S, 18.56E, Endrödy-Younga, 31.VIII.1981, 1 ex. (TMSA); SW Cape, Struisbaai, 34.47S, 20.03E, Endrödy-Younga, 28.VIII.1983, 2 exx. (TMSA), 2 exx. (cB); Cape Prov., Clanwilliam distr., Sederberg, 500–1100 m, P. Leleup, VII.1962, 5 males, 7 females (MRAC), 3 males, 6 females (cB); Cape Prov., Muizenberg, R. Legg, VI.1089, 2 males, 5 females (MRAC), 2 males, 2 females (cB); Western Cape Prov., Table Mountain N. P., Cape of Good Hope, 34,14S, 18.25E, J. Deckert, 23.X.2007, 1 male, 3 females (MNB), 2 females (cB).

DESCRIPTION. Length of body: 6–6.5 mm; from anterior margin of head to posterior margin of elytra: 2.8–3 mm. Uniformly brown, sometimes slightly reddish. Head sub-oval, dilated posteriad, with feebly rounded sides, and broadly rounded posterior angles. Eyes small and a little protruberent. Surface of head with transverse micro-striation and minute, dense punctation, apart from a median band; the distance between the punctures is equal to their diameter. Pronotum robust, massive, longer than head, anterioly dilated where it is almost wider than head, with less oblique anterior margins, very narrowly rounded anterior angles and less strongly sinuate sides. Surface similar to that of head, with a dorsal series of 7, 8 punctures and lateral series of 4, 5 punctures; there are usually some other punctures around these series and near the anterior angles, so that it looks as though there were 3, 4 series on wither side of the median band. Elytra shorter and wider than pronotum, with less marked humeral angles. Surface with dense, very shallow punctures arranged in numerous series. Abdomen with transverse micro-striation and fine punctation on the sides. Male genital segment with elongate pleura and tergite of the usual shape (Fig. 836); sternite elongate and narrow, furnished with pale setae on the distal portion (Fig. 837). Aedeagus rounded (Fig. 838), 1.15 mm long; short distal apophys; parameres asymmetrical; inner sac ribbon-like, long and narrow, folded on itself and covered with scales and slender spinules.

DISTRIBUTION. South Africa: Cape Province (Fig. 860).

17. ***Notolinopsis finisterrae*** n. sp.

EXAMINED MATERIAL. Holotype male: South Africa, Cape, "Cap Bonne Esperance" (NMW).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.5 mm; from anterior margin of head to posterior margin of elytra: 3.7 mm. Dark brown. Similar to *N. swartbergensis* n. sp. Head more sub-rectangular, less narrow anteriorly; eyes larger; surface of head with finer and denser, polygonal micro-reticulation, and sparser, small shallow punctures; pronotum proportionately large, with oblique anterior margins and narrowly rounded anterior angles; elytra fairly large, with marked humeral angles. Tergite and sternite of the male genital segment as in figures 839, 840. Aedeagus sub-spherical (Figs. 841, 1763), a little elongated, 1.36 mm long, with very characteristically shaped of right paramere in dorsal view; broad distal lobule with a dark acute apex, the left paramere of normal shape, and the right paramere, very broad and long; inner sac ribbon-like, very long, folded on itself.

ETYMOLOGY. The specific epithet refers to "*land's end*" nature of the Cape of Good Hope.

DISTRIBUTION. South Africa: Cape Province (Fig. 860).

REMARKS. Female unknown. The specimen also bear the labels "Xantholinus parallelus …" (illegible)" (in litt.), "*ex coll. Klima*", "*Cotypus* / Xantholinus / subtilepunctatus / *O. Scheerpeltz*" and the symbol "♀" (sic), and was determined by Scheerpeltz as *Leptacinus subtilepunctatus* (see "REMARKS" to *N. swartbergensis*), about publication of this species.

18. ***Notolinopsis swartbergensis*** n. sp.

EXAMINED MATERIAL. Holotype male: South Africa, Swartberge, Blesberg W, 1820 m, 33.25S, 22.40E, Endrödy-Younga, 12.XII.1978 (TMSA); paratypes: same data, 2 exx. (TMSA), 2 exx. (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.5 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Uniformly light brown. Body narrow. Head sub-rectangular, the same width in front and behind, with broadly rounded posterior angles. Eyes small and flat. Surface of head with polygonal micro-reticulation and fine and dense punctation; the distance between the punctures almost equal to the diameter of punctures. Pronotum anteriorly dilated, sub-rectilinear sided, with oblique anterior margins and marked anterior angles. Surface with transverse micro-striation and coarse punctation. Elytra longer than pronotum, with marked humeral angles and coarse punctation. Tergite and sternite of the male genital segment as in figures 842, 843. Aedeagus similar to that of *N. bispinosus* n. sp. (Fig. 844) but wider and slightly shorter, 0.96 mm long; distal lobule shorter and with less pronounced apical furcation; wider inner sac, covered with larger and denser scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality.

DISTRIBUTION. South Africa: Cape Province (Fig. 860).

REMARKS. I think it possible that next this species is *N. subtilepunctatus* (*Leptacinus subtilepunctatus* Scheerpeltz, 1974: 112; Herman, 2001a: 3685), described on the basis of a female from Basutoland (now Lesotho), a mountainous country to the east of Cape Province, on the other side of so the region, from the Swartberg mountains, type locality of *N. swartbergensis* n. sp., in the Western Cape Province. Only the study of a male from the type locality can determine the systematic position of *N. subtilepunctatus*. Below I give data concerning the type of this species: the Museum of Zoology of Lund preserves 1 specimen labelled "*S. Afr. Basutoland / Qachas Nek 20 miles / N Matatiele / 7.III.51 No 213*", "*Swedish South Africa / Expedition / 1950-1951 / Brinck-Rudebeck*", "Leptacinus / subtilepunctatus / *n. sp.*" (handwritten by Scheerpeltz), "*Holotype*" (handwritten on red label), "*Typus* / Leptacinus / subtilepunctatus / *O. Scheerpeltz*", "Leptacinus / subtilepunctatus / *sp. n. / det. Scheerpeltz 1968*", "*Type No. 615.1 / Zool. Mus. Lund Sweden / Staphylinidae*". It is a female that also bears the label "Notolinopsis subtilepunctatus *(Scheerp.), Bordoni det. 2006*".

19. ***Notolinopsis hawequas*** n. sp.

EXAMINED MATERIAL. Holotype male: South Africa, SW Cape, Hawequas Mt, 1350 m, 33.40S, 19.05E, Endrödy-Younga, 4.XII.1978 (TMSA); paratypes: Lesotho, Sani Pass, 2850 m, 29.34S, 29.17E, R, Fencl, 14.XI.2001, 1 male (B), 1 female (cJ); same data, Mpwere, 30 km NW Sani Pass, 2400 m, 29.23S, 29.05E, R. Fencl, 12.XI.2001, 1 female (cJ); same data, Letseng, Diamond mine env., 3100 m, 28.52S, 28.50E, R. Fencl, 13.XI.2001, 1 female (cJ), 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.5 mm; from anterior margin of head to posterior margin of elytra: 3.5 mm. Uniformly dark brown (the holotype is teneral) with black head. Head and pronotum with transverse micro-striation. Head sub-spherical, with fine, sparse punctation. Pronotum massive, dilated anteriorly, longer and wider than head. Similar to *N. meridionalis* n. sp. but smaller and narrower; head narrower, not dilated posteriad. Eyes a little larger and more protruberent. Elytra shorter, with marked humeral angles. Tergite and sternite of the male genital segment as in figures 845, 846. Aedeagus similar

in the shape to that of *N. meridionalis* n. sp. but smaller (Fig. 847), 0.92 mm long; parameres very long; distal lobule with sub-acute apex; inner sac ribbon-like, wide, folded on itself and covered with sparse brown scales.

Variability. The paratypes have no substantial morphological differences with the holotype described.

Etymology. The specific epithet refers to the type locality, as a noun in apposition.

Distribution. South Africa: Cape Province; Lesotho (Fig. 860).

20. ***Notolinopsis latitarsis*** Casey, 1906

Notolinopsis latitarsis - Casey, 1906: 378; Bernhauer & Schubert, 1914: 304 (sub *Xantholinus*)
Linosomus latitarsis - Herman, 2001a: 3692)

Type material. The National Museum of Natural History in Washington preserves 2 specimens, one a male, labelled "*Welling / ton, S. Afr*.", "*Casey / bequest / 1925*", "*Type USNM / 48190*" (on red label), "latitarsis / *Csy*" (handwritten by Casey); the other, a female, from the same locality, without red label, with the label "*Casey determ.* / latitarsis *2*". I choose the first as lectotype and the second as paralectotype of the species. They respectively bear the labels "*Lectotypus* Notolinopsis latitarsis *Csy, Bordoni des. 2006*" and "*Paralectotypus* Notolinopsis latitarsis *Csy, Bordoni des. 2006*", and both bear the determination label "Notolinopsis latitarsis *Csy, Bordoni det. 2006*".

Examined Material. South Africa, Cape, Strassenrand b. Cold Stream, 34.06S, 24.27E, U. Göliner, 1.V.1995, 1 ex. (MNB), 1 ex. (cB).

Description. Length of body: 6.5 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Uniformly more or less dark brown. Similar to *N. capensis* but head less dilated posteriad and eyes larger. Pronotum similar in shape, with dorsal series of 6, 7 punctures and lateral series of 4 punctures and some other punctures near the anterior angles. Elytra clearly longer than those of *N. capensis*, dilated posteriad, with much less marked humeral angles. Surface with shallow and sparser punctation. Tergite of the male genital segment as in figure 848; sternite elongate and narrow, with a long series of oblique setae (Fig. 849); aedeagus (Fig. 850) roundish, narrow in the distal portion, 1.33 mm long, with a large distal lobule; parameres large, thick, asymmetrical; inner sac ribbon-like, long and narrow, covered with a series of short spines with dark apices.

Distribution. South Africa: Cape Province (Fig. 860).

Remarks. Due to the difficulty of identifying single females, it is not yet known whether *N. languidus* (*Notolinopsis languidus* Casey, 1906: 379; Bernhauer & Schubert, 1914: 304 (sub *Xantholinus*). *Linosomus languidus* (Herman, 2001a: 3692) should be placed next to this species. Below I give data concerning the type material.

The National Museum of Natural History of Washington preserves 1 specimen labelled "Welling / ton, S. Afr.", "*Casey / bequest/ 1925*", "T*ype USNM / 48189*" (on red label), "languidus / *Csy*" (handwritten by Casey). It is a female that I choose as lectotype of *N. languidus*. It bears the label "*Lectotypus* Notolinopsis languidus *Csy, Bordoni des. 2006*" and the determination label "Notolinopsis languidus *Csy, Bordoni det. 2006*".

21. ***Notolinopsis spinosus*** n. sp.

Examined material. Holotype male: South Africa, S Cape, Garden of Eden, 34.02S, 23.12E, Endrödy-Younga, 13.XII.1976 (TMSA).

Description of Holotype. Male. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Reddish brown with darker elytra. Similar to *N. meridionalis* n. sp. but smaller, of more reddish colouration; head subquadrate, a little longer than wide, with slightly rounded sides, and narrowly rounded posterior angles. Surface with finer punctation; eyes more protruberent; pronotum narrower and shorter, less dilated anteriorly, with finer punctation; elytra sub-rectangular, proportionately longer and narrower than that of *N. meridionalis* n. sp. Surface with much finer and sparser punctation. Tergite and sternite of the male genital segment as in figures 851, 852. Aedeagus of characteristic shape (Fig. 853), elongate and narrow, 0.96 mm long, with distal lobule very large, very long and nar-

row; parameres very long and narrow; inner sac ribbon-like, short, covered with a series of thickened spines.

ETYMOLOGY. The specific epithet refers to the Latin *spinosus -s -um* (thorny), in relation to the structure of the inner sac of the aedeagus.

DISTRIBUTION. South Africa: Cape Province (Fig. 860).

BIONOMICS. The specimen was collected in "*litter*".

REMARKS. Female unknown.

22. ***Notolinopsis silvestris*** n. sp.

EXAMINED MATERIAL. Holotype male: Lesotho, Mpwere, 30 km NW Sanoi Pass, 2400 m, R. Fencl, 12.XI.2001 (cJ); paratypes: same data, 2 females (cJ), 2 females (cB); South Africa, Natal, Royal Park Mont Aux. Sources, 5000 ft., R.E. Gregg, 12.X.1965, 1 male (FMNH); Cape Prov., Beaufort distr., Katberg for., A. Tilli, II.2002, 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.7 mm; from anterior margin of head to posterior margin of elytra: 2 mm. Uniformly light brown (but probably immature). Similar to *N. swartbergensis* n. sp. but smaller and paler; head and pronotum with traces of transverse micro-striation. Head more quadrate; eyes smaller and flat; surface of head with deeper punctures; pronotum much narrower, less dilated anteriorly, with coarser and denser punctation; elytra shorter and narrower, with finer punctation. Tergite and sternite dof the male genital segment as in figures 854, 855. Aedeagus very small (Fig. 856), 0.7 mm long; parameres very robust, dilated and very wide and long, longer than the basal bulb; distal lobule long and robust.

VARIABILITY. The specimen from Cape Province is smaller and narrower than the other specimens studied, but the aedeagus is identical.

ETYMOLOGY. The specific epither is the Latin *silvestris -e* (sylvan).

DISTRIBUTION. South Africa: Natal, Cape Prov.; Lesotho (Fig. 860).

REMARKS. The specimen from Natal has a damaged head and lacks the right elytron.

23. ***Notolinopsis twello*** n. sp.

EXAMINED MATERIAL. Holotype male: South Africa, Transvaal, Barberton distr., Twello forest, 4500 ft, N. Leleup, X.1961 (MRAC); paratypes: same data, 1 female (MRAC), 1 male, 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.5 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Fully winged. Entirely reddish orange with infuscate elytra. Head subquadrate, with rounded sides. Surface with not particularly sparse punctation. Pronotum sub-rectangular, longer than and as wide as head, without micro-sculpture, and with deep punctures, apart a median band. Elytra sub-rectangular, short, with rounded humeral angles, as long as pronotum and slightly wider posteriad. Surface with very fine and very dense punctation, arranged in numerous series. Tergite and sternite dof the male genital segment as in figures. 857, 858. Aedeagus small (Fig. 859), 0.8 mm long, with long parameres and very small and short distal lobule; inner sac narrow, strip-like, covered with sparse, minute scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. South Africa: Transvaal (Fig. 860).

19. Genus ***Linosomus*** Kraatz, 1857 sensu n. (Fig. 1715)

Linosomus - Kraatz, 1857: 647; Gemminger & Harold, 1868: 605; Bernhauer & Schubert, 1914: 296; Blackwelder, 1952: 221

Notolinus - Casey, 1906: 371 and 375; Bernhauer & Schubert, 1914: 300; Cameron, 1932: 22; Blackwelder, 1943: 473 (all as subgen. of *Xantholinus*); Steel, 1949a: 268; Bordoni, 2001:161; 2005: 544 (all sub *Notolinus*), syn. n.

Kainolinus - Coiffait & Saiz, 1964: 511; Bordoni, 2001: 163 (syn. of *Notolinus*)

TYPE SPECIES. *Gyrohypnus tenuicornis* Nordmann, 1837, fixed by subsequent monotypy by Gemminger & Harold, 1868: 605. Type species of *Notolinus*: *N. fumipennis* Casey, 1906, by original designation. Type species of *Kainolinus*: *K. approbabilis* Coiffait et Saiz, 1964, by original designation.

DESCRIPTION. Similar to *Notolinopsis* in general features (Fig. 861), robust and squat, fairly convex, in the more or less dark brownish colouration, in the broad neck, dilated anterior tarsi, shape of labrum and mandibles with a lateral groove, in the obsolete ocular grooves, upper epipleural line not joining the lower line, in the divided antesternal plate, shape of gular sutures, and elytra with a few series of punctures. This genus differs from *Notolinopsis* in the following characters: shape of maxillary and labial palpi (Figs. 862, 863), with last segments clearly longer than those of *Notolinopsis*, and clearly narrower than the preceding segment, and in the punctate anterior portion of neck (Fig. 865). Aedeagus very small (Fig. 870), tubular, narrow, long and largely membranous, with similar distal lobule, semitransparent, and membranous, and very long and narrow parameres. It includes both fully winged and apterous species. Female genital segment as in figure 867.

DISTRIBUTION. South Africa, Australia, NZ (Bordoni, 2005, 2005a). In Africa occurs only in South Africa (Figs. 882, 893).

REMARKS. The species are very similar to one another in size, colouration and punctation, so unassociated single females are not identifiable.

KEY TO THE SPECIES

1. Apterous species.....2
-. Fully winged species.....3

2. Body 8 mm long, reddish orange with yellow elytra; eyes smaller and elytra shorter; head subquadrate, a little dilated anteriorly; pronotum longer and slightly narrower than head. Aedeagus (Fig. 870) with bifurcute distal lobule. South Africa: Cape Prov.....1. *L. bifurcatus* n. sp.
-. Body 9 mm long, entirely reddish brown; eyes small and flat and elytra and short; head subrectangular, not dilated anteriorly; pronotum a little shorter and narrower than head. Aedeagus (Fig. 874). Tanzania: Kilimanjaro..... .....2. *L. septentrionalis* n. sp.

3. Body 8–9 mm long.....4
-. Body less than 8 mm long.....5

4. Body reddish brown, with black head and yellowish elytra, 8.5–9 mm long; body more robust; head and pronotum wider. Aedeagus (Fig. 877) with sub-oval distal lobule. South Africa: Cape Prov.....3. *L. tenuicornis*
-. Body entirely brown, 8 mm long; body less robust; head and pronotum narrower. Aedeagus (Fig. 880) with distal lobule of characteristic shape. South Africa: Cape Prov..... .....4. *L. endroedyi* n. sp.

5. Body longer, more than 6.5 mm on average, but very variable in size, more or less dark brown: Aedeagus (Fig. 885) shorter, with distal lobule slender, with acute apex. Zimbabwe, South Africa.....5. *L. socius*
-. Body shorter, about 6.5 mm long, normally without microsculpture; aedeagus longer.....6

6. Body reddish brown, with darker head, sometimes with elytra yellowish posteriad, last abdominal segments reddish; head larger; eyes larger; punctation finer. Aedeagus with distal lobule (Fig. 888) similar to that of *L. socius*. South Africa: Cape Prov., Transvaal....6. *L. fumipennis*
-. Body light brown; head smaller; eyes smaller; punctation sparser. Aedeagus (Fig. 891) with characteristic distal lobule. South Africa: Transkei.....7. *L. mhlanlanensis* n. sp.

1. ***Linosomus bifurcatus*** n. sp.

EXAMINED MATERIAL. Holotype male: South Africa, Cape Prov., Beaufort distr., Katberg forest, N. Leleup, I.1961 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 8 mm; from anterior margin of head to pos-

terior margin of elytra: 3.3 mm. Apterous. Reddish orange, with yellow elytra. Head subquadrate, a little dilated anteriorly, with slightly rounded sides. Eyes very small and flat. Surface of head with fine, transverse micro-striation and small, deep, sparse punctures, apart a median band. Pronotum longer and narrower than head, dilated anteriorly, with sub-rectilinear sides and rounded anterior angles. Surface with fine, transverse micro-striation and sparse punctation, similar to that of head; the pronotum bears an irregular dorsal series of 7, 8 punctures. Elytra short, shorter and a little wider than pronotum, with obsolete humeral angles. Surface with fine punctures, widely spaced in a few series. Abdomen with fine, transverse micro-striation and fine, sparse punctation on the sides. Tergite and sternite of the male genital segment as in figures 868, 869. Aedeagus 0.95 mm long (Figs. 870, 871), narrow, with very long parameres; distal lobule large, bifurcute and extending beyond apices of parameres.

ETYMOLOGY. The specific epithet refers to the Latin *bi-furcutus -a -um* (bifurcute), in reference to the shape of the distal lobule.

DISTRIBUTION. The species is only known from the type locality in Cape Province (Fig. 882).

REMARKS. Female unknown.

2. ***Linosomus septentrionalis*** n. sp.

EXAMINED MATERIAL. Holotype male: (Tanzania), Tanganyika, Kilimanjaro, Weldob. Machama, 2000–2500 m, H. Franz, 20.VII.1972 (cB); paratypes: same data, 1 female (cB), 1 male, 1 female (NMW); same data, Bismark Hügel, 3100 m, J. and N. Leleup, 15.II.1956, 1 male (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 9 mm; from anterior margin of head to posterior margin of elytra: 4.5 mm. Apterous. Body reddish brown. Head and pronotum with transverse micro-striation. This species differs from its congeners in the much paler colouration, in the very small and flat eyes and in the very short elytra. Head sub-rectangular, with slightly rounded sides and broadly rounded posterior angles, Surface with evident and not sparse punctation, apart a broad median band. Pronotum a little shorter and narrower than head, scarcely dilated anteriorly, with sub-rectilinear sides; dorsal series of 8, 9 punctures and lateral oblique series of 5, 6 punctures, all very superficial and small. Elytra sub-rectangular, shorter and narrower than pronotum, with obsolete humeral angles. Surface with coarser and very shallow punctation, arranged in some series. Male genital segment and sternite of the same as in figures 872, 873. Aedeagus 1.15 mm long (Fig. 874), similar to that of *L. socius* but with parameres and large distal lobule of different shape.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is the Latin adjective *septentrionalis -e* (northern), referring to the origins of this species' congeners.

DISTRIBUTION. Tanzania (Kilimanjaro).

BIONOMICS. The specimens were collected in "*mountain forest*, Erica, Hagenia, Podocarpus *and large deciduous trees thickly covered with moss*" (from notebook of Franz., Schillhammer, com. pers.), "*For.* Hagenia, Philippia, *lisière super.*".

3. ***Linosomus tenuicornis*** (Nordmann, 1837) comb. n. (Fig. 1764)

Gyrohypnus tenuicornis - Nordmann, 1837: 125; Erichson, 1839b: 338; Gemminger & Harold, 1868: 605

Linosomus tenuicornis - Herman, 2001a: 3692 (sensu auct.)

Xantholinus bicoloripennis - Scheerpeltz, 1974: 129; Herman, 2001a: 3784, syn. n.

TYPE MATERIAL. The Deutsches Entomologische Institut in Müncheberg preserves 1 specimen labelled "*Cap. b. Esp.*", "*Vielleicht Type*" (printed on red label), "Leptac. / tenuicornis / *Cap. b. Sp.*" (pencil), "*coll. Kraatz*". It is a male that I choose as lectotype of the species. It bears the label "*Lectotypus* Gyrohypnus tenuicornis *Nordm., Bordoni des. 2006*" and the determination label "Linosomus tenuicornis *(Nordm.), Bordoni det. 2006*".

The Museum of Zoology in Lund preserves 1

specimen labelled "*S. Afr. Cape Prov. / Saldanhabaai / Malagas Island / 25.I.51 No. 159*", "*Swedish South Africa / Expedition / 1950-1951 / Brinck-Rudebeck*", "Xantholinus / bicoloripennis / *sp. n.*" (handwritten by Scheerpeltz), "*Holotype*" (handwritten on red label), "*Typus* / Xantholinus / bicoloripennis / *O. Scheerpeltz*" (on red label), "Xantholinus / bicoloripennis / *sp. n. / det. Scheerpeltz 1968*", "*Typus No. 624.1/ Zool. Mus. Lund Sweden/ Staphylinidae*". It is a female identical to *L. tenuicornis* with the label "Linosomus tenuicornis *(Nordm.), Bordoni det. 2006*".

Examined Material. South Africa, SW Cape, Geelbek farm, 33.12S, 18.07E, Endrödy-Younga and Penrith, 25.VIII.1983, 2 exx. (TMSA); W Cape Prov., Wiedouw farm, 31.43S, 18.43E, Endrödy-Younga, 12.IX.1987, 8 exx. (TMSA), 6 exx. (cB); Cape Prov., Bookram farm, 37.39S, 18.17E, Endrödy-Younga, 30.VIII.1981, 2 exx. (TMSA); Cape Prov., Brackfontain farm, 32.56S, 18.15E, Endrödy-Younga, 3.XI.1983, 2 exx. (TMSA), 3 exx. (cB); Cape Prov., Velddrif, 3 km S, 32.48S, 18.08E, Endrödy-Younga and Penrith, 22.VIII.1983, 4 exx. (TMSA); Cape Prov., Clanwilliam distr., Sederberg, 500–1100 m, N. Leleup, VII.1962, 1 male (cB).

Description. Length of body: 8.5–9 mm; from anterior margin of head to posterior margin of elytra: 4.5–4.8 mm. Brown with posterior half of elytra pale yellow. Similar to *N. socius* but much more robust; head more massive, with more marked posterior angles and sparser punctation; pronotum proportionately wider, with more marked anterior angles. Tergite and sternite of the male genital segment as in figures 875, 876. *Linososmus tenuicornis* differs from *L. socius* n. sp. especially in the shape of the aedeagus, its much grater size, 1.70 mm long instead of about 1 mm, with basal bulb dilated and not tubular, and distal lobule much dilated (Fig. 877).

Bionomics. Some specimens were collected in "*groundtraps with faeces bait*", "*groundtraps with banana bait* ", "*cattle dung on sand*".

Distribution. South Africa: Cape Province (Fig. 882).

Remarks. For comment on this species see also "Remarks" on the genus *Notolinopsis*.

Owing to the difficulty of identifying single females, I do not yet know whether it is close to or perhaps even synonymous with a specimen described as *Nudobius brincki* (but *Nudobius* do not have dilated anterior tarsi!) by Scheerpeltz (1974: 123), and also cited as *Nudobius* by Herman (2001a: 3723), based on a probably immature female preserved in the Zoological Museum in Lund, and labelled "*S. Afr. Cape Prov. / Longebaan / 31.X.50 No 20*", "*Swedish South Africa / Expedition / 1950-1951 / Brinck-Rudebeck*", "Nudobius / Brincki *sp. n.*", "*Holotype*" (handwritten on red label), "*Typus* / Nudobius/ Brincki / *O. Scheerpeltz*" (on red label), "Nudobius / Brincki / *sp. n. / det. Scheerpeltz 1968*", "*Type No 621.1 / Zool. Mus. Lund Sweden / Staphylinidae*".

4. ***Linosomus endroedyi*** n. sp.

Examined Material. Holotype male: South Africa, S Cape, Mt Outenikwa Pass, 33.53S, 22.23E, Endrödy-Younga, 4.XI.1978 (TMSA); paratypes: same data, 1 ex. (cB); S Cape, George, 33.58S, 22.28E, Endrödy-Younga, 4.IX.1979, 10 exx. (TMSA), 5 exx. (cB).

Description of Holotype. Male. Length of body: 8 mm; from anterior margin of head to posterior margin of elytra: 3.8 mm. Reddish brown with darker head and lighter elytra. Similar to *L. socius* in the colouration but body longer and narrower head more elongate and narrower, not dilated posteriad, and with finer punctation, much and almost flat eyes; longer and narrower pronotum and shorter elytra. Tergite and sternite of the male genital segment as in figures 878, 879. Aedeagus larger than that of *L. socius* n. sp. (Figs. 880, 881), 1.14 mm long; larger and broader parameres; distal lobule of characteristic, complex shape.

Variability. The paratypes have no substantial morphological differences with the holotype described.

Etymology. Patronymic. Dedicated to S. Endrödy-Younga who collected abundant material much of which is treated in the present work.

Distribution. South Africa: Cape Province (Fig. 882).

Bionomics. Collected in "*forest litter*".

5. ***Linosomus socius*** (Fauvel, 1877) comb. n.

Xantholinus socius - Fauvel, 1877: 247; Olliff, 1887: 490; Bernhauer, 1908: 18
Xantholinus anthracinus - Broun, 1880: 105; Lea, 1925: 215 (syn. of *L. socius*)
Leptacinus picticornis - Olliff, 1887: 476; Herman, 2001: 26 (syn. of *L. socius*)
Leptacinus picticornis - Blackburn, 1888: 7; Lea, 1925: 215 (syn. of *L. socius*)
Notolinus socius - Kuschel, 1990: 26; Herman, 2001a: 3720; Bordoni, 2001: 166; 2005: 546
Notolinus parvus, Casey, 1906: 377; Bordoni, 2001: 165, syn. n.
Notolinopsis incultus - Casey, 1907: 378, syn. n.
Leptacinus caffer - Scheerpeltz, 1974: 115; Herman, 2001a: 3671, syn. n.
Leptacinus natalensis - Scheerpletz, 1974: 114; Herman, 2001a: 3679, syn. n.
Leptacinus brincki - Scheerpletz, 1974: 114; Herman, 2001a: 3671, syn. n.
Kainolinus approbabilis - Coiffait & Saiz, 1964: 521; Bordoni, 2001: 166 (syn. of *L. socius*)

TYPE MATERIAL. The lectotype and 1 paralectotype of *L. socius* are preserved in the Institut royal des Sciences naturelles in Bruxelles (see Bordoni, 2001).

A lectotype and 3 paralectotypes of *N. parvus* are preserved in the National Museum of Natural History in Washington (see Bordoni, 2001).

The National Museum of Natural History in Washington preserves 1 specimen labelled "*Welling / ton, S. Afr.*", "*Casey / bequest / 1925*", "*Type USNM / 48188*" (on red label), "Notolinopsis / incultus / *Csy*" (handwritten by Casey). It is a female that I choose as lectotype of the species. It now bears the label "*Lectotypus* Notolinopsis incultus *Csy, Bordoni des. 2006*".

The Museum of Zoology in Lund preserves 1 specimen labelled "*S. Afr. Natal / Royal Natal National / Park Gudu Falls. / 4.IV.51 N°. 260*", "*Swedish South Africa / Expedition / 1950-1951 / Brinck-Rudebeck*", "*Cotypus* / Leptacinus / caffer / *O. Scheerpeltz*" (on pink label), "*Type No. / 617.2*", "*ZML 2007 / 111*". It is a female identical with *L. socius*.

The Naturhistorisches Museum in Vienna preserves 3 specimens labelled "*Cotypus* / Leptacinus/ caffer / *O. Scheerpeltz*"; two of these with the labels "*Sud Afrika / Ung. Johannesburg*" and "♀" (in fact one of these is a male with damaged genital segment!). The third specimen, a female, is labelled "*S. Afr. Cape Prov. / Jonkershoek 8 miles SE / Stellenbosch. / 4.VII.51 No. 349*", "*Swedish South Africa / Expedition / 1950-1951 / Brinck- Rudebeck*", "Leptacinus / caffer / *n. sp.*" (handwritten by Scheerpeltz).

The Museum of Zoology in Lund preserves 2 specimens labelled "*S. Afr. Natal / Royal Natal National / Park Gudu Falls. / 4.IV.51 N°. 260*", "*Swedish South Africa / Expedition/ 1950-1951 / Brinck-Rudebeck*". One bears the labels "Leptacinus / natalensis *sp. n.*" (handwritten by Scheerpeltz), "*Holotype*" (handwritten on red label), "*Typus* / Leptacinus/ natalensis / *O. Scheerpletz*" (on red label), "Leptacinus / natalensis / *sp. n./ det. Scheerpletz 1968*", "*Type N°. 616.1.2 / Zool. Mus. Lund Sweden / Staphylinidae*", the other "*Cotypus* / Leptacinus / natalensis / *O. Scheerpletz*" (on red label), "*Type N°/ 616.2*". Both are males identical with *L. socius*.

The Lund Museum also preserves 1 specimen labelled "*S. Afr. Cape Prov./ Stellenbosch. / 4.VII.51 / N°. 349*", "*Swedish South Africa/ Expedition / 1950-1951 / Brinck-Rudebeck*", "Leptacinus / Brincki / *sp. n.*" (handwritten by Scheerpeltz), "*Holotype*" (handwritten on red label), "*Typus* / Leptacinus / Brincki / *O. Scheerpeltz*" (on red label), "*Leptacinus / Brincki / sp. n. / det. Scheerpeltz 1968*", "*Type N°. 618.1 / Zool. Mus. Lund Sweden/ Staphylinidae*". It is a female identical with *L. socius*.

All these specimens now bear the determination label "Linosomus socius *(Fvl.), Bordoni det. 2006*".

EXAMINED MATERIAL. Zimbabwe (S-Rhodesia), Melsetter, 1700 m, N. Leleup, VII.1960, 1 ex. (MRAC).

South Africa, Mpulanga, Sabie env., 1200 m, 25.13S, 30.37E, P. Hlavac, 10–11.II.2004, 1 ex. (cJ); Cape-Cederbg, Devil's Kloof, 850 m, 32.28S, 19.06E, Endrödy-Younga, 9.XI.1983, 1 ex. (TMSA), 1 ex. (cB); Cape-Cederbg, jeep track, 1250 m, 32.28S, 19.14E, Endrödy-Younga, 7.XI.1983, 2 exx. (TMSA); Cape, Marloth NR, Duiwelsberg, 33.58S, 20.26E, M. Uhlig, 13.XI.1996, 1 ex. (NMB); Cape, De Hoop NR, 34.27S, 20.24E, M. Uhlig 17.XI.1993, 1 ex. (NMB); Cape Prov., Umg. Pearl. H. Franz, 1975,

3 exx. (NMW), 1 ex. (cB); Cape, Bontebok NP, 34.04S, 20.27E, M. Uhlig, 15.XI.1993, 1 ex. (NMB); SW Cape Prov., Cape Town, 65 km N, 33.21S, 18.15E, Endrödy-Younga and Penrith, 30.VIII.1983, 4 exx. (TMSA), 2 exx. (cB); SW Cape, Greyton, M. Smizek, 22.X.1999, 1 ex. (cJ); Cape Peninsula, Cecilia Forest Res., D. and A. Kistner, 12.XII.1965, 13 exx. (FMNH), 4 exx. (cB); W Cape, Haweques, 33.45S, 19.08E, Endrödy-Younga, 5.XI.1973, 2 ex. (TMSA); W Cape, Wiadow farm, 31.43S, 18.43E, Endrödy-Younga, 12.IX.1987, 1 ex. (TMSA), 2 exx. (cB); W Cape, Cape Town, 33.56S, 18.26E, B. and M. Uhlig, 6.IV.1998, 1 ex. (MNB); Cape Town, A. Newton, V.1953, 2 exx. (MM); S Cape, Herkerville Forest, 34.04S, 23.10E, Endrödy-Younga, 7.XII.1976, 2 exx. (TMSA); (Cape Prov.), Grootvaderbos, C.P.G. VanSon, 1–6.XI.1940, 1 ex. (TMSA); SW Cape, Arniston, inland, 34.39S, 20.13E, Endrödy-Younga and Penrith, 29.VIII.1983, 2 exx. (TMSA), 1 ex. (cB); SW Cape, Brackfontain farm, 32.56S, 18.15E, Endrödy-Younga, 3.XI.1983, 1 ex. (cB); (Cape Prov.), Capland, Willowmore, Brauns leg., 1 ex. (TMSA); Cape Prov., Peninsula, Table Mt, Bats Cave, N. Leleup, XII.1960, 1 ex. (MRAC); Cape Prov., Peninsula, Hout baal, Tierbos, 200 m, N. Leleup, XII.1960, 4 exx. (MRAC), 2 exx. (cB); Cape of Good Hope Nat. Res., C. Kutzscher and H. Venke, 21.IV.1996, 1 ex. (DEI); E Cape, St. Francis Bay, B. and B.Valentine, 13.XI.1996, 1 ex. (FMNH); Transvaal, Uitsoek, Grootklof, ind. for., 25.15S, 30.33E, Endrödy-Younga, 16.XII.1986, 19 exx. (TMSA), 8 exx. (cB); Transvaal, 5 km S Graskop, 1500 m, H. and A. Howden, 28.XII.1985, 2 exx. (FMNH); Transvaal, Pilgrims Rest., 1400 m, S. Peck, 11-31.XII.1985, 1 ex. (FMNH); E Transvaal, Berlin F. S. Sinkhole, 25.31S, 30.46E, Endrödy-Younga, 23.X.1986, 3 exx. (TMSA); Transvaal, 30 km W Trichiardtadal, Downe Podocarp for., S. Peck, 23–30.XII.1985, 2 exx. (FMNH), 2 exx. (cB); Transvaal, Pilgrims Rest, 1400 m, S. Peck, 11–31.XII.1985, 5 exx. (FMNH), 1 ex. (cB); E Transvaal, 30 km W Trichardtsdal, Down Podocarp for., S. Peck, 30.XII.1985, 3 exx. (cB), 3 exx. (FMNH); Transvaal, Pilgrims Rest distr., Graskop Forest, N. Leleup, VIII.1960, 1 ex. (MRAC); Transvaal, Johannesburg, Rose Henville, E. Pearce, V.1952, 1 ex. (MM).

S Natal, Weza, lower Stinkwood fo., 30.34S, 29.43E, Endrödy-Younga and Klimaszewsky, 20.XI.1989, 3 exx. (TMSA), 3 exx. (cB).

South Africa, Natal, 75 km WSW Estcourt, Cathedral Peaks For. Sta., S. and J. Peck, 20.XII.1979, 11 exx. (FMNH), 4 exx. (cB); Natal, Cathedral Peaks Park, 1500 m, W. Schawaller, 24–27.XI.2003, 1 ex. (SMNS); Natal, 75 lm WSW Estocourt, Cathedral Peaks For. Sta., 1440 m, S. and J Peck, 20.XII.1979, 12 exx. (FMNH), 3 exx. (cB); 31.XII.1979, 1 ex. (FMNH); 7–31.XII.1979, 1500 m, 16 exx. (FMNH), 4 exx. (cB); Natal, Richsomnd Distr., Indoleni, J. W. Hunt, 16.IX.1958, 2 exx. (MM); Free State, Golden Gate NP, Cathedral Caul, 28,31S, 28.34E, 1939 m, Geginat, 12.III.2001, 1 ex. (NMB); (KwaZulu-Natal), Seven Weeks Poort, Ladismith distr., R. H. Jones and J. H. Potgieter, XII.1968, 1 ex. (TMSA); Natal, (Zululand), Nqadu, A. Newton, 2.X.1958, 1 ex, (cB); Lesotho, Drakensberge, Um. Sabie, H. Franz, 1975, 1 ex. (NMW); A.N. Newton, 1951, 3 exx. (MM).

Description. Length of body: 6–7 mm; from anterior margin of head to posterior margin of elytra: 3.5–4 mm. Dark brown with light brown elytra; antennae and legs brown. Head sub-rectangular, slightly longer than wide, dilated posteriad. Eyes large and a little protruberent. Surface of head with fine, transverse micro-striation and sparse, deep, sub-circular, umbilicate punctures, apart from a median band. Pronotum longer and a little wider than head, anteriorly dilated, sub-rectilinear sided. Surface with sparser and wavy micro-striation; dorsal series of 6, 7 punctures and lateral oblique series of 4, 5 punctures, with some other punctures surrounding them; all the punctures smaller than those of head. Elytra as long as pronotum, a little wider, dilated posteriad, with marked humeral angles. Surface shiny, with 7, 8 series of punctures on each elytron. Abdomen with fine and dense, transverse micro-striation and minute, dense punctures arranged in some regular series. Male genital segment of usual shape, with elongate tergite (Fig. 883); sternite as in figure 884. Aedeagus (Fig. 885) 0.8–0.9 mm long, translucent; distal lobule and parameres very long. Female genital segment as in figure 867.

DISTRIBUTION. South Africa; Australia (Bordoni, 2005a), New Zealand (Bordoni, 2005), introduced. In Africa occurs only in South Africa (Fig. 893).

BIONOMICS. Specimens were collected in "*groundtrap with banana bait*", "*feaces trap*", "*rott.* Cussoria *bark*", "*elephant dung*", "*cattle dung*", "*horse manure*", "*dead* Podocarp", "*podocarp forest*", "Podocarp *Forest mushrooms on mossy log*", "*in relict native forest*", "*litter*", "*rotted* Boletus *litter, pine plantation*", "r*ésidu de forêt ombrophile,* humus".

REMARKS. The species is very variable in size, colour and punctation. The first species described with the named characters may be *Xantholinus hottentottus* Sachse, 1852 for which however there is no type. I consider it a *nomen oblitum*.

6. ***Linosomus fumipennis*** (Casey, 1906) comb. n.

Notolinus fumipennis - Casey, 1906: 376; Herman, 2001a: 3719; Bordoni, 2001: 163

TYPE MATERIAL. Lectotype and paralectotype of this species, labelled "*Wellington, S. Afr.*", are preserved in the National Museum of Natural History in Washington (Bordoni, 2001).

DESCRIPTION. Length of body: 6.5 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Reddish brown with darker head and paler elytra, the latter yellowish posteriad; abdomen with last two segments reddish. Similar to *L. socius* but head wider, quadrate, with more protruberent eyes and denser and more evident punctation; pronotum without transverse microstriation, with dorsal series of 6 punctures and lateral series of 3, 4 puntures and two large punctures near the anterior angles; elytra longer than those of socius, with fine and sparse punctures arranged in a few series. Tergite and sternite of the male genital segment as in figures 886, 887. Aedeagus similar to that of socius but longer, 1.13–1.15 mm long, with narrower parameres in lateral view; distal lobule enlarged in the middle and with arcuate apex (Fig. 888).

EXAMINED MATERIAL. South Africa, Wellington, 2 exx. (USNM); Cle Doux, 1 ex. (NMW), 1 ex. (cB); E Transvaal, 30 km W Trichardtsdal, Down Podocarp for., S. Peck, 30.XII.1985, 1 ex. (FMNH).

DISTRIBUTION. South Africa: Cape Province, Transvaal (Fig. 882).

REMARKS. Due to the difficulty of identification of single females, next to this species must be placed a species described as *Notolinus grossulus,* Casey, 1906: 376 (see also Herman, 2001a: 3720) from Cape Town. The lectotype female of this taxon is preserved in the National Museum of Natural History of Washington (Bordoni, 2001).

7. ***Linosomus mhlanlanensis*** n. sp. (Fig. 1715)

EXAMINED MATERIAL. Holotype male: South Africa, Transkei, Mhlanlane for. st., 31.26S, 28.32E, Endrödy-Younga, 8.III.1985 (TMSA); paratypes: same data, 1 ex. (MY), 1 ex. (TMSA); Natal, Bangeni forest, 30.38S, 29.39E, Endrödy-Younga and Klimaszewsky, 21.XI.1989, 2 exx. (TMSA), 1 ex. (cB).

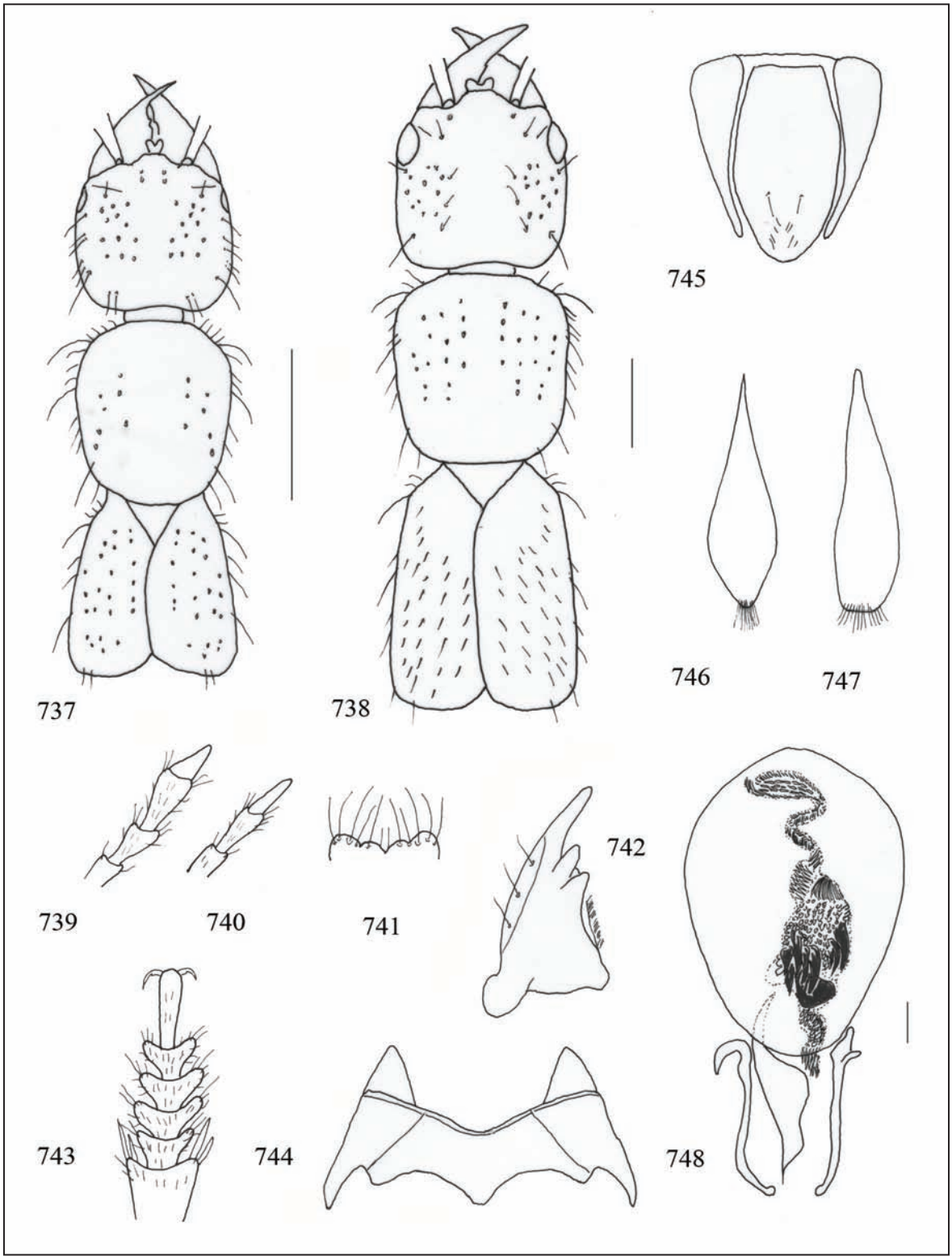
DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.5 mm; from anterior margin of head to posterior margin of elytra: 3.5 mm. Reddish brown with darker head and paler elytra. Similar to *L. socius* in size and colouration but paler, and slighter; eyes smaller; pronotum narrower with more rounded anterior angles, and surface without transverse microstriation; elytra shorter, with coarser punctation. Tergite and sternite of the male genital segment as in figures 889, 890. Aedeagus larger than that of *L. socius* (Figs. 891, 892), 1.15 mm long; parameres larger and longer and distal lobule in lateral view, arcuate, with thickened margins.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

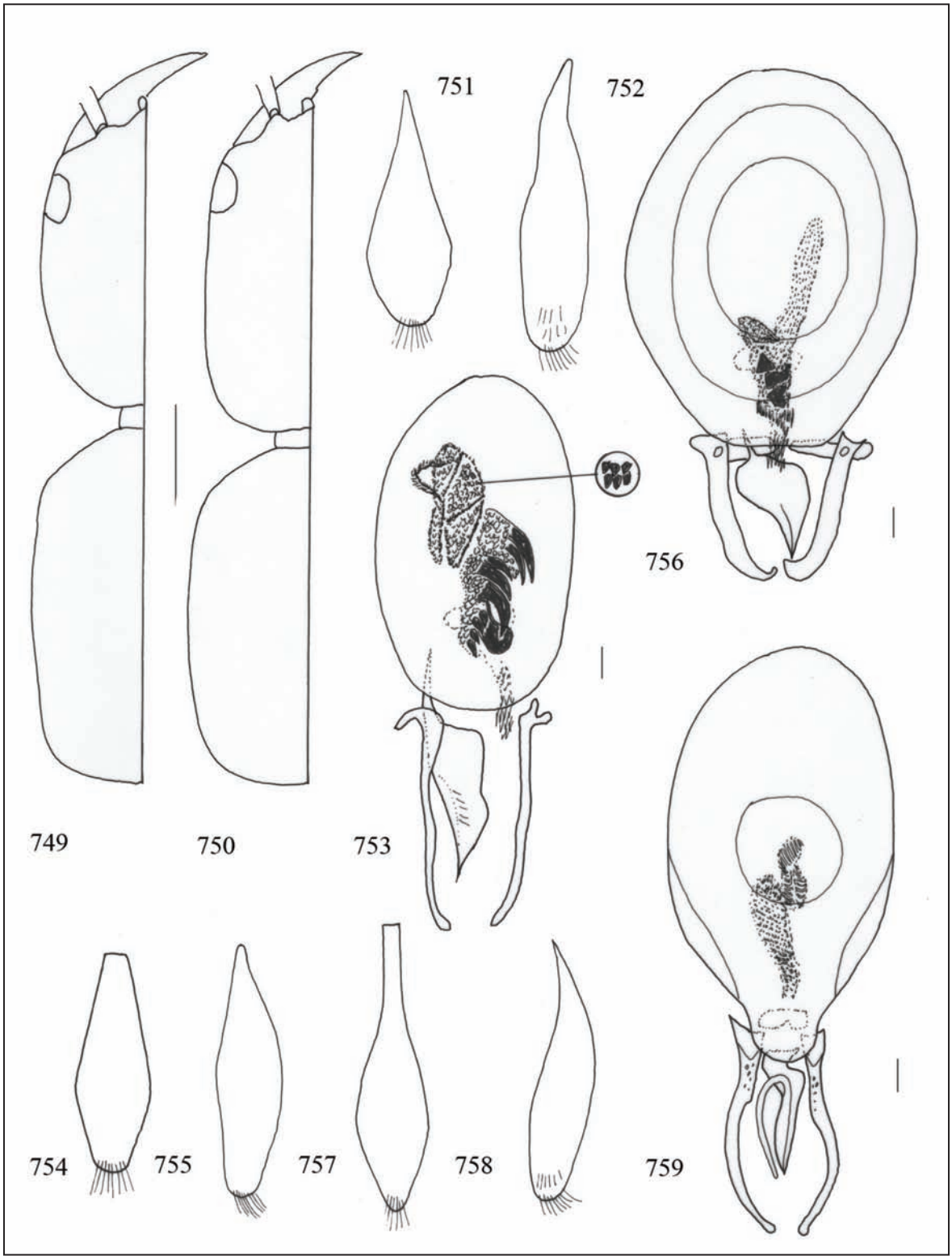
ETYMOLOGY. The specific epithet refers to the type locality.

DISTRIBUTION. South Africa: Transkei, Natal (Fig. 882).

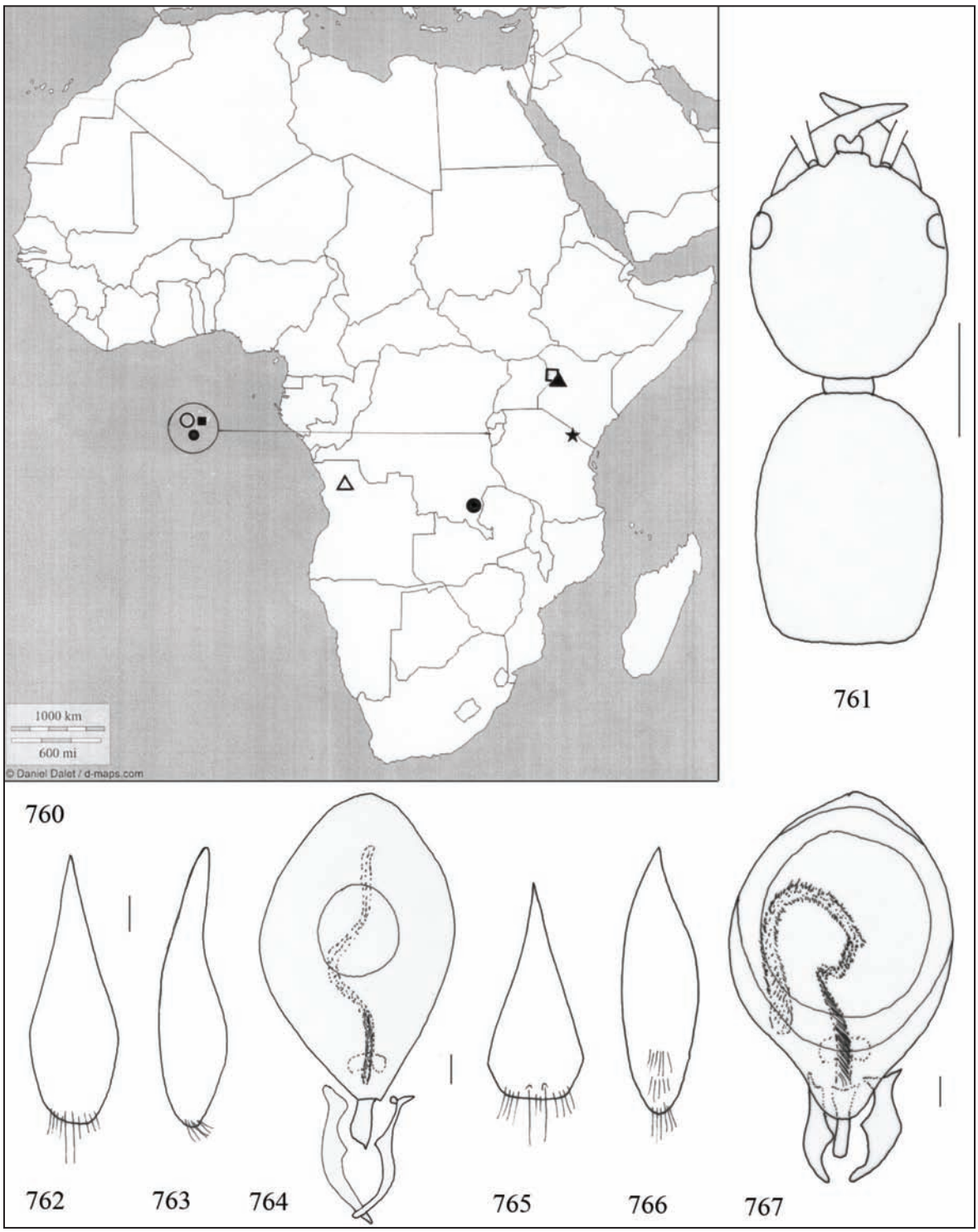
BIONOMICS. Some specimens were collected in "*forest litter*".



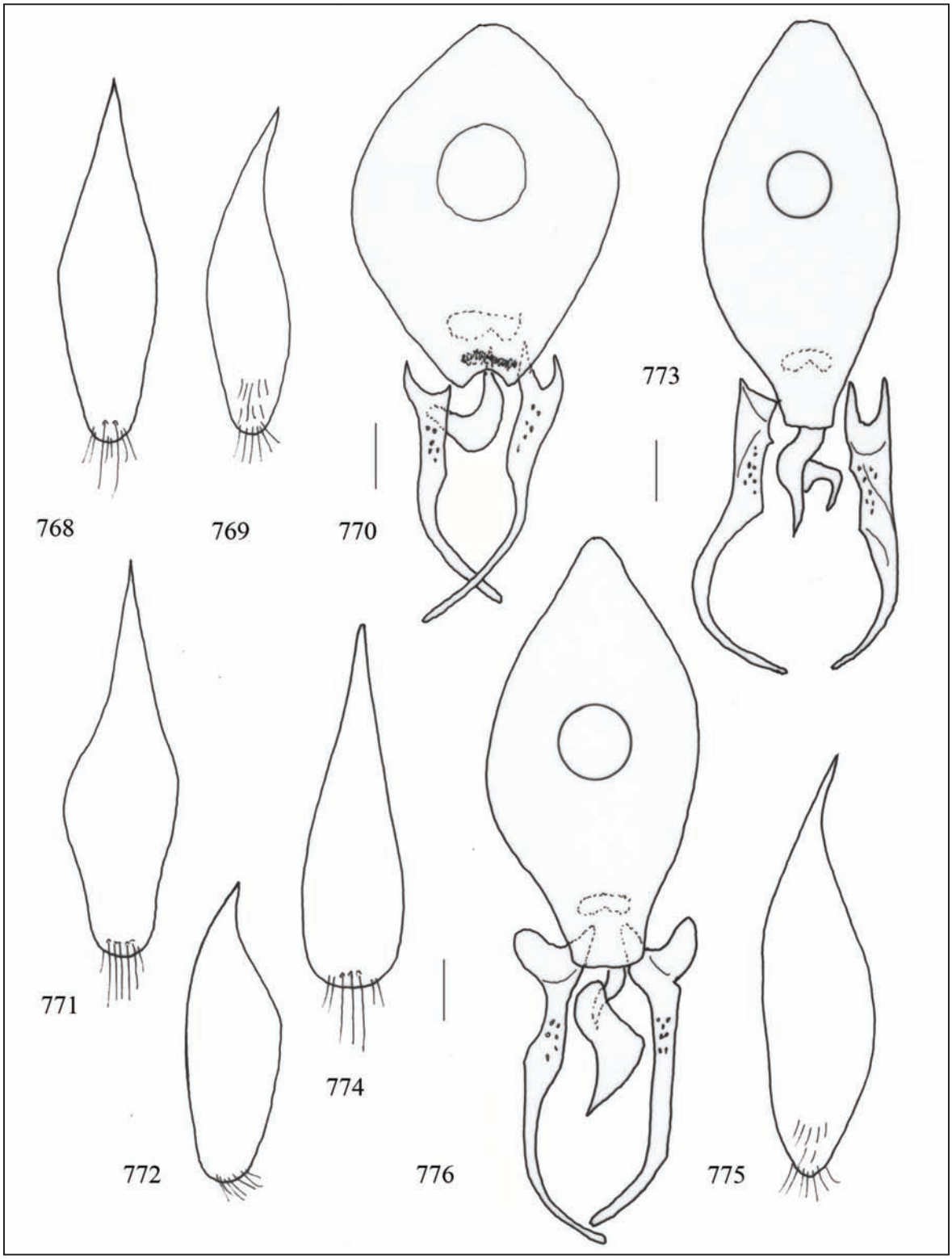
Figures 737–748. Fore-body of *Notolinopsis bambusianus* n. sp. (Fig. 737) and *N. capensis* (Fig. 738) (bar scale: 0.5 mm). *Notolinopsis afromontanus* n. sp.: maxillary and labial palpi (Figs. 739, 740), labrum (Fig. 741), mandible (Fig. 742), anterior tarsus (Fig. 743), mesosternum (Fig. 744), female genital segment (Fig. 745), tergite and sternite of the male genital segment, aedeagus (Figs. 746–748) (bar scale: 0.1 mm).



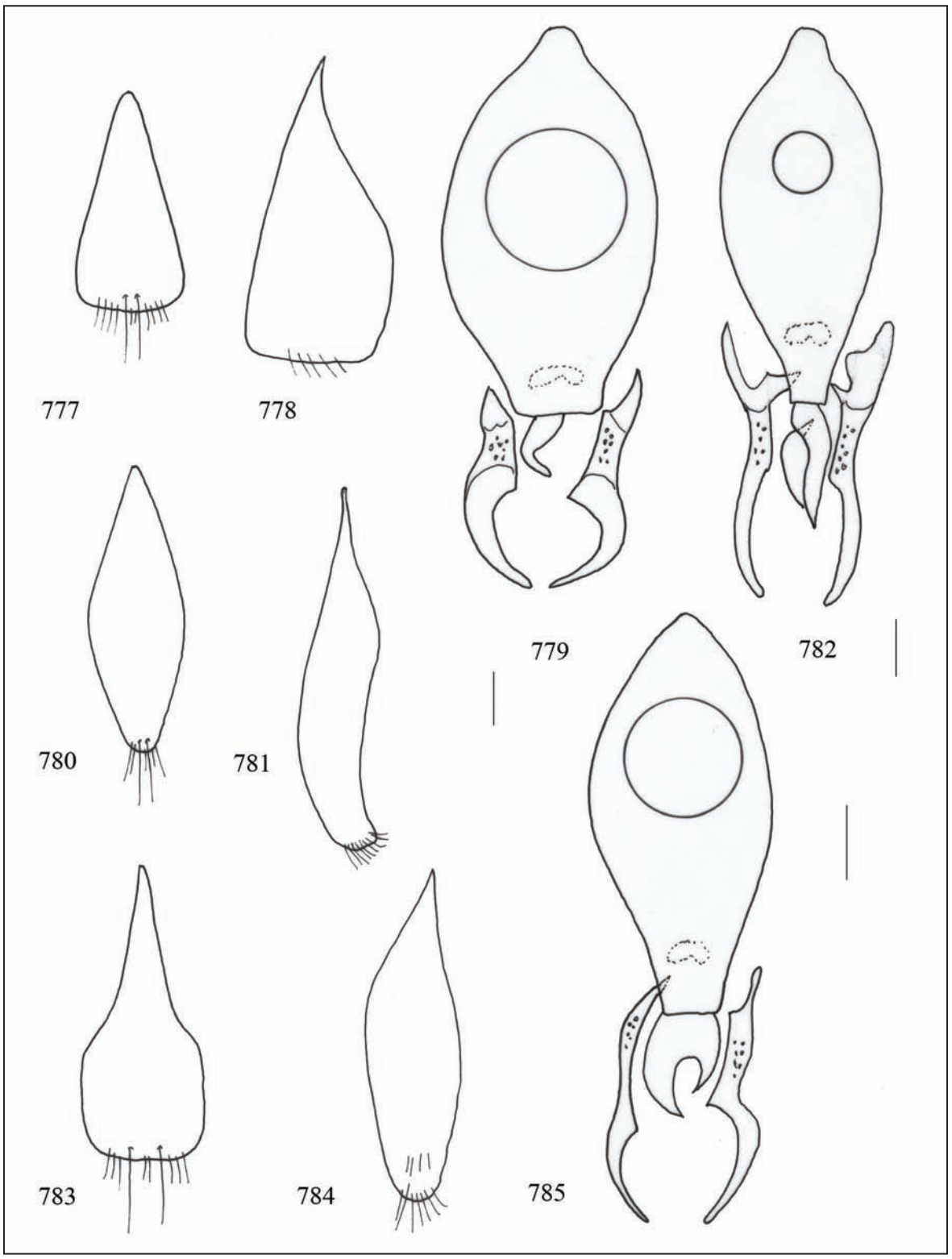
Figures 749–759. Head and pronotum (bar scale: 0.5 mm) of *Notolinopsis crateris* (Fig. 749) and *N. afromontanus* n. sp. (Fig. 750). *Notolinopsis crateris*: tergite and sternite of the male genital segment, aedeagus (Figs. 751–753) (bar scale: 0.1 mm). Tergite and sternite of the male genital segment, aedeagus of *N. bambusianus* n. sp. (Figs. 754–756) and *N. montanus* n. sp. (Figs. 757–759) (bar scale: 0.1 mm).



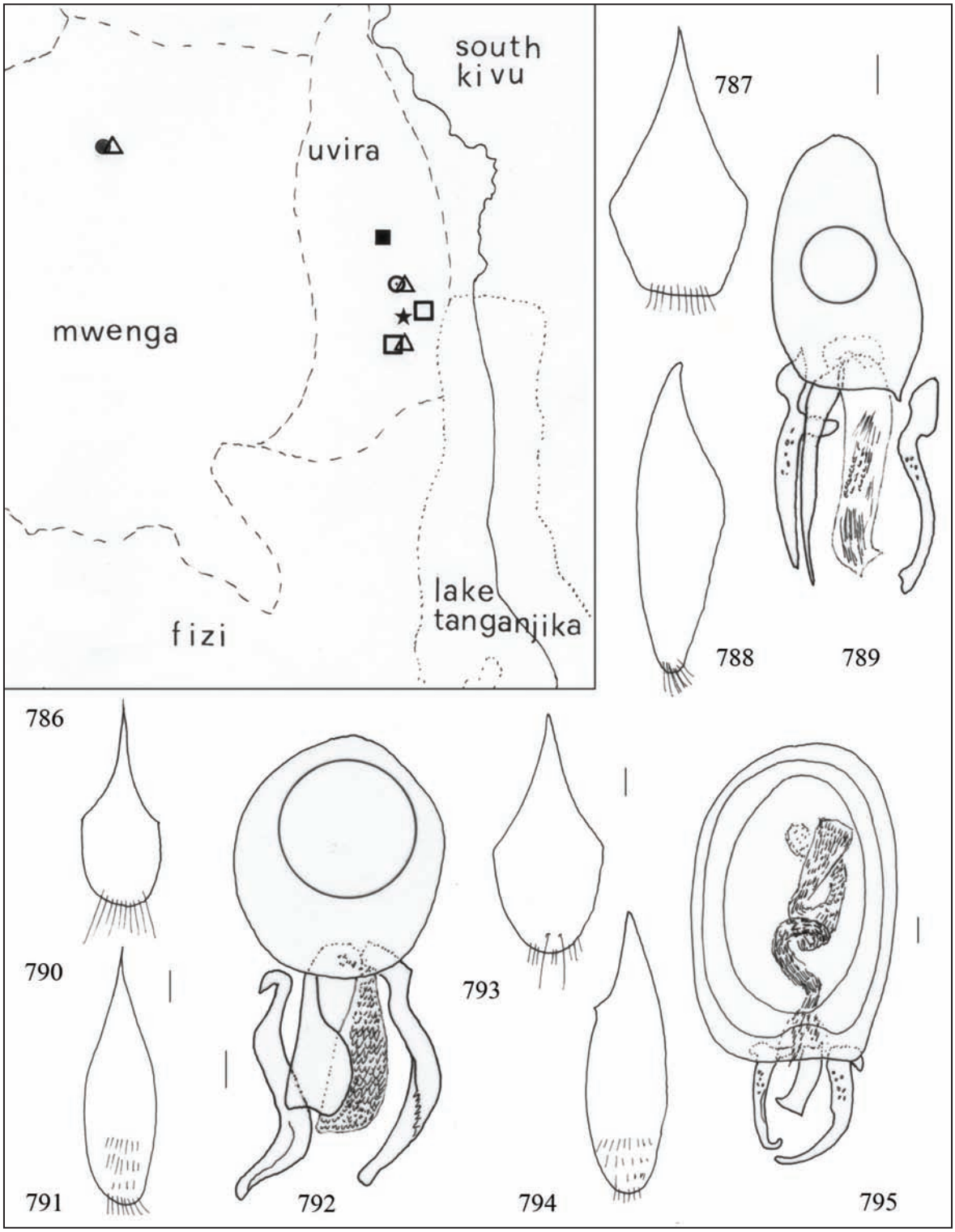
Figures 760–767. Fig. 760: distribution of the genus *Notolinopsis bambusianus* sub-group: *N. afromontanus* n. sp. (filled triangle), *N. crateris* (open square), *N. microps* (star), *N. bambusianus* n. sp. (open circle), *N. montanus* n. sp. (small square), *N. afrus* n. sp. (small circle), and *N. capensis*-group: *N. angolanus* n. sp. (open triangle), *N. nidorum* n. sp. (big filled circle). Figs. 761–767. *Notolinopsis afrus* n. sp.: head and pronotum (bar scale: 0.5 mm) (Fig. 761), tergite and sternite of the male genital segment, aedeagus (Figs. 762–764) (bar scale: 0.1 mm). *Notolinopsis lesotho* n. sp.: tergite and sternite of the male genital segment, aedeagus (765–767) (bar scale: 0.1 mm).



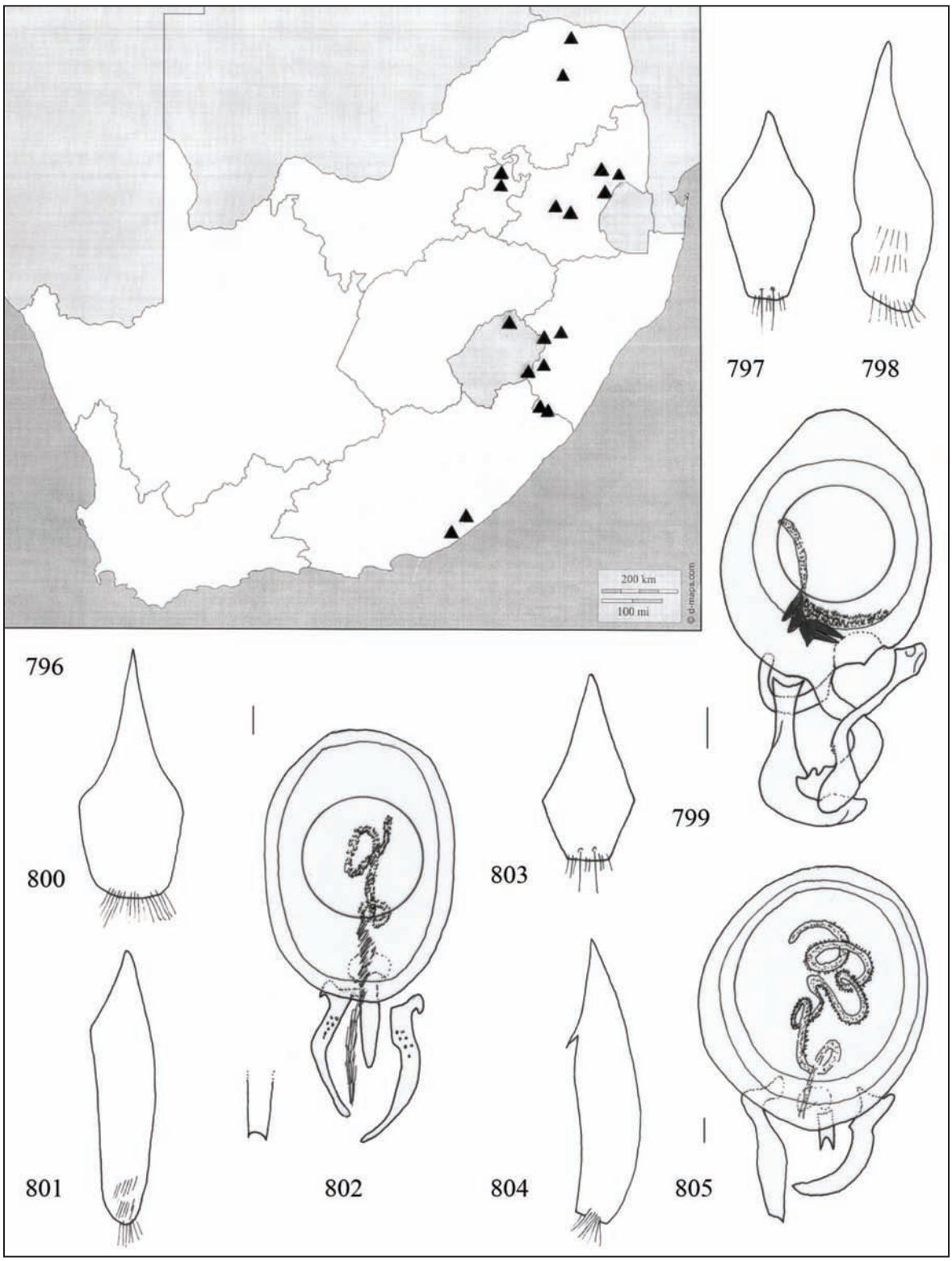
Figures 768–776. Tergite and sternite of the male genital segment, aedeagus of *Notolinopsis submontanus* n. sp. (Figs. 768–770). Tergite and sternite of the male genital segment, aedeagus of *Notolinopsis uncinatus* n. sp. (Figs. 771–773). Tergite and sternite of the male genital segment, aedeagus of *Notolinopsis lungweianus* n. sp. (bar scale: 0.1 mm) (Figs. 774–776).



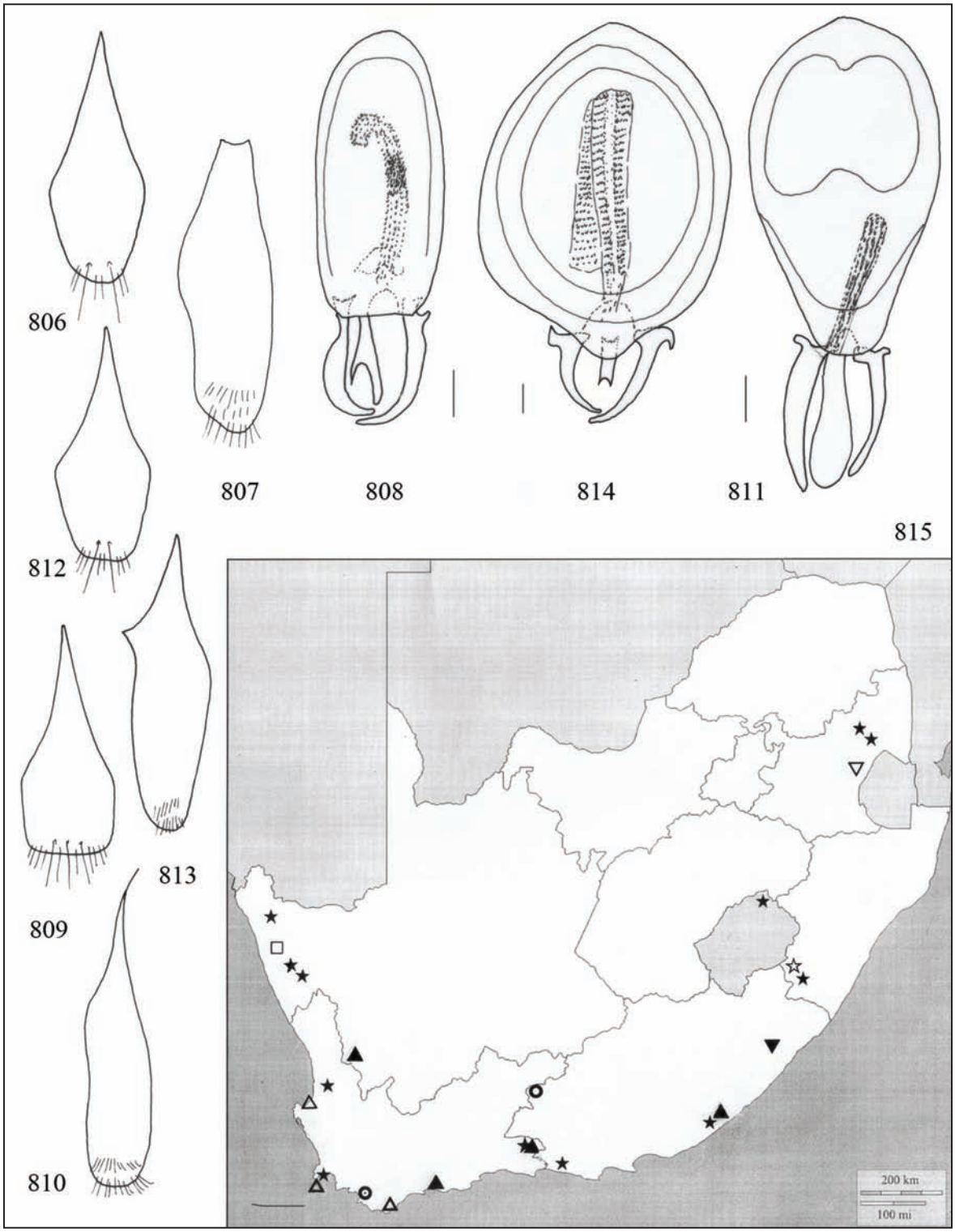
Figures 777–785. Tergite and sternite of the male genital segment, aedeagus of *Notolinopsis congoanus* n. sp. (Figs. 777–779). Tergite and sternite of the male genital segment, aedeagus of *Notolinopsis poligonalis* n. sp. (Figs. 780–782).Tergite and sternite of the male genital segment, aedeagus of *Notolinopsis uviranus* n. sp. (bar scale: 0.1 mm) (Figs. 783–785).



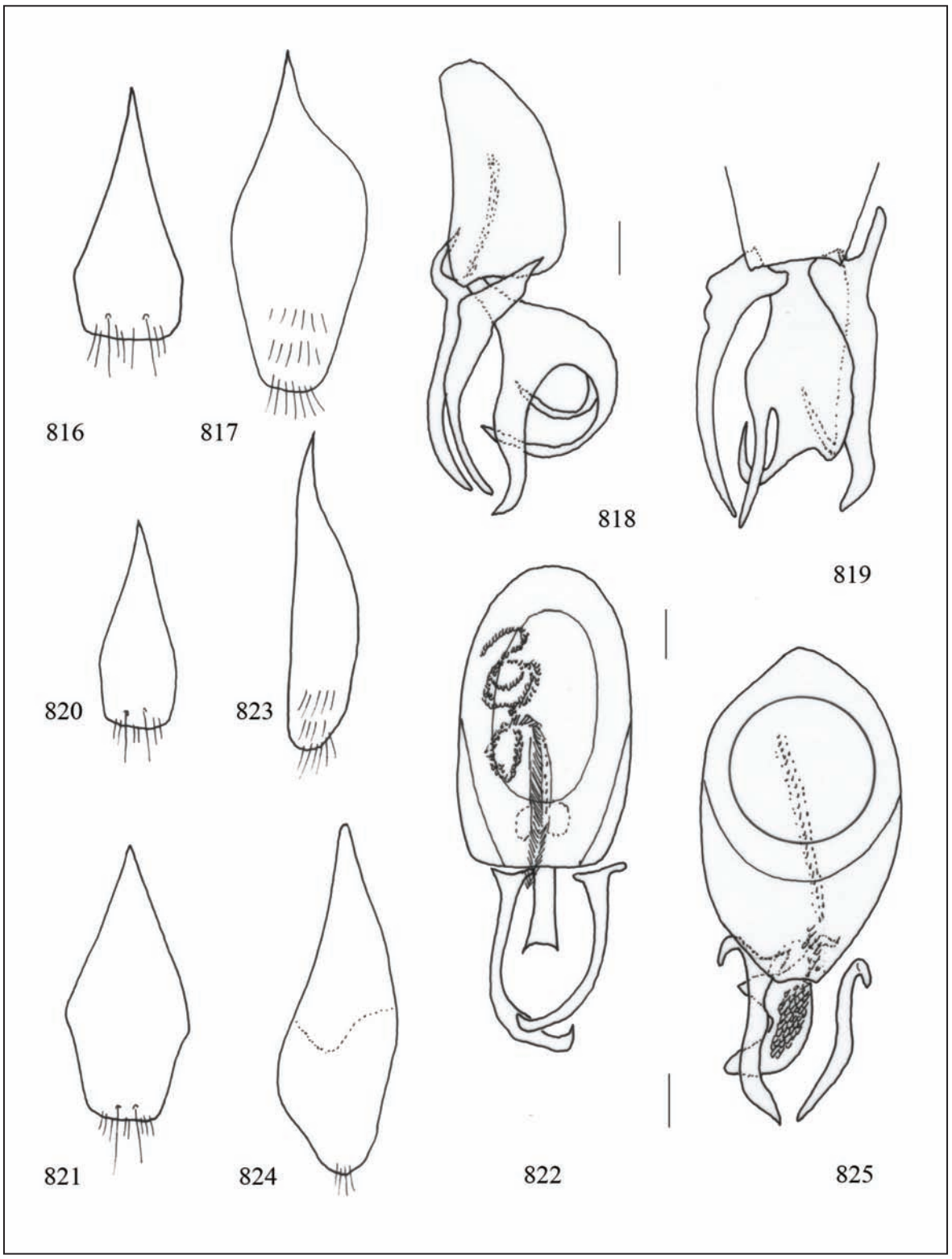
Figures 786–795. Fig. 786: distribution of *Notolinopsis uncinatus* sub-group in Congo: *N. submontanus* n. sp. (open circle), *N. uncinatus* n. sp. (filled square), *N. lungweianus* n. sp. (filled circle), *N. congoanus* n. sp. (star), *N. polygonalis* n. sp. (open square), *N. uviranus* n. sp. (open triangle). Figs. 787–795. Tergite and sternite of the male genital segment, aedeagus of *Notolinopsis hanstroemi* (Figs. 787–789), *Notolinopsis reticulatus* n. sp. n. (Figs. 790–792), and *Notolinopsis oosthuizeni* n. sp. (Figs. 793–795) (bar scale: 0.1 mm).



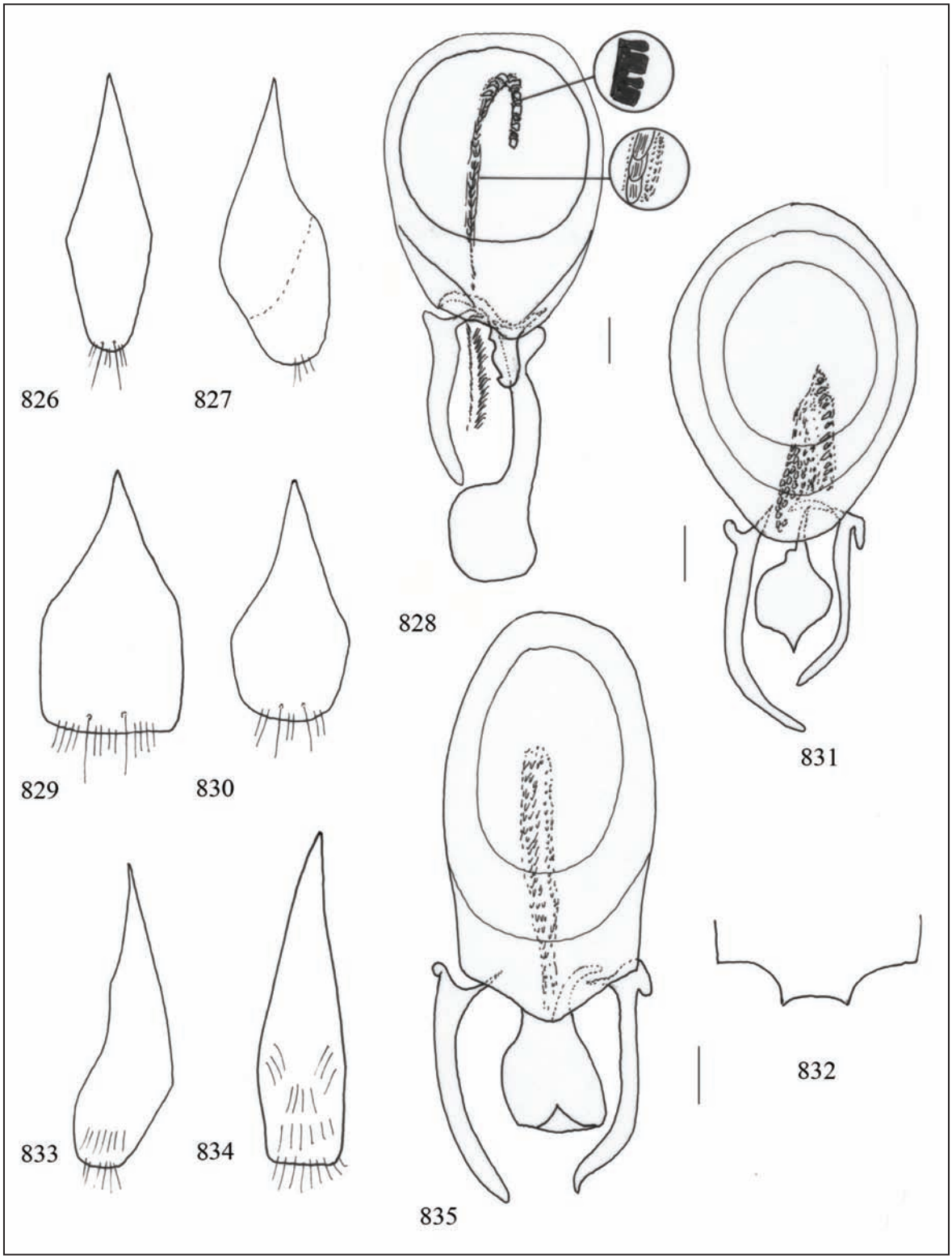
Figures 796–805. Fig. 796: distribution of *Notolinopsis hanstroemi*. Figs. 797–805. Tergite and sternite of the male genital segment, aedeagus of *Notolinopsis fallax* (Figs. 797–799), tergite and sternite of the male genital segment, aedeagus of *Notolinopsis brunneus* n. sp. (Figs. 800–802), and *Notolinopsis sphaericus* n. sp. (Figs. 803–805) (bar scale: 0.1 mm).



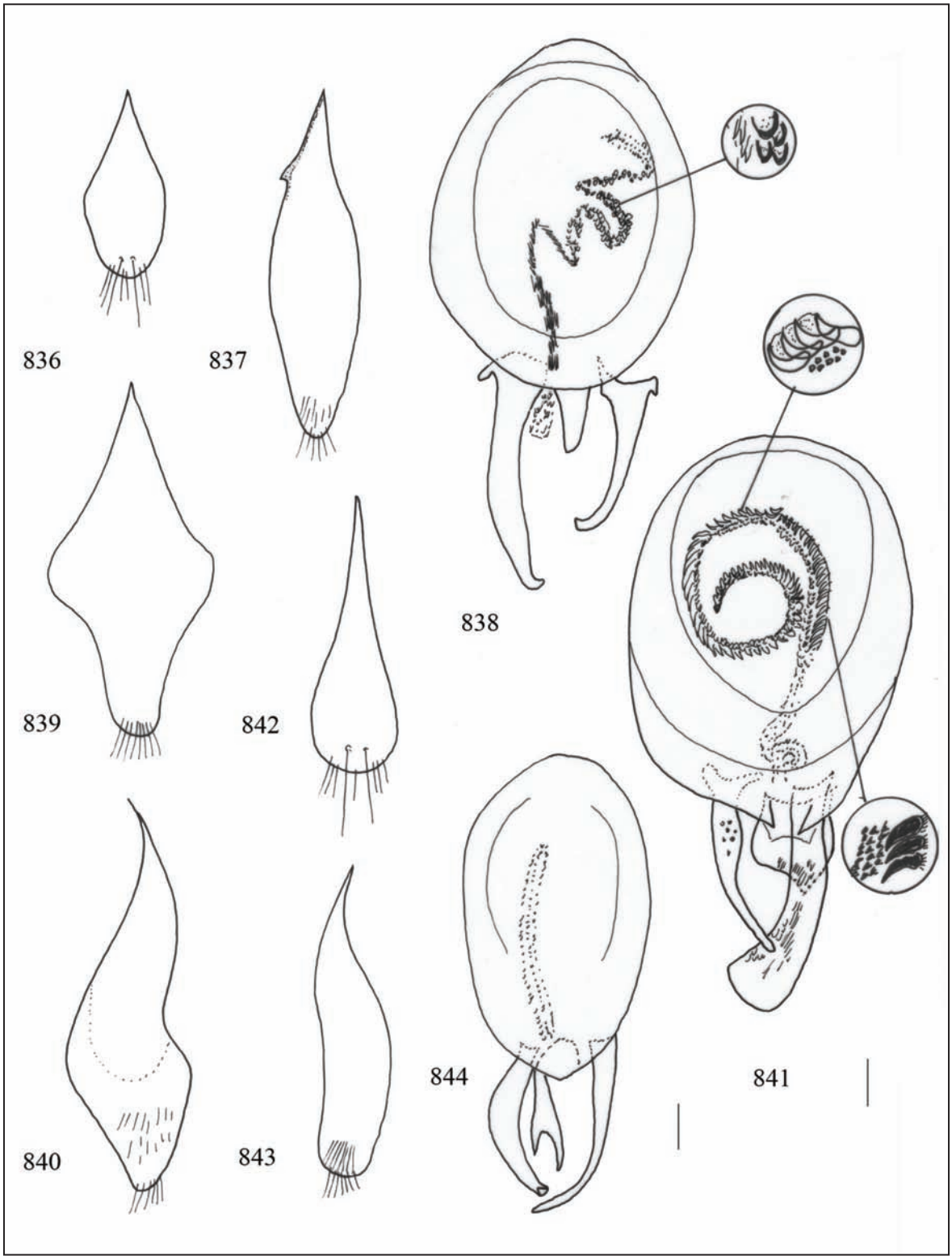
Figures 806–815. Tergite and sternite of the male genital segment, aedeagus of *Notolinopsis bispinosus* n. sp. (Figs. 806–808), *N. niger* n. sp. (Figs. 809–811), and *N. magnus n.* sp. (Figs. 812–814) (bar scale: 0.1 mm). Fig. 815: distribution of *Notolinopsis capensis*-group: *N. reticulatus* n. sp. (filled triangle), *N. oostuizeni* n. sp. (open circle), *N. fallax* (open triangle), *N. brunneus* n. sp. (filled star), *N. sphaericus* n. sp. (open triangle), *N. bispinosus* n. sp. (inverted open triangle), *N. niger* n. sp. (open star), *N. magnus* n. sp. (open square), *N. nquadu* n. sp. (inverted filled triangle).



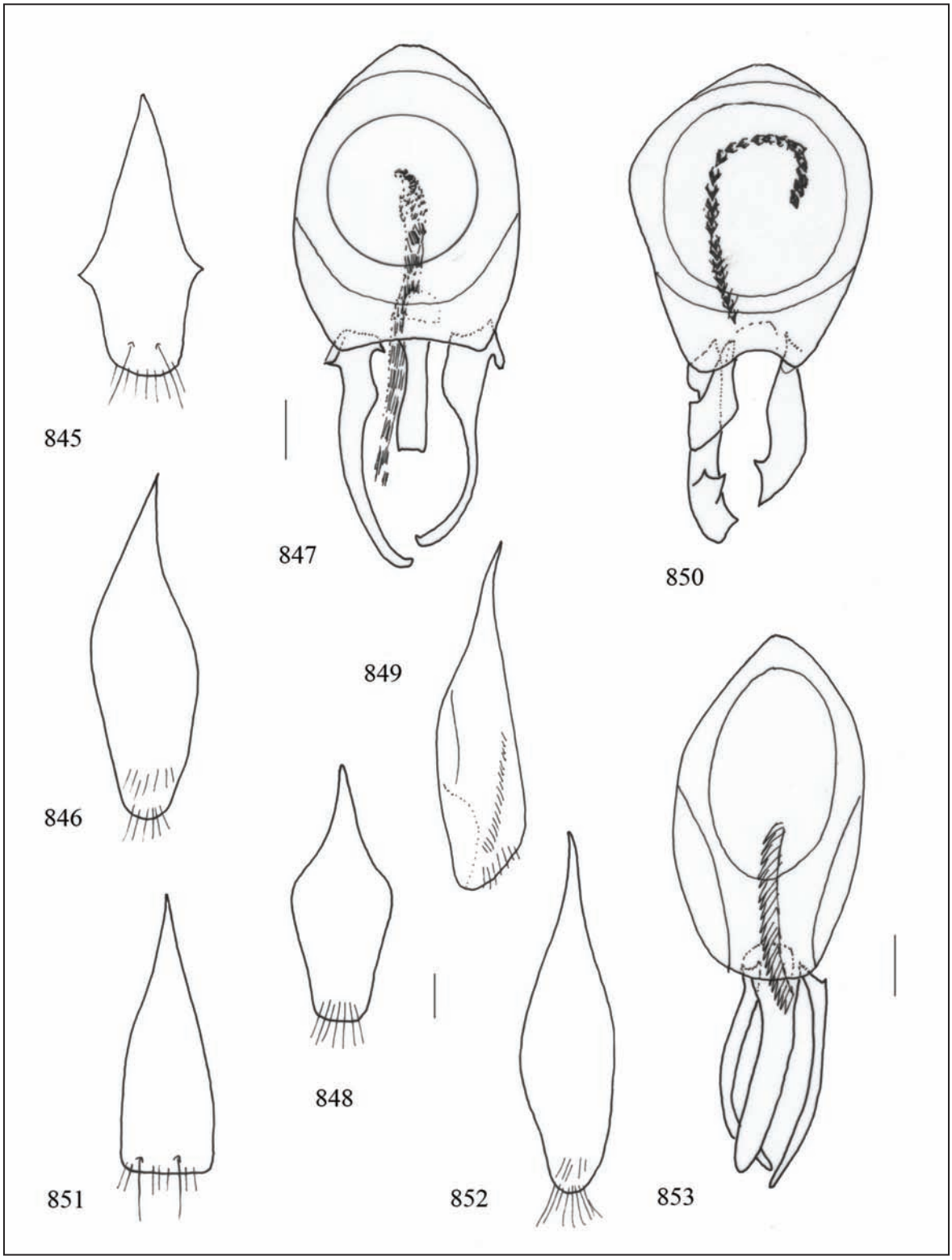
Figures 816–825. Tergite and sternite of the male genital segment, aedeagus of *Notolinopsis nquadu* n. sp. (Figs. 816–818) ,with aedeagus in ventral view (Fig. 819), tergite and sternite of the male genital segment, aedeagus of *N. meridionalis n.* sp. (Figs. 820–822), tergite and sternite of the male genital segment, aedeagus of *N. peninsularis* n. sp. (bar scale: 0.1 mm) (Figs. 823–825) .



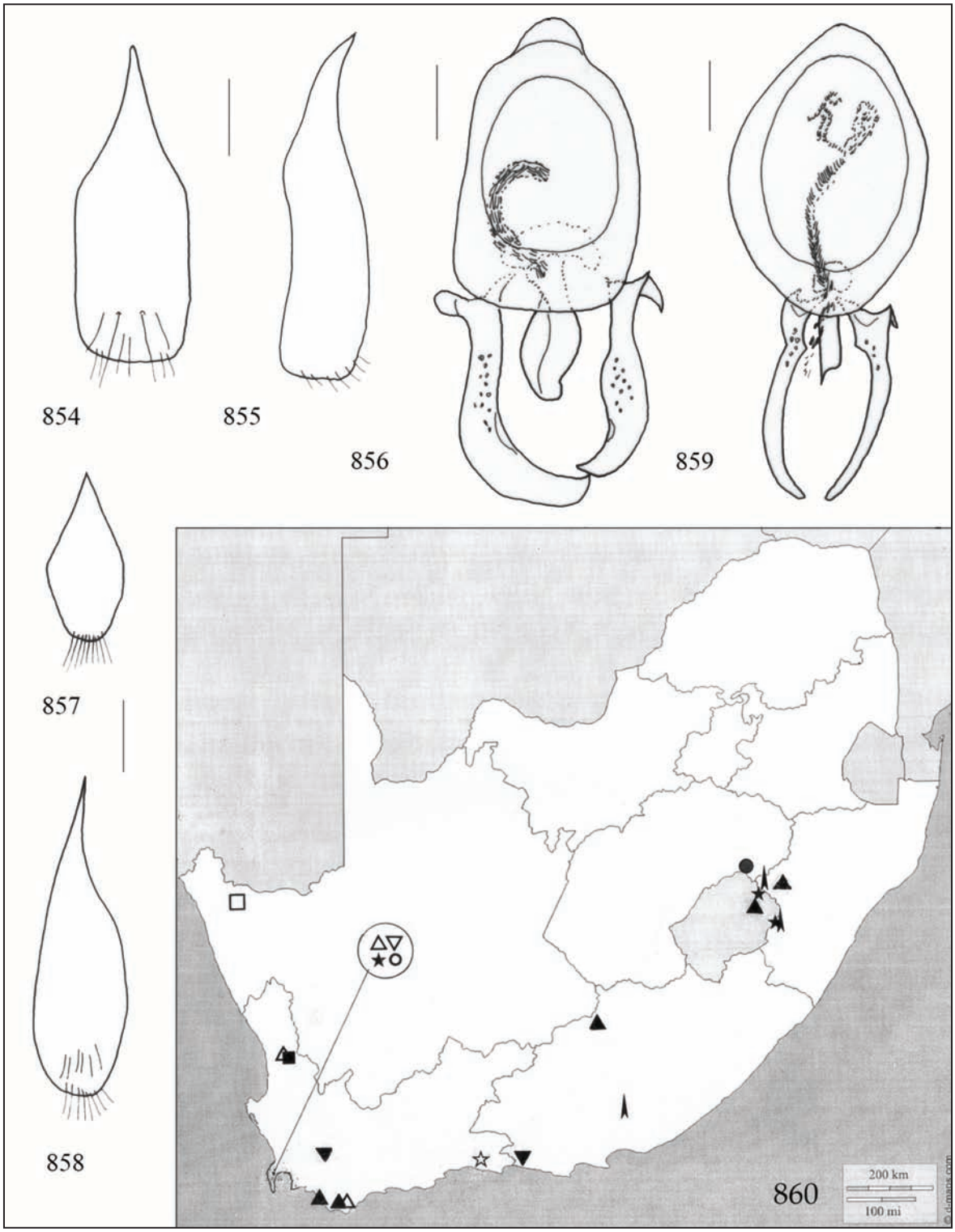
Figures 826–835. Tergite and sternite of the male genital segment, aedeagus of *Notolinopsis oceanicus* n. sp. (Figs. 826–828), and tergite and sternite of the male genital segment, aedeagus of *N. nidorum* n. sp. (Figs. 829–831). *Notolinopsis angolanus* n. sp.: 6° visible sternite (Fig. 832), tergite and sternite of the male genital segment, aedeagus (Figs. 833–835) (bar scale: 0.1 mm).



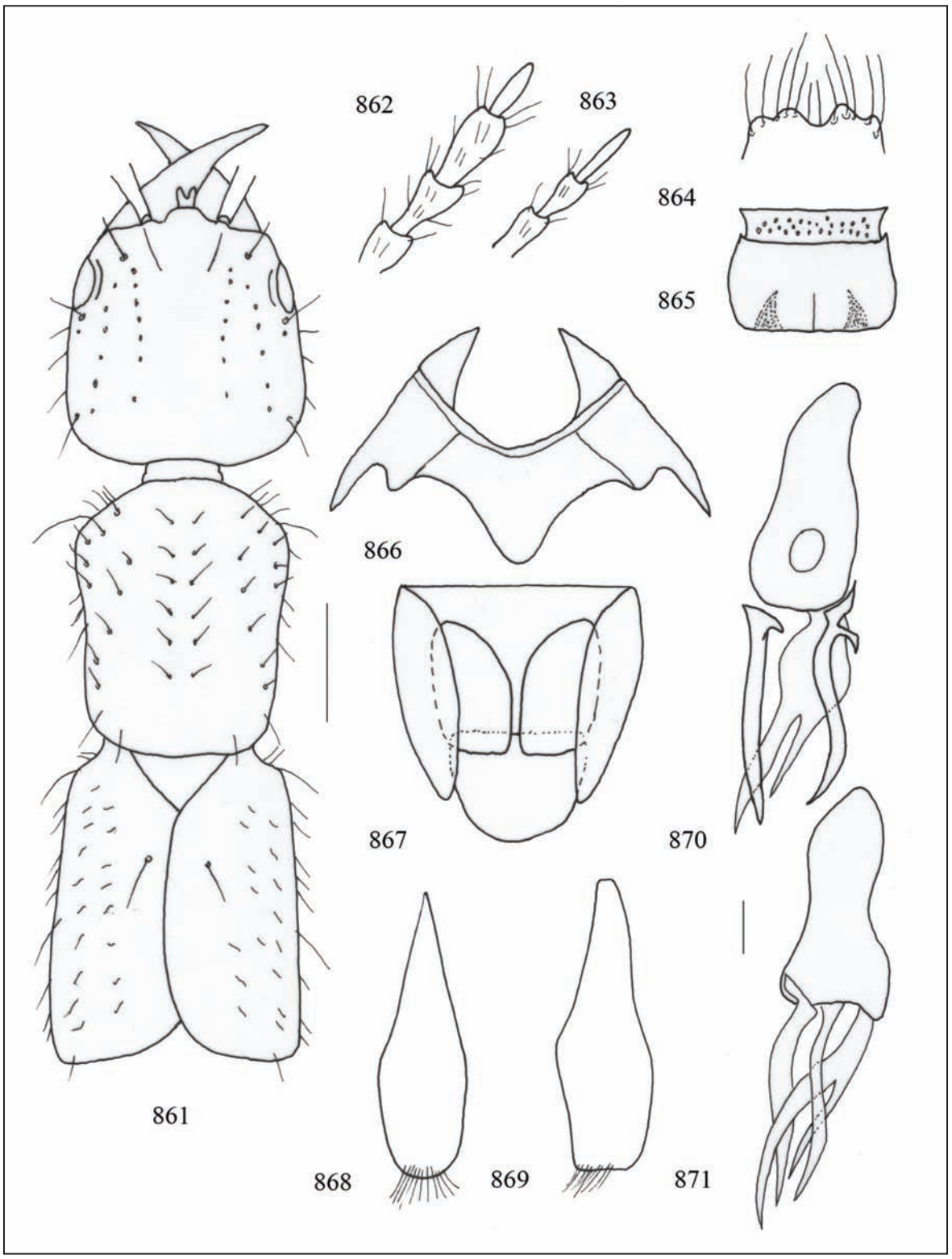
Figures 836–844. Tergite and sternite of the male genital segment, and aedeagus of *Notolinopsis capensis* (Figs. 836–838), tergite and sternite of the male genital segment, and aedeagus of *Notolinopsis finisterrae* n. sp. (Figs. 839–841), and tergite and sternite of the male genital segment, and aedeagus of *Notolinopsis swartbergensis* n. sp. (Figs. 842–844) (bar scale: 0.1 mm).



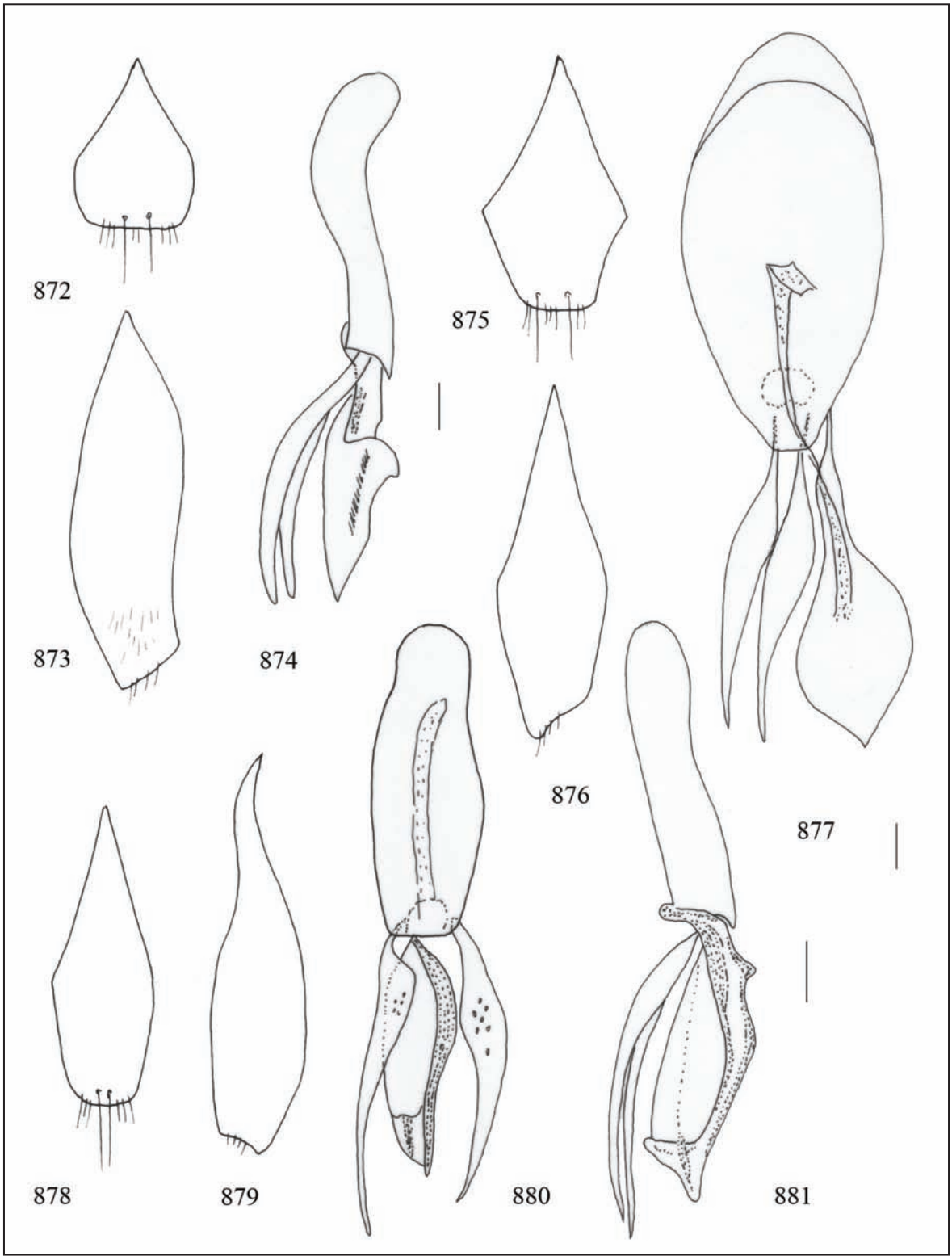
Figures 845–853. Tergite and sternite of the male genital segment, and aedeagus of *Notolinopsis hawequas* n. sp. (Figs. 845–847), tergite and sternite of the male genital segment, and aedeagus of *Notolinopsis latitarsis* (Figs. 848–850), and tergite and sternite of the male genital segment, and aedeagus of *Notolinopsis spinosus* n. sp. (Figs. 851–853) (bar scale: 0.1 mm).



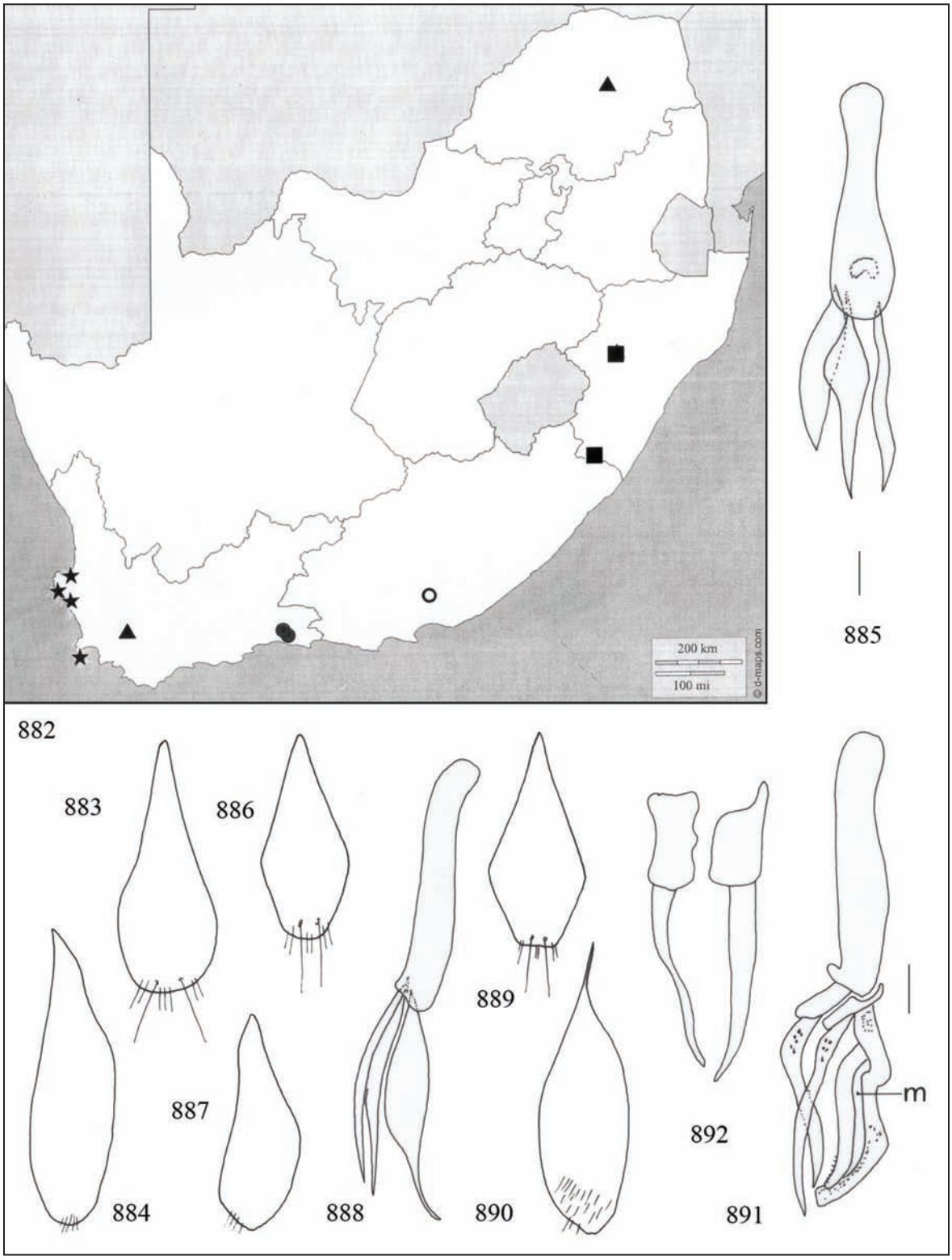
Figures 854–860. Tergite and sternite of the male genital segment, aedeagus of *Notolinopsis silvestris* n. sp. (Figs. 854–856) and *N. twello* n. sp. (Figs. 857–859) (bar scale: 0.1 mm). Fig. 860: distribution of *N. capensis*-group: *N. meridionalis* n. sp. (filled triangle), *N. peninsularis* n. sp. (open circle), *N. oceanicus* n. sp. (filled square), *N. capensis* (open triangle), *N. finisterrae* n. sp. (inverted open triangle), *N. swartbergensis* n. sp. (open square), *N. hawequas* n. sp. (filled star), *N. latitarsis* (inverted filled triangle), *N. spinosus* n. sp. (open star), *N. silvestris* n. sp. (arrow), *N. twello* n. sp. (filled circle).



Figures 861–871. *Linosomus tenuicornis*: fore-body (bar scale: 0.5 mm) (Fig. 861), maxillary and labial palpi (Figs. 862, 863), labrum (Fig. 864), neck (Fig. 865), mesosternum (Fig. 866), female genital segment (Fig. 867). *Linosomus bifurcatus* n. sp.: tergite and sternite of the male genital segment, aedeagus (Figs. 868–870), with aedeagus in lateral view (Fig. 871) (bar scale: 0.1 mm).



Figures 872–881. Tergite and sternite of the male genital segment, aedeagus of *Linosomus septentrionalis* n. sp. (Figs. 872–874), tergite and sternite of the male genital segment, aedeagus of *L. tenuicornis* (Figs. 875–877), and tergite and sternite of the male genital segment, aedeagus of *L. endroedyi* n. sp. (Figs. 878-880), with aedeagus in lateral view (Fig. 881) (bar scale: 0.1 mm).



Figures 882–892. Fig. 882: distribution of the genus *Linosomus*: *L. bifurcatus* n. sp. (open circle), *L. tenuicornis* (star), *L. endroedyi* n. sp. (filled circle), *L. fumipennis* (triangle), *L. mhlanlanensis* n. sp. (square). Figures 883–892. Tergite and sternite of the male genital segment, aedeagus of *Linosomus socius* (Figs. 883–885), *L. fumipennis* (Figs. 886–888), and *L. mhlanlanensis* n. sp. (Figs. 889–891), with parameres in ventral view (Fig. 892) (bar scale: 0.1 mm).

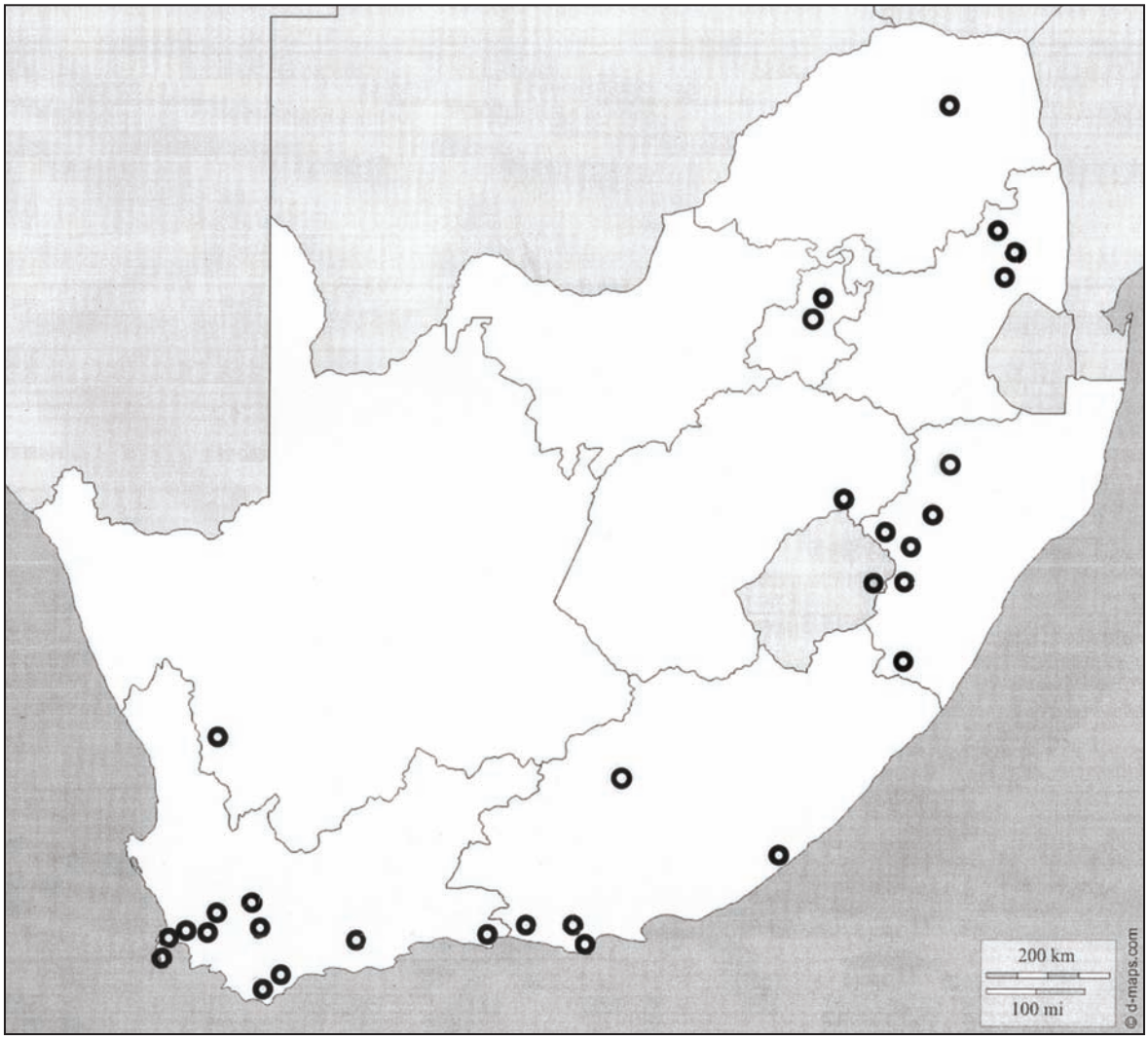


Figure 893. Distribution of *Linosomus socius*.

20. Genus ***Metocinus*** Cameron, 1950 (Figs. 894–1178; 1716–1721)

Metocinus - Cameron, 1950: 32; Herman, 2001a: 3703

TYPE SPECIES. *Metocinus aethiops* Cameron, 1950, by original designation and monotypy.

DESCRIPTION. Head narrow and elongate, with short and shallow ocular grooves and obsolete frontal grooves; pronotum with dorsal and lateral series of punctures; elytra with series of fine punctures; maxillary palpi with segments 2 and 3 subequal; last segment very narrow, subulate, with acute apex and a little shorter than the preceding segment (Fig. 896); labial palpi with last segment longer than the preceding one, very narrow, the base and the apex of the same width, much narrower than the preceding segment, the latter longer than the first segment (Fig. 897); mandibles with small tooth and thin prostheca (Fig. 899); labrum as in figure 898; antennae with segments 2 and 3 sub-equal, elongate; antesternal plate divided; gular sutures V-shaped, convergent in the distal portion but not fused; prosternum long, slightly produced posteriad in the middle; upper epipleural line not joining the inferior line; mesosternum as in Fig. 901; metasternum long and a little convex; anterior tarsi dilated; last metatarsomere longer

than the two preceding tarsomeres together (Fig. 900). Fully winged, more or less dark brown, with large, sometime very protruberent eyes, or apterous, yellowish, with very small and flat eyes (see above). Male genital segment of usual structure. Aedeagus (Figs. 953, 971, 988) with basal bulb composed of three, sometimes apparently two, telescoped parts, in the sense that the component parts fit into one another, while being connected to one other (for this reason the sizes given are approximate). The aedeagus is oblong, consisting of a very thin, transparent membrane; parameres robust, short or long, more or less asymmetrical; inner sac covered with more or less evident sclerifications, often very thickened, so that they may appear as confusing dark masses. The parameres, asymmetric, are connected to a characteristic distal structure, of different shape according to species. Female genital segment as in figure 902.

DISTRIBUTION. Characteristic genus of Africa, especially in the central Africa (Figs. 916, 1001, 1034).

BIONOMICS. Medium and high altitude montane species, living in humus in forests, especially of bamboo and *Hagenia*.

REMARKS. The species of this genus can be separated in two groups, the first composed of apterous species, with yellowish red body and very small flat eyes (*M. reductus* group), and the second composed of fully winged species, with brown body (sometimes more or less light reddish brown) and eyes of normal size, sometimes very large and protruberent (*M. aethiops* group). The descriptions of the species make references to other taxa, with similar external characters, independently of which group they belong. Many species are compared with *M. kahuzi* n. sp., one of the most characteristic taxa. Prior to my revision only two species of this genus were known. The number has now risen to 82.

KEY TO SPECIES GROUPS

1. Apterous species, with pale colouration, yellow, yellowish orange or light reddish brown; eyes very small and flat, elytra very short, with obsolete humeral angles (Fig. 894).....1. *M. reductus* group
-. Fully winged species, with more or less dark brown colouration, sometimes with reddish elytra; eyes of normal size, sometime very large and protruberent, elytra of normal length, with evident humeral angles (Fig. 895).....2. *M. aethiops* group

1. *Metocinus reductus* group

This group can be divided in some sub-groups, according to the general shape of the aedeagus and inner sac. The first sub-group conteins the species with aedeagus very narrow, spindle-shaped, with very thin inner sac (*M. kahuzi* sub-group). The second sub-group include the species with sub-ovoid aedeagus and inner sac ribbon-shaped, narrow, but short and not wrapped itself more times; sometimes with two parallel, long, proximal series of scales and spinulae (*M. lucidus* sub-group). The third sub-group includes species with ovoid aedeagus and inner sac ribbon-shaped narrow, very long and frequently wrapped itself more times (*M. afroalpestris* sub-group). The fourth sub-group include species with inner sac provided with large spines (*M. sabinyo* sub-group).

Due to the external similarity of the species of this group, the keys are based especially on the structure of the inner sac of the aedeagus.

KEY TO SUB-GROUPS

1. Aedeagus very narrow, elongated, with very narrow, short, almost filiform inner sac furnished with minute, sparse scales (Fig. 908).....
.....1. *M. kahuzi* sub-group
2. Aedeagus oval, more or less dilated.....2

2. Inner sac ribbon-shaped, narrow, short and not folded on itself several times; sometimes with two long parallel long proximal series of scales and spinules (Fig. 929).....2. *M. lucidus* sub-group
-. Inner sac ribbon-shaped, narrow, very long and often folded on itself several times, with series of indentations on the margins, often not acute but truncate (Fig. 971).....
.....3. *M. afroalpestris* sub-group
-. Inner sac of various shapes, furnished with large spines (Fig. 1142).....4. *M. sabinyo* sub-group

1. *Metocinus kahuzi* sub-group

KEY TO THE SPECIES

1. Body more robust, normally wide, 6–7 mm long.....2
-. Body less robust, narrow, about 5 mm long.....3

2. Body about 7 mm long; head and pronotum proportionately larger; pronotum more dilated anteriorly; elytra longer. Aedeagus (Fig. 905) larger, longer and wider, with very short, narrow inner sac. Congo: Virunga.....1. *M. vulcanius* n. sp.
-. Body about 6 mm long; head and pronotum proportionately shorter; pronotum less dilated anteriorly; elytra shorter. Aedeagus smaller (Fig. 908), shorter and narrower, with longer inner sac. Congo: Kivu.....2. *M. kahuzi* n. sp.
-. Body about 6 mm long, more robust and broader than the previous species. Aedeagus (Fig. 911) very long and large, with long, more evident inner sac. Congo: Virunga.....3. *M. longiphallus* n. sp.

3. Dorsal series of pronotum of 11, 12 punctures; body 5 mm long. Aedeagus (Fig. 915) of particular shape. Congo: Lubero.....
.....*M. parvioculatus* n. sp.
-. Dorsal series of pronotum of 6–8 punctures.....4

4. Body 5.3 mm long; head wider; pronotum and elytra longer. Aedeagus (Fig. 920) with characteristic distal portion and inner sac visible in distal position. Congo: Kivu.....5. *M. kivuensis* n. sp.
-. Body 5 mm long; head narrower; pronotum and elytra shorter. Aedeagus with different distal portion and inner sac visible in proximal position (Fig. 923), preceded by a series of fine spinules. Congo: Kivu.....6. *M. submontanus* n. sp.

1. ***Metocinus vulcanius*** n. sp.

Examined Material. Holotype male: Congo (Zaire), P. N. Virunga, Volcan Sabinyo, N Bitsiti, 2300–2400 m, R.P.M.J. Celis, 21.VII.1964 (MRAC); paratype: same data, 2 males, 4 females (MRAC), 4 males, 2 females (cB).

Description of Holotype. Male. Length of body: 7 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Apterous. Similar to *M. kahuzi* n. sp. but more robust. Head longer, with more rounded sides and sparser punctation. Eyes larger than that of *M. kahuzi* n. sp. Pronotum larger and more robust, more dilated anteriorly, with more broadly rounded anterior angles; dorsal series of 8, 9 punctures. Elytra wider than that of *M. kahuzi* n. sp. Tergite and sternite of the male genital segment as in figures 903, 904. Aedeagus 1.1 mm long (Fig. 905), oval, narrow in proximal and distal portions, with symmetrical parameres; inner sac very small, very short and narrow, covered with minute and sparse spinules.

Variability. The paratypes have no substantial morphological differences with the holotype described.

Etymology. The specific epithet refers to the Latin *vulcanius -a -um* (volcanic).

Distribution. The species is only known from the type locality in Congo (Fig. 916).

2. ***Metocinus kahuzi*** n. sp. (Fig. 1716)

Examined Material. Holotype male, (Congo), Kivu, T. Kabare, Contraf. SE Kahuzi, 2080 m, N. Leleup, VIII.1951 (MRAC); paratypes: same data, 1 male, 1 female (MRAC), 2 males, 1 female (cB); same data, 13.VIII.1951, 1 male (cB); Kivu, Terr. Kalehe, SO Kahuzi, 2200 m, N. Leleup, 29.VII.1951, 1 male (MRAC), 1 male (cB); Kivu, Terr, Kalehe, SO Nuhual, 2200 m, N. Leleup, VII.1951, 1 male (MRAC); same data, Katondi, 2200 m, N. Leleup, 7.XII.1951, 1 male (MRAC); same data, Mulo, 1900 m, R.P.M.J. Celis, 7.V.1953, 1 male (MRAC); Kivu, Terr. Lubero, 2200 m, N. Leleup, 27–30.XI.1951, 4 males, 1 female (MRAC); same data, S Talia, S Illambula, 2500 m, R. Bergmans 9.X.1952, 2 females (MRAC); Congo (Zaire), P. N. Virunga, Volcan Sabinyo, E de Tahamugassa, 2240 m, R.P.M.J. Celis, 17.VII.1964, 1 male (MRAC); same data, SE Tahamugassa, 2300 m, R.P. Celis, 16.VII.1964, 2 males, 4 females (MRAC), 2 females (cB); same data, NE Tshamugassa, 2260 m, R.P. Celis, 17.VII.1964, 1 male, 2 females (MRAC); same data, N Tshamugassa, 2000-2100 m, R.P. Celis, 19.VII.1964, 2 males, 5 females (MRAC); same data, N Bitsiti, au pied

du Sabinyo, 2300–2400 m, R.P.M.J. Celis, 21.VII.1964, 5 males, 17 females (MRAC), 3 males, 7 females (cB); same data, W Musule, 2400 m, R.P.M.J. Celis, 24.VII.1964, 3 males, 8 females (MRAC), 3 males (cB); same data, Rutare, N. Sabinyo, 2300 m, R.P.M.J. Celis, 22.VII.1964, 2 males, 2 females (MRAC), 2 males (cB); same data, Rutare, 2180 m, R.P.M.J. Celis, 22.VII.1964, 2 females (MRAC); same data, W Chanya, W Sabinyo, Tshamugassa, R.P. Celis, VII.1964, 1 male, 2 females (MRAC); same data, Volcan Mikeno, same data, Rweru, 2800–2900 m, R.P.M.J. Celis, 20–30. VI.1964, 2 males, 9 females (MRAC), 2 males, 3 females (cB); same data, Kabare-Rweru, 2700 m, R.P.M.J. Celis, 22.VI.1964, 1 female (MRAC); same data, SE Rweru, 2800 m, E. Celis, 26.VI.1964, 2 males, 2 females (MRAC); same data, SW Rweru, 2550–2800 m, R.P.M.J. Celis, 26–29.VI.1964, 7 males, 10 females (MRAC), 8 males, 4 females (cB); same data, 2000–2100 m, R.P.M.J. Celis, 3.VII.1064, 1 male, 2 females (MRAC), 1 female (cB); same data, 30.VI.1064, 1 male (cB); same data, 2800–2900 m, R.P.M.J. Celis, 20.VI.1964, 2 males, 5 females (MRAC), 2 males, 1 female (cB); same data, W Rweru, 2400–2600 m, R.P.M.J. Celis, 6.VII.1964, 4 males, 7 females (MRAC), 2 males, 3 exx. (cB); same data, Rweru-Kibumba, 2000–2200 m, R.P.M.J. Celis, 3.VII–3.VIII.1964, 2 males, 4 females (MRAC); same data, W Rweru, 2400–2600 m, R.P.M.J. Celis, 2.VII.1964, 1 male (MRAC); same data, N Rweru, torrent Mbabuka, 2400–2500 m, R.P. Celis, 2.VII.1964, 1 ex. (MRAC); same data, piste de Gorillas, N Rweru, R.P.M.J. Celis, VI.1964, 1 male (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 2.5 mm. Apterous. Body narrow with short fore-body (Fig. 894). Head small, elongate. Eyes small and flat. Surface of head with traces of transverse micro-striation and minute and sparse punctures. Pronotum longer than head, anteriorly as wide as head, with oblique anterior margins, broadly rounded anterior angles and slightly sinuate sides. Surface with feeble traces of transverse micro-striation; dorsal series of 9, 10 large punctures and lateral series of 8, 9 irregular and smaller punctures. Elytra much shorter and narrower than pronotum, with obsolete humeral angles; surface with very shallow and sparse punctures arranged in few series. Abdomen with more or less polygonal micro-reticulation and very fine and sparse punctation. Tergite and sternite of the male genital segment as in figures 906, 907. Aedeagus 0.80-0.92 mm (Fig. 908), elongate and narrow, membranous and translucent; parameres short and robust, more or less asymmetrical; inner sac very narrow and short, tube-shaped, with very small and sparse scales.

VARIABILITY. The species is very variable in size, shape of the head, length of aedeagus and shape of parameres. It is one of the commonest species in the Kivu area.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. Congo: Kivu region (Sabinyo, Mikeno volcanos) (Figs. 916, 917).

BIONOMICS. The specimens were collected in "*humus bambous*" in mountain forests.

3. ***Metocinus longiphallus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo (Zaire), P. N. Virunga, Volcan Mikeno, Kabare-Rweru, 3200 m, R.P.M.J. Celis, 22.VI.1964 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.5 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Apterous. Body yellowish orange. Head and pronotum with transverse micro-striation. Similar to *M. hagenianus* n. sp., but more robust and darker. Head much less dilated posteriad, with more rounded sides. Surface with denser punctation on the sides, with 4 large anterior punctures (Fig. 912). Pronotum as long as head, anteriorly dilated where it is as wide as head, wider than that of *M. hagenianus* n. sp.; dorsal series of 9, 10 shallow punctures and lateral oblique series of 6, 7 punctures and some other punctures around them. Elytra similar to that of *M. hagenianus* n. sp., with coarser punctation. Tergite and sternite of the male genital segment as in figures 909, 910. Aedeagus very large (Fig. 911), 1.48 mm long, very narrowly oval, with asymmetrical parameres; inner sac narrow and short, covered with fine and sparse scales.

ETYMOLOGY. The specific epithet refers to the long aedeagus of this species.

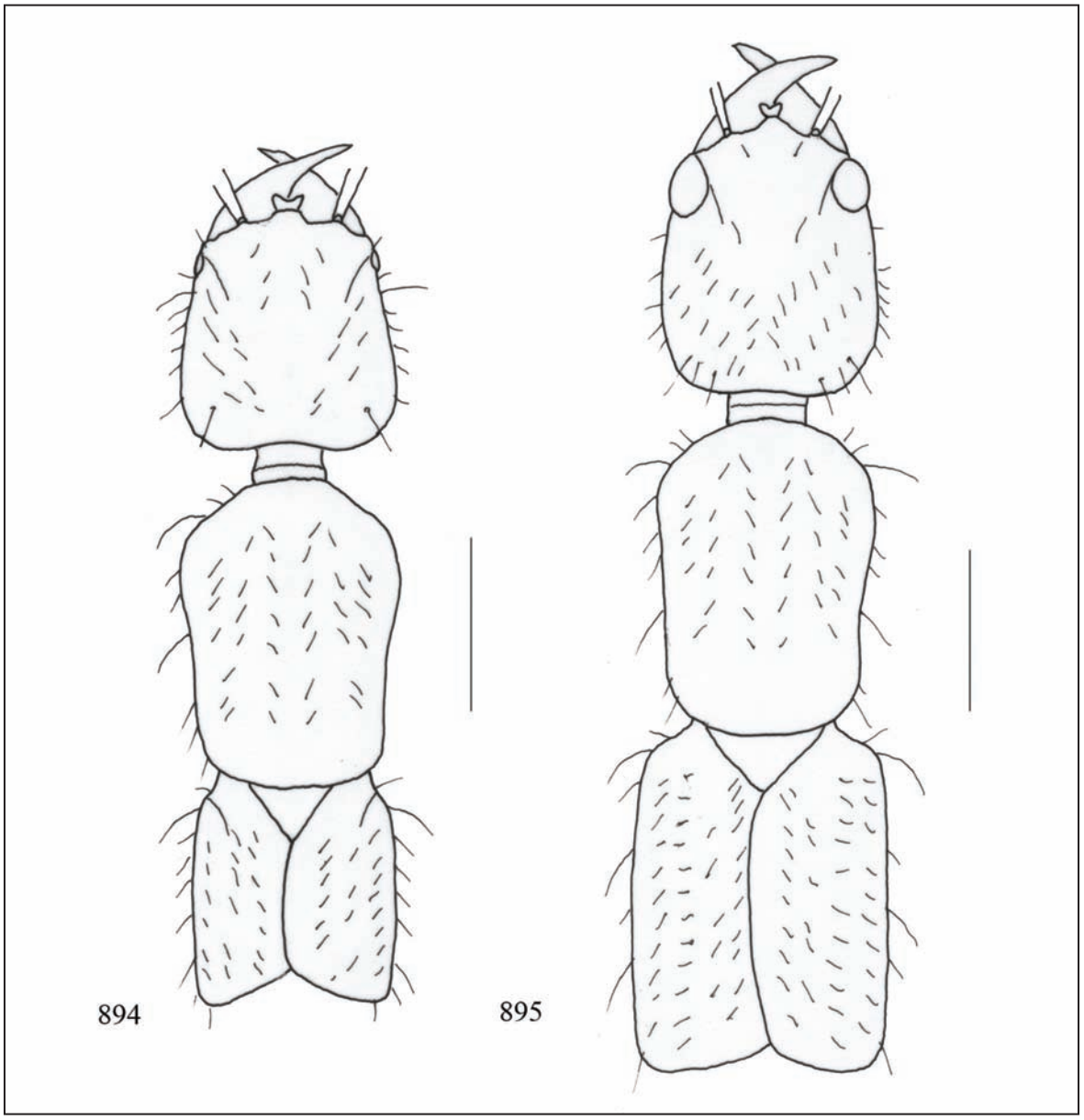
Distribution. The species is only known from the type locality in Congo (Fig. 916).

Remarks. Female unknown. The extinct Mikeno volcano in Congo, on the border with Rwanda, is part of the Virunga Mountain range.

4. ***Metocinus parvioculatus*** n. sp.

Examined Material. Holotype male: Congo, Dorsale de Lubero, Mt Kesongware, R.P.M.J. Celis, VIII.1963 (MRAC); paratypes: same data, 2 males (MRAC), 2 males (cB).

Description of Holotype. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.1 mm. Apterous. Body yellowish. Eyes small but evident. Similar to *M. pseudokinola* n. sp., but larger and broader. Head more oval, with broadly rounded posterior angles. Pronotum with more oblique anterior angles and



Figures 894–895. Fore-body of *Metocinus kahuzi* n. sp. (Fig. 894) and *M. dissimilis* n. sp. (Fig. 895) (bar scale: 0.5 mm).

more broadly rounded anterior angles; dorsal series of 11, 12 punctures and lateral series of 5 punctures. Elytra proportionately very short, sub-rectangular, with obsolete humeral angles. Surface with very fine and dense punctation arranged in numerous series. Tergite and sternite of the male genital segment as in figures 913, 914. Aedeagus (Fig. 915) 1 mm long, very narrow, of characteristic shape; parameres very short and broad; inner sac short, covered with fine and long spinules.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet comes from the Latin *parvi- oculatus -a -um* (with small eyes).

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 916).

REMARKS. Female unknown.

5. ***Metocinus kivuensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, T. Kalehe, Riv. Mukoba, SO Kahuzi, 2200 m, N. Leleup, VII.1951 (MRAC); paratype: same data, Terr. Kabare, contr. SE Kahuzi, N. Leleup, 13.VIII.1951, 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.3 mm; from anterior margin of head to posterior margin of elytra: 2.3 mm. Apterous. Head and pronotum with traces of transverse micro-striation. Similar to *M. hagenianus* n. sp., but smaller, narrow. Head of similar shape but smaller, with more broadly rounded posterior angles. Eyes smaller than those of *M. hagenianus* n. sp. Pronotum narrower and longer than that of *M. hagenianus* n. sp., and narrower than head, with sub-rectilinear sides, not dilated anteriorly; dorsal series of 7, 8 fine punctures and lateral series of 5, 6 fine punctures. Elytra sub-rectangular, shorter and narrower than that of *M. hagenianus* n. sp., with sub-parallel sides, and sparser punctation. Tergite and sternite of the male genital segment as in figures 918, 919. Aedeagus 0.9 mm long (Fig. 920), oblong, dilated in the middle, with symmetrical, short parameres; inner sac very narrow, short, covered with fine scales.

VARIABILITY. The paratype has no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the Kivu region.

DISTRIBUTION. The species is only known from the cited localities in Congo (Fig. 917).

BIONOMICS. The specimen was collected in "*humus bambous et* Hagenia".

REMARKS. Female unknown.

6. ***Metocinus submontanus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, contr. S Kahuzi, 2200 m, B. Basilewsky, 27.III.1953 (MRAC); paratype: same data, 1 male (cB).

DESCRIPTION. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.2 mm. Apterous. Head and pronotum with traces of transverse micro-striation. Similar to *M. montanellus* n. sp., but body thin, smaller and narrower than that of *M. montanellus* n. sp. Head narrower than that of *M. montanellus* n. sp., with more narrowly rounded posterior angles and sparser punctation. Eyes small but slightly protruberent. Pronotum dilated anteriorly where it is wider than head, less dilated than in *M. montanellus* n. sp., with sub-rectilinear sides; dorsal series of 6, 7 finer punctures and lateral oblique series of 5, 6 anterior punctures. Elytra proportionately shorter than that of *M. montanellus* n. sp., with large scutellum and fine and more clearly visible punctation. Tergite and sternite of the male genital segment as in figures 921, 922. Aedeagus (Fig. 923) 0.74 mm long, very narrow, similar to that of *M. kahuzi* n. sp. but smaller, with different distal structure, longer parameres; inner sac with a long distal series of fine spinules, followed by a narrow sac, ribbon-shaped, covered with fine scales.

VARIABILITY. The paratype has no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is the Latin *sub- montanus -a -um* (submontane).

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 917).

REMARKS. Female unknown.

2. *Metocinus lucidus* sub-group

KEY TO THE SPECIES

1. Body 7.8 mm long; head sub-rectangular, with sub-rectilinear sides; pronotum dilated anteriorly. Aedeagus as in figure 926; inner sac with 2 medio-distal series of large scales, gradually smaller in size towards the distal portion. Congo: Virunga.....1. *M. mikeno* n. sp.
-. Body larger, about 7 mm long.....2
-. Body smaller, less than 7 mm long.....3

2. Head not narrowed anteriorly, shorter, with broadly rounded posterior angles; pronotum shorter, with slightly rounded sides. Aedeagus as in figure 929; inner sac with 2 short, close series of spines. Congo: Virunga, Mikeno.....2. *M. rubellianus* n. sp.
-. Head narrowed anteriorly, longer, with narrowly rounded posterior angles; pronotum longer, with sub-rectilinear sides. Aedeagus as in figure 932; inner sac with 2 separate, long series of differently shaped spines, Congo: Kivu, Virunga..... .....3. *M. nyakasiba* n. sp.

3. Body about 6.5 mm long; head short, with rounded sides; pronotum short and narrow, with oblique anterior margins; elytra short. Aedeagus as in figure 935; inner sac covered with large sub-rectangular scales. Congo: Mwenga.....4. *M. luiko* n. sp.
-. Body about 6 mm long.....4
-. Body less than 6 mm long.....7

4. Inner sac with only one series of spines (Fig. 938). Congo: Lubero.....5. *M. silvanus* n. sp.
-. Inner sac with 2 series of spines.....5

5. Aedeagus smaller (Fig. 941), 0.7 mm long; inner sac with 2 series of opposed, small spines and proximal portion covered with scales. Congo: Kabare.....6. *M. monticolus* n. sp.
-. Aedeagus larger, 1.1–1.2 mm long.....6

6. Inner sac with 2 mixed series of sparse scales and spines, preceded by a distal series of very long spinules (Fig. 944); head sub-rectangular, with sub-rectilinear sides; pronotum more rectangular; elytra longer. Congo: Lubero .....7. *M. katondi* n. sp.
-. Inner sac with 2 fused series of large, not acute scales (Fig. 947); head sub-oval, with rounded sides; pronotum more dilated anteriorly; elytra shorter. Congo: Kahuzi.....8. *M. mlozilozi* n. sp.
-. Inner sac narrow, with 2 close series of more or less rounded scales (Fig. 950); body dark brown, 6.3 mm long; head proportionately large, wide, with slightly rounded sides; pronotum strongly dilated anteriorly. Tanzania: Uluguru Mts .....9. *M. kidundanus* n. sp.

7. Body 5.6 to 5.8 mm long.....8
-. Body less than 5.5 mm long.....9

8. Inner sac with only 1 series of scales; head a little wider, more narrowed anteriorly; eyes smaller; pronotum more dilated anteriorly. Aedeagus as in figure 953; inner sac with a series of short scales between very fine and sparse scales on the sides, preceded by a series of dense spinules. Congo: Lubero.....10. *M. lucidus* n. sp.
-. Inner sac with 2 series of spines: head narrower, a little narrowed anteriorly; eyes larger; pronotum less dilated anteriorly. Aedeagus as in figure 958; inner sac with 2 close series of spines. Congo: Kibali-Ituri.....11. *M. blukwa* n. sp.

9. Body 5.2-5.4 mm long, much larger and more robust; head and pronotum proportionately longer. Aedeagus as in figure 961; inner sac strip-like, covered with small sparse scales; distal structure of characteristic shape. Congo: Kahuzi. .....12. *M. zairensis* n. sp.
-. Body 3.8 mm long, very small and slender; head sub-rectangular, with sub-rectilinear sides and very small eyes; pronotum as long and wide as head. Aedeagus as in figure 964; inner sac proportionately large, with 2 close series of sub-rectangular scales. Rwanda: Rugege .....13. *M. microps* n. sp.

1. ***Metocinus mikeno*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo (Zaire), P. N. Virunga, Volcan Mikeno, SW Rweru, 2550 m, R.P.M.J. Celis, 29.VI.1964 (MRAC); paratypes: same data, 2 males, 2 females (MRAC), 4 males, 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 7.8 mm; from anterior margin of head to posterior margin of elytra: 3.5 mm. Apterous. Similar to *M. kahuzi* n. sp., but larger and longer, dark reddish brown. Head more sub-rectangular, robust and broader than that of *M. kahuzi* n. sp. Eyes larger. Surface of head deeper. Pronotum more massive, large and broad, more dilated anteriorly; dorsal series of 10, 11 irregular punctures and lateral series of irregular punctures, mixed many other punctures. Elytra proportionately larger and longer than that of *M. kahuzi* n. sp. Tergite and sternite of the male genital segment as in figures 924, 925 Aedeagus sub-oval (Fig. 926), large, 1.3 mm long, with characteristic distal structure and very asymmetrical parameres; inner sac with a distal series of fine spinules, followed by two sub-parallel series of different spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is only known actually from the type locality in Congo (Fig. 954).

2. ***Metocinus rubellianus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, (Zaire), P. N. Virunga, Volcan Mikeno, Kabara-Rweru, 3200 m, R.P. Celis, 22.VI.1964 (MRAC); paratypes: same data, 1 male, 4 females (MRAC), 1 male, 3 females (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 7 mm; from anterior margin of head to posterior margin of elytra: 3.5 mm. Reddish brown. Apterous. Head and pronotum with fine, transverse micro-striation. Head sub-rectangular, with slightly rounded sides and narrowly rounded posterior angles. Eyes very small and flat. Surface with fine, deep, sparse punctation apart from a median band. Pronotum a little dilated anteriorly, longer than head and anteriorly as wide as head. Surface with numerous fine, deep, sparse punctures, apart from a median band; a dorsal series of 11, 12 irregular punctures is dimly apparent. Elytra very short, shorter and a little narrower than pronotum, with obsolete humeral angles. Surface with fine, sparse punctation arranged in some series. Tergite and sternite of the male genital segment as in figures 927, 928. Aedeagus 1.14 mm long (Fig. 929), with asymmetrical parameres; inner sac with two series of spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is the Latin *rubellianus -a -um* (reddish).

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 954).

REMARKS. The inner sac of the aedeagus of this species is similar to that of *M. nyakasiba* n. sp. but the two series of spines are different.

3. ***Metocinus nyakasiba*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Kabare Nyakasiba, 2350 m, N. Leleup II.1951 (MRAC); paratype: Congo, N. P. Virunga, Volcan Sabinyo, SE Tshamugussa, 2300 m, R.P. Celis, 16.VII.1964, 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 7 mm; from anterior margin of head to posterior margin of elytra: 3.2 mm. Apterous. Head and pronotum with transverse micro-striation. Similar to *M. hagenianus* n. sp., but slightly more robust. Head larger and more elongate, with less rounded sides than in *M. hagenianus* n. sp. Eyes larger. Pronotum longer than head, slightly dilated anteriorly where it is as wide as head, longer than that of *M. hagenianus* n. sp., less dilated anteriorly and with more rounded anterior angles; dorsal series of 11 punctures and lateral series of 6, 7 punctures, with other punctures near the anterior angles. Elytra longer than those of *M. hagenianus* n. sp., with coarser punctation. Tergite and sternite of the male genital segment as in figures 930, 931. Aedeagus large (Fig. 932), 1.26 mm long, with asymmetrical parameres; inner sac narrow and long, with a distal series of fine spinules and with numerous, thickened spines arraged in two parallel series.

VARIABILITY. The paratype have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is only known from Congo (Figs. 954, 955).

REMARKS. Female unknown.

4. ***Metocinus luiko*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Mwenga, SO Itombwe, Luiko, 2100 m, N. Leleup, I.1952 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.5 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Apterous. Body shiny. Similar to *M. kahuzi* n. sp. but much more robust, broader. Head longer and less narrow anteriorly than that of *M. kahuzi* n. sp. Eyes larger and slightly protruberent. Surface with coarser punctation. Pronotum more massive and broad, with less oblique anterior margins and sub-rectilinear sides; dorsal series of 8, 9 large punctures and lateral series of 6, 7 punctures. Elytra a little longer than those of *M. kahuzi* n. sp., with obsolete humeral angles and coarser and deeper punctation than in *M. kahuzi* n. sp. Tergite and sternite of the male genital segment as in figures 933, 934. Aedeagus 1 mm long (Fig. 935), with asymmetrical parameres; inner sac narrow, ribbon-shaped, with a distal series of fine spinules and covered with large sub-rectangualar scales.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 955).

BIONOMICS. The specimen was collected in "*humus, for. mont.*".

REMARKS. Female unknown.

5. ***Metocinus silvanus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Terr. Lubero, 2200 m, N. Leleup, 1.XII.1951 (MRAC); paratypes: same data, 1 female (MRAC), 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Apterous. Head, pronotum and abdomen with traces of transverse micro-striation. Similar to *M. katondi* n. sp., but larger and more dilated head, narrower anteriorly and with coarser and sparser punctation than that of *M. katondi* n. sp. Pronotum more massive, more dilated anteriorly, with dorsal series of 9, 10 irregular punctures and lateral series of 5 irregular punctures. Elytra much shorter, sub-rectangular, with obsolete humeral angles. Surface with finer and shallow punctures arranged in a few series. Tergite and sternite of the male genital segment as in figures 936, 937 Aedeagus ovoid-dilated (Fig. 938), 1 mm long, with asymmetrical parameres; inner sac with short scales and spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the Latin *silvanus -a -um* (sylvan).

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 954).

6. ***Metocinus monticolus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Terr. Kabare, SE Kahuzi, Lwiro, 2000 m, N. Leleup, 5.I.1952 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Apterous. Body shiny. Similar to *M. reductus*, but thinner, with narrower and longer elytra. Head sub-rectangular, with sub-rectilinear and sub-parallel sides. Eyes a little protruberent. Surface of head with coarser and sparser punctures than in *M. reductus*. Pronotum more massive, more dilated anteriorly, with more broadly rounded anterior angles; dorsal series of 7, 8 large and more widely spaced punctures and lateral series of 6, 7 punctures. Elytra sub-rectangular, proportionately long, very narrow, with obsolete humeral angles and deep, coarse and dense punctation. Tergite and sternite of the male genital segment as in figures 939, 940. Aedeagus small (Fig. 941), ovoid, dilated, 0.7 mm long, with asymmetrical parameres; inner sac short and very narrow, covered with fine spinules.

ETYMOLOGY. The specific epithet is the Latin *monticolus -a -um* (mountain).

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 955).

BIONOMICS. The specimen was collected in "*humus* Hagenia".

REMARKS. Female unknown.

7. ***Metocinus katondi*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Terr. Lubero, Katondi, 2200 m, N. Leleup, 8.XII.1951 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Apterous. Body shiny. Similar to *M. luiko* n. sp., but larger. Head more strongly dilated posteriad, with more rectilinear sides. Eyes smaller than those of *M. luiko* n. sp. Surface of head with more evident and deeper punctation. Pronotum not dilated anteriorly, with less oblique anterior margins and more marked anterior angles; dorsal series of 6, 7 more widely spaced punctures and lateral series of 7, 8 finer punctures. Elytra with more marked humeral angles, with very dense and shallow punctation, arranged in numerous series. Tergite and sternite of the male genital segment as in figures 942, 943. Aedeagus 1.2 mm long (Fig. 944), with symmetrical parameres; inner sac narrow, with a distal series of fine spinules and covered with more or less small scales and spines.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 954).

BIONOMICS. The specimen was collected in "humus*, for. mont. bambous*".

REMARKS. Female unknown.

8. ***Metocinus mlozilozi*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, T. Kabare, Contraf. SE Kahuzi, 2080 m, N. Leleup, VIII.1951 (MRAC); paratypes: same data, 2 males, 6 females (MRAC), 3 males, 2 females (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 2 mm. Apterous. Head, pronotum and abdomen with traces of transverse micro-striation. Similar to *M. congoensis* n. sp., from which differs by larger head, with more rounded sides and finer and sparser punctation, larger eyes and coarser punctation on pronotum and elytra. Tergite and sternte of the male genital segment as in figures 945, 946. Aedeagus 1.1 mm long (Fig. 947), with large parameres; inner sac narrow, ribbon-shaped, covered with opposing, parallel series of large scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet, "*mlozilozi*", is the Swahili word for the tree *Hagenia abyssinica*, the single species of this African montane endemic belonging to the Rosaceae.

DISTRIBUTION. The species is actually known from the type locality only, in Congo (Fig. 955).

BIONOMICS. The specimens were collected in "humus*, forêt* Hagenia".

9. ***Metocinus kidundanus*** n. sp.

EXAMINED MATERIAL. Holotype male: Tanganyika, Terr. Uluguru Mts, Sommet du Kidunda, 1800–1950 m, P. Basilewsky and N. Leleup, 7.V.1957 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.3 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Apterous. Head and pronotum with transverse micro-striation. Similar to *M. luiko* n. sp., but larger and darker, brown. Head larger and wider, much less narrowed anteriorly than that of *M. luiko* n. sp. Surface with coarser and sparser punctation. Pronotum more massive, more strongly dilated anteriorly, with more oblique anterior margins than that of *M. luiko* n. sp.; marked anterior angles; dorsal series of 5 widely spaced punctures and lateral series of 3, 4 irregular punctures. Elytra narrow, sub-rectangular, longer than in *M. luiko* n. sp., with obsolete humeral angles. Surface with very fine and sparse punctures arranged in a few series. Tergite and sternite of the male genital segment as in figures 948, 949. Aedeagus large (Fig. 950), 1.25 mm long,

with asymmetrical parameres; inner sac ribbon-shaped, long and narrow, furnished with numerous very thick short spines, with a pair of distal, triangular spines.

ETYMOLOGY. The specific epithet refers to the type locality in Tanzania.

DISTRIBUTION. The species is only known from the type locality in Tanzania (Fig. 1001).

BIONOMICS. The specimen was collected in "*forêt de montagne*".

REMARKS. Female unknown.

10. ***Metocinus lucidus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Dorsale de Lubero, Mt Kasongwere, R.P.M.J. Celis, VIII.1963 (/MRAC); paratypes: same data, 6 males, 13 females (MRAC), 5 males, 7 females (cB); Kivu, Terr. Lubero, 2200 m, N. Leleup, 30.XI.1951, 1 male (MRAC); Congo, Kivu, Butembo, P. Basilewsky, 9.XII.1952, 1 male (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.7 mm; from anterior margin of head to posterior margin of elytra: 2.5 mm. Apterous. Head, pronotum and abdomen with traces of transverse micro-striation. Body yellowish brown. Similar to *M. kahuzi* n. sp., but shorter and narrower. Head narrower, anteriorly narrow, not dilated posteriad. Eyes smaller. Surface of head with finer punctration than that of *M. kahuzi* n. sp. Pronotum shorter, anteriorly dilated, with more oblique anterior margins. Elytra shorter, with larger and sparser punctation than that of *M. kahuzi* n. sp. Tergite and sternite of the male genital segment as in figures 951, 952. Aedeagus oval (Fig. 953), 1.1 mm long, with asymmetrical parameres; inner sac with two parallel distal series of fine spinules, followed by a ribbon-shaped narrow portion, enlarged proximally, covered with fine scales and with a left series of evident sub-rectangular scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is the Latin *lucidus -a -um* (shiny).

DISTRIBUTION. The species is only known from Congo (Fig. 954).

11. ***Metocinus blukwa*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kibali-Ituri, Blukwa, 1820-2100 m, N. Leleup, I.1954 (MRAC); paratypes: same data, 1 male (MRAC), 2 males (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.7 mm. Apterous. Body yellow brown. Similar to *M. lucidus* n. sp., but narrower, with narrower head, not dilated posteriad and more prominent eyes. Pronotum narrower, not dilated anteriorly. Elytra a little longer. Tergite and sternite of the male genital segment as in figures 956, 957. Aedeagus oval (Figs. 958, 1765), very narrow and long, 1.3 mm long, with robust parameres; inner sac with two juxtaposed series of spinules.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1034).

REMARKS. Female unknown. Compared with *M. lucidus* n. sp., the aedeagus is larger, with inner sac composed of two series of spinules instead of one.

12. ***Metocinus zairensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo (Zaire), Kivu, Mt. Kahuzi, 2200 m, H. Mühle, 26.VIII.1986 (MNB); paratypes: same data, 1 male (cB); Kivu, Terr. Kabare, nyakasiba, 2350 m, N. Leleup, I.1951, 1 male (MRAC); same data, contr. SE Kahuzi, 2080 m, N. Leleup, VIII.1951, 1 male (without head) (cB); Congo, Kivu, contr. S Kahuzi, 2200 m, P. Basilewsky, 27.III.1953, 1 male, 1 female (MRAC); 2 males (cB); same data, P. Basilewsky, 26–28.III.1953, 1 male, 1 female (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.3 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Apterous. Head with traces of polygonal micro-reticulation. Body shiny, light brown. Head oval, a little narrowed

anteriorly, with slightly dilated sides and broadly rounded posterior angles. Eyes very small, flat. Surface of head with very fine and sparse punctures. Pronotum scarcely broader than head, anteriorly dilated where it is as wide as head, with sub-rectilinear sides, very oblique anterior margins and obsolescent anterior angles; dorsal series of 11, 12 punctures and lateral series of 6, 7 punctures; all punctures very fine. Elytra short, sub-rectangular, much shorter and narrower than pronotum, with sub-rectilinear and sub-parallel sides and obsolete humeral angles. Surface with dense, coarse but shallow punctures, arranged in a few series. Tergite and sternite of the male genital segment as in figures 959, 960. Aedeagus oval (Fig. 961), small, 0.74 mm long, with large asymmetrical parameres; inner sac short, with a distal combs of small spines followed by a proximal dilated portion covered in sparse scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described. Length of body: 5.2–5.4 mm; from anterior margin of head to posterior margin of elytra: 2.5–2.7 mm.

ETYMOLOGY. The specific epithet refers to Zaire.

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 955).

REMARKS. In the Levasseur collection in the Musém national d'Histoire naturelle in Paris these specimens were labelled "Nudobius camerounensis *n. sp. in litteris*". This is surprising because Levasseur often added to the studied specimens a label indicating the structure of the anterior tarsi, which in *Nudobius* are not dilated.

13. ***Metocinus microps*** n. sp.

EXAMINED MATERIAL. Holotype male: Rwanda, Forêt de Rugege, 2400 m, N. Leleup, III.1951 (MRAC); paratypes: same data, 3 males, 7 females (MRAC), 3 males, 3 females (cB); same data, 2200 m, N. Leleup, III.1951, 3 females (MRAC), 2 females (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 3.8 mm; from anterior margin of head to posterior margin of elytra: 1.6 mm. Apterous. Head with transverse micro-striation. Similar to *M. pseudokinola* n. sp. but shorter. Head narrower and longer than that of *M. pseudokinola* n. sp., not shiny. Eyes smaller. Surface with slightly larger punctures. Pronotum shorter, less dilated anteriorly, not shiny. Elytra shorter and scutellum much smaller, with more evident and denser punctation than that of *M. pseudokinola* n. sp. Tergite and sternite of the male genital segment as in figures 962, 963. Aedeagus oval (Fig. 964), very narrow, 0.8 mm long, with symmetrical slender parameres; inner sac ribbon-shaped, short, covered with thickened spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is derived from the Greùek μικροπσ (small).

DISTRIBUTION. The species is only known from the type locality in Rwanda (Fig. 1002).

3. *Metocinus afroalpestris* sub-group

KEY TO THE SPECIES

1. Body about 6.5 mm long.....2
-. Body less than 6 mm long.....4

2. Inner sac long, folded on itself several times, covered with characteristic scales; superior margin with sub-rounded indentations, chain-shaped, the inferior margin with a row of fine, short spines (Fig. 968). Body robust; head oblong, narrowed anteriorly; elytra very short. Congo: Kalehe, Kahuzi.....1. *M. afroalpestris* n. sp.
-. Inner sac shorter, folded once on itself.....3

3. Inner sac similar to that of *M. afroalpestris* n. sp., but inferior margin covered with scales ans short spines; the distal portion bone-shaped (Fig. 971). Congo: Mwenga, Uvira.....2. *M. hagenianus* n. sp.
-. Inner sac similar to that of *M. hagenianus* n. sp., but superior margin with short subquadrate scales; median surface with numerous, widely spaced scales; distal portion wide, covered with very fine, long spinules (Fig. 974). Congo: Kalehe, Kahuzi.....3. *M. congoensis* n. sp.

4. Larger species, about 5 mm long.....5

-. Smaller species, 4–4.4 mm long; inner sac covered with more or less long, very close spines; distal portion divided in 2 long strips, covered with fine, sparse spinules (Fig. 977). Tanzania: Uluguru Mts.....4. *M. confectus* n. sp.

5. Body larger, broader; head less narrowed anteriorly; pronotum longer and wider, more strongly dilated anteriorly; elytra longer. Aedeagus as in figure 981; inner sac similar to that of *M. congoensis* n. sp., but shorter, smaller, covered only with opposing spines and fine, sparse scales in the distal portion. Congo: Kahuzi.....5. *M. montanellus* n. sp.

-. Body smaller, narrower; head more narrowed anteriorly; pronotum shorter and narrower, less strongly dilated anteriorly; elytra shorter. Aedeagus as in figure 984; inner sac without spines or large scales, covered with only in sparse scales. Congo: Kalehe.....6. *M. flavens* n. sp.

1. ***Metocinus afroalpestris*** n. sp.

Examined Material. Holotype male: Congo, Kivu, T. Kalehe, verst. SO Kahuzi, 2850 m, N. Leleup, VII.1951 (MRAC); paratypes: same data, 4 males, 2 females (MRAC), 4 males, 1 female (cB); same data, Mont Kahuzi, 3300 m, N. Leleup, I.1951, 2 males, 9 females (MRAC), 5 males, 1 female (cB); same data, 2200–2300 m, N. Leleup, I.1958, 1 male, 1 female (cB); same data, T. Kalehe, sommet Kahuzi, 2900-3330 m, N. Leleup, 27.VII.1951, 1 male (MRAC); same data, T. Kabare, Contref. SE Kahuzi, 2000 m, N. Leleup, VII.1951, 1 male (MRAC), 1 male, 2 females (cB); same data, S Kahuzi, 2300 m, P. Basilewsky, 26–28.III.1953, 1 male, 2 females (MRAC), 1 male (cB).

Description of Holotype. Male. Length of body: 6.4 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Apterous. Head and pronotum with very fine transverse micro-striation. Body robust (Fig. 965), broad, with very short elytra. Head large, dilated posteriad, with slightly rounded sides and prominent, narrowly rounded posterior angles. Eyes small. Surface of head with fine and very sparse punctures. Pronotum massive, longer and wider than head, scarcely dilated posteriad, with broadly rounded anterior angles and slightly sinuate sides; dorsal series of 6, 7 fine punctures and lateral series of 7, 8 irregular punctures, with other punctures near the anterior angles. Elytra very short, narrow, much shorter than pronotum, with obsolete humeral angles, small scutellum and very fine punctures arranged in some series. Tergite and sternite of the male genital segment as in figures 966, 967. Aedeagus oval (Fig. 968), large, 1.48 mm long, with particular distal structure and asymmetrical parameres; inner sac ribbon-shaped, wrapped around itself several times, covered with scales, and on the external margin by large subqaudrate scales; the distal portion of the sac with a series of fine spinules, followed by other spinules disposed in a fishbone pattern.

Variability. The paratypes have no substantial morphological differences with the holotype described. Length of body: 6.3–6.5 mm; from anterior margin of head to posterior margin of elytra: 2.6–3 mm.

Etymology. The specific epithet refers to the Latin *afro- alpestris -e* (afro-alpine).

Distribution. The species is known from Kivu region, in Congo (Fig. 985).

Bionomics. The specimens were collected in "humus, *forêt bambous*", "*racines de plantes*", "*ravin avec herbes et arbustes*".

2. ***Metocinus hagenianus*** n. sp.

Examined Material. Holotype male: Congo, Kivu, Terr. Mwenga, Lac Lungwe, 2700 m, N. Leleup, VIII.1953 (MRAC); paratypes: same data, 2 females (MRAC), 1 male, 1 female (cB); same data, Uvira Luvubu, 2650 m, N. Leleup, 24.XI.1950, 3 males, 5 females /MRAC), 2 males, 4 females (cB).

Description of Holotype. Male. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 2.7 mm. Apterous. Head and pronotum with traces of transverse micro-striation. Body yellow testaceous. Head sub-rectangular, elongate, dilated posteriad, with narrowly rounded posterior angles. Eyes very small and flat. Surface of head with very fine and sparse punctures. Pronotum a little longer than head, anteriorly slightly dilated where it is as wide as head. Dorsal and lateral series poorly distinguishable from other punctures. Elytra short, narrow, shorter and narrower

than pronotum, with obsolete humeral angles. Surface with visible, sparse and dense punctation. Abdomen with polygonal micro-reticulation and fine and sparse punctation. Tergite and sternite of the male genital segment as in figures 969, 970. Aedeagus oval (Fig. 971), large, 1.37 mm long, with characteristic distal structure and asymmetrical parameres; inner sac ribbon-shaped, wrapped around itself; the external margin of the sac is covered with large sub-triangular thickened spines; the internal margin is covered with a broad strip of very fine scales; the median portion of the sac covered with a very long series of sub-rectangular, very small spines; distal portion with long spinules.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the African montane tree *Hagenia abyssinica*.

DISTRIBUTION. The species is known only from Congo, Kivu region (Fig. 985).

BIONOMICS. The specimens were collected in "humus *for. bambou et* Hagenia", "*terreau bambous*".

3. ***Metocinus congoensis*** n. sp. (Figs. 1717, 1718)

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Terr. Kalehe, verst. S Kahuzi, 2850 m, N. Leleup, 1.VIII.1951 (MRAC); paratypes: same data, 1 male, 2 females (MRAC), 3 males, 1 female (cB); Terr. Kalehe, SO Kahuzi, 2770 m, N. Leleup, VII.1951 (MRAC); same data, Terr. Kalehe, SO Kahuzi, 2770 m, N. Leleup, VII.1951 (MRAC); same data, 5 males, 3 females (MRAC), 2 males, 3 females (cB); Mont Kahuzi, vers. N, 3200 m, N. Leleup, I.1959, 1 male, 2 females (MRAC), 1 male (cB); Contr. S Kahuzi, 2200–2300 n, P. Basilewsky, 26-28.III.1953, 4 males, 4 females (MRAC), 4 males, 1 female (cB); same data, Terr. Uvira, Ht Luvubu, 2750 m, N. Leleup, V.1954, 3 females (MRAC), 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.3 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Apterous. Head and pronotum with transverse micro-striation. Similar to *M. bambusianus* n. sp., but narrower. Head subrectangular, narrower than that of *M. bambusianus* n. sp. Eyes smaller, flat. Surface of head with finer punctures. Pronotum narrower, anteriorly less dilated, and with finer punctures than those of *M. bambusianus* n. sp. Elytra proportionately shorter and narrower than those of *M. bambusianus* n. sp., with obsolete humeral angles. Abdomen with polygonal micro-reticulation. Tergite and sternite of the male genital segment as in figures 972, 973. Aedeagus oval (Fig. 974), 0.96 mm long, with characteristic distal structure and large asymmetrical parameres; inner sac ribbon-shaped, wrapped around itself; distal portion with two series of fine spinules, followed by proportionately large sac covered with sparse scales and with two opposing, parallel series of different small spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described. Length of body: 6–6.6 mm; from anterior margin of head to posterior margin of elytra: 2.7–3 mm.

ETYMOLOGY. The specific epithet refers to Congo (Fig. 985).

BIONOMICS. Some specimens were collected in "humus *for. bambous*", "prairies avec arbustes".

DISTRIBUTION. The species is known only from Congo, in Kivu region.

4. ***Metocinus confectus*** n. sp.

EXAMINED MATERIAL. Holotype male: Tanganyika, Terr. Uluguru Mts, Sommet du Kidunda, 1800-1950 m, P. Basilewsky and N. Leleup, 3.V.1957 (MRAC); paratypes: same data, 1 female (MRAC), 1 male (cB); Tanzania, Mts Uluguru, Kinola, 1500–1750 m, L. Berger, N. Leleup and J. Debecker, 13.VI.1971, 1 male, 1 female (MRAC), 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.2 mm; from anterior margin of head to posterior margin of elytra: 1.9 mm. Apterous. Head and pronotum with traces of transverse micro-striation. Body yellowish, slender, narrow and elongate. Characterized by the shape of the fore-body (Fig. 978). Head with fine and sparse punctures. Pronotum with dorsal series of 5 shallow, widely spaced punctures and lateral oblique series of 4, 5 punctures. Elytra with shallow sparse punctures arranged in a few series. Tergite and sternite of the male genital segment as in figures 975, 976. Aedeagus sub-oval

(Fig. 977), 0.77 mm long, with characteristic distal structure and narrow, very asymmetrical parameres; inner sac ribbon-shaped, covered with opposing small spines; the inner sac, in the distal portion, is divided in two tapes.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described. Length of body: 4–4.4 mm; from anterior margin of head to posterior margin of elytra: 1.8–1.9 mm.

ETYMOLOGY. The specific epithet is the Latin *confectus -a -um* (strained) in relation to the small, narrow body.

DISTRIBUTION. The species is known actually only from Uluguru Mts, in Tanzania (Fig. 1001).

BIONOMICS. The specimens were collected in "*forêt de montagne*".

5. ***Metocinus montanellus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Terr. Kalehe, sommet Kahuzi, 2900–3330 m, N. Leleup 27.VII.1951 (MRAC); paratype: same data, 1 female (cB).

DESCRIPTION. Length of body: 4.9 mm; from anterior margin of head to posterior margin of elytra: 2.4 mm. Apterous. Body slender (Fig. 978). Head and pronotum with transverse microstriation. Similar to *M. hagenianus* n. sp., but shorter. Head more oval and shorter, with more rounded sides, eyes smaller, and punctation denser on the head than that of *M. hagenianus* n. sp. Elytra shorter, narrow, with shallower punctures than those of hagenianus; scutellum smaller. Tergite and sternite of the male genital segment as in figures 979, 980. Aedeagus oval (Figs. 981, 1766) 0.96 mm long, with characteristic distal structure and large asymmetrical parameres; inner sac ribbon-shaped, covered with sparse and fine scales, followed by small triangular thickened spines; distal portion with two parallel series of fine spinules.

VARIABILITY. The paratype have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is the Latin *montanellus -a -um* (mountain).

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 985).

6. ***Metocinus flavens*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Terr. Kalehe, contr. SO Kahuzi, 2200 m, N. Leleup, 8.VIII.1951 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.1 mm. Apterous. Head and pronotum with traces of transverse microstriation. Similar to *M. montanellus* n. sp., but smaller. Head shorter, eyes smaller, pronotum narrower than in *M. montanellus* n. sp. Dorsal series of 8, 9 punctures and lateral series of 7, 8 punctures. Elytra proportionately shorter, more dilated posteriad, with smaller scutellum, less rugose, finer and sparser punctation than that of *M. montanellus* n. sp. Tergite and sternite of the male genital segment as in figures 982, 983. Aedeagus oval (Fig. 984), 1 mm long, with characteristic distal structure and large symmetrical parameres; inner sac ribbon-shaped, wrapped around itself, narrow; distal portion covered with fine spinules, followed by more sparse scales in the median and proximal portion.

ETYMOLOGY. The specific epithet is the Latin *flavens -entis* (yellowish).

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 985).

BIONOMICS. A specimen was collected in "*humus for. bambous*".

REMARKS. Female unknown. This species is similar to *M. kivuensis* n. sp. but differs in its shorter pronotum, more oblique anterior margins and shorter elytra.

4. *Metocinus sabinyo* sub-group

KEY TO THE SPECIES

1. Body larger, 6.6 to 6.8 mm long, reddish brown.....2
-. Body less than 6.5 mm long, lighter.....3

2. Body 6.6 mm long; head larger, more dilated anteriorly: pronotum massive, broad; elytra longer. Aedeagus larger (Fig. 988); inner sac with distal spinules, followed by 5 spines and by a large, long median spine; proximal portion with two tape-like structures, covered with scales. Rwanda: Rugege.....1. *M. afromontanus* n. sp.
-. Body 6.8 mm long; head smaller, less dilated anteriorly; pronotum less massive, narrow; elytra shorter. Aedeagus smaller (Fig. 991); inner sac with a lvery ong median spine, next to some scales and scales, followed by a strip covered with small scales. Congo: Virunga.....2. *M. virunga* n. sp.

3. Body larger, usually more than 6 mm long.....4
-. Body smaller, 5.5–6 mm long; head elongate, a little narrowed anteriorly; pronotum sub-rectangular, a little dilated anteriorly. Aedeagus as in figure 994; inner sac with 4 large median spines followed by a series of small spines, gradually decreasing in size. Tanzania, Rwanda, Burundi, Congo.....3. *M. reductus*

4. Body larger, broader, 6.3 mm long; head wider, more strongly narrowed anteriorly; pronotum longer and more dilated anteriorly. Aedeagus as in figure 997; inner sac with numerous large spines, gradually a little decreasing in size in the distal portion. Congo: Virunga.....4. *M. sabinyo* n. sp.
-. Body smaller, narrower, 6.2 mm long; head narrow, less strongly narrowed anteriorly; pronotum shorter and less dilated anteriorly. Aedeagus as in figure 1000; inner sac with 3 large distal spines, followed by a very long, median spine and by 2 close series of minute spines. Rwanda: Rugege.....5. *M. leleupi* n. sp.

1. ***Metocinus afromontanus*** n. sp.

EXAMINED MATERIAL. Holotype male: Rwanda, Forêt de Rugege, 2400 m, N. Leluep, III.1951; paratypes: same data, 1 male (MRAC), 2 males (cB); same data, 2200 m, 1 female (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.6 mm; from anterior margin of head to posterior margin of elytra: 3.1 mm. Apterous. Head and pronotum with transverse micro-striation. Similar to *M. hagenianus* n. sp., but more robust and broader, with darker colouration. Head longer and with less rounded sides than in *M. hagenianus* n. sp. Pronotum longer and much less strongly dilated anteriorly, with less oblique anterior margins and more broadly rounded anterior angles than in *M. hagenianus* n. sp. Elytra longer, with more widely spaced punctures; scutellum larger. Tergite and sternite of the male genital segment as in figures 986, 987. Aedeagus oval (Figs. 988, 1767), very large, 1.77 mm long, with characteristic distal structure; parameres more or less asymmetrical, short and narrow; inner sac with a distal cluster of fine spinules, followed by 5 large spines and by a large, long spine; the proximal part of the sac consists of two tape-like structures covered in fine scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is from the Latin *montanus -a -um* (mountain), with the prefix *afrus -a -um* (African).

DISTRIBUTION. The species is only known from the type locality in Rwanda (Fig. 1002).

2. ***Metocinus virunga*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo (Zaire), P. N. Virunga, Volcan Sabinyo, Chanya W, W Sabinyo, Tshamagassa, R.P.M.J. Celis, VII.1964 (MRAC); paratipes: same data, 5 males, 4 females (MRAC), 3 males, 1 female (cB); same data, 2800 m, R.P.M.J. Celis, 26.VI.1964, 2 males, 2 females (cB); same data, E de Tshamagassa, 2240 m, R.P.M.J. Celis, VII.1964, 1 male, 2 females (MRAC), 1 male (cB); same data, Volcan Sabinyo, N Bitsiti, 2300–2400 m, R.P.M.J. Celis, 21.VII.1964, 1 male (MRAC), 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.5 mm; from anterior margin of head to posterior margin of elytra: 2.5 mm. Apterous. Similar to *M. kahuzi* n. sp., but more slender and narrow. Head smaller, pronotum more dilated anteriorly, with more marked anterior angles, and elytra with shallower punctation than in *M. kahuzi* n. sp. Tergite and sternite of the male genital segment as in figures 989, 990. Aedeagus oval (Fig. 991), broad, 1.33 mm long, with characteristic distal structure; parameres short and broad, more or less asymmet-

rical; inner sac with a distal cluster of fine spinules, followed by a large spine; proximal part of the sac narrow and long, covered with fine scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Virunga Natural Park, as a noun in apposition.

DISTRIBUTION. The species is only known from Viirunga Natural Park in Congo (Fig. 916).

BIONOMICS. The specimens were collected "*sous bambous*".

REMARKS. *Metocinus kahuzi* n. sp. occurs in the same locality. The two species very similar in the external characters, *M. virunga* n. sp. only differing in its narrower body. Examination of the aedeagus is therefore essential for determination.

The extinct Sabinyo volcano is situated on the borders of Congo, Uganda and Ruanda and is part of the Virunga Mountains.

3. ***Metocinus reductus*** Tottenham, 1956

Metocinus reductus - Tottenham, 1956: 238; Herman, 2001a: 3703

TYPE MATERIAL. The Musée royal de l'Afrique centrale of Tervuren preserves 7 specimens, the first labelled "*Holotype*" (printed on orange label), "*Coll. Mus. Congo / Urundi: Usumbura / 800 m. 25/27–II.1953 / P. Basilewsky*", "Leptacinus / reductus / *Tottenham / TYPE*"; the second is labelled as the first, with the label "*paratype*"; the third and fourth are also labelled "*paratype*" and "*Coll. Mus. Congo / Urundi: Bururi, 2100 m / 8–III.1953 / P. Basilewsky*", "Leptacinus/ reductus / *Tottenham / Paratype*"; the fifth to seventh are labelled as the preceding ones, but the locality is "*Ruanda: Tshuruyaga for. / Rugege, 2400 m / P. Basilewsky 22–I.1953*".

EXAMINED MATERIAL. Rwanda, Forêt de Rugege, 2100 m, N. Leleup, III.1951, 4 males, 5 females (MRAC), 5 males, 3 females (cB); Forêt de Rugege, 2150 m, N. Leleup, IV.1951, 3 males, 8 females (MRAC), 2 males, 5 females (cB); Forêt de Rugege, 2200 m, N. Leleup, II.1952, 1 male (MRAC); Forêt de Rugege, 2300 m, N. Leleup, 21.II.1952, 1 male, 1 female (MRAC), 1 male, 1 female (cB); Forêt de Rugege, 2200–2300 m, N. Leleup, 21.II.1952, 2 males, 1 female (MRAC), 1 male, 1 female (cB); Forêt de Rugege, 2100 m, N. Leleup, III.1951, 1 male, 1 female (MRAC), 1 male (cB).

Congo, Kivu, Terr. Uvira, 800 m, N. Leleup V.1951, 1 male (MRAC).

Burundi (Congo), Urundi, Bururi, 2100 m, P. Basilewsky, 8.III.1953, 1 ex. (MRAC).

DESCRIPTION. Length of body: 5.5–6.5 mm; from anterior margin of head to posterior margin of elytra: 2.7–3 mm. Apterous. Body shiny, uniformly light brown. Similar to *M. aethiops* but longer and narrower, with short elytra. Head narrower and anteriorly narrowed. Surface with sparser punctation, devoid of large punctures. Eyes smaller and flat. Pronotum with more obsolescent anterior angles; dorsal series of 7, 8 punctures and lateral series of 5, 6 punctures among some other punctures. Elytra very short, much shorter and narrower than pronotum, with totally obsolete humeral angles. Surface wrinckled, a little matt, with fine punctures arranged in few series. Abdomen more matt, with fine and dense, transverse micro-striation and finer and denser punctation. Tergite and sternite of the male genital segment as in figures 992, 993. Aedeagus oblong (Fig. 994), translucent, oval, 1.1–1.2 mm long, with characteristic distal structure; parameres more or less asymmetrical; inner sac with a distal sub-triangular cluster of fine spinules, followed by a series of 4 more or less large spines and by a series of spines, gradually decreasing in size.

DISTRIBUTION. Burundi, Rwanda, Congo (Figs. 985, 1002, 1178).

BIONOMICS. Many specimens were collected in "*humus, vest. for. ombroph.*".

REMARKS. It is evident that Tottenham (1956) attributed the type specimens to the genus *Metocinus* later, at the time of the publication, since the specimens are labelled "*Leptacinus*".

4. ***Metocinus sabinyo*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo (Zaire), P. N. Virunga, Volcan Sabinyo, N Bitsiti, 2300–2400 m, R.P.M.J. Celis, 21.VII.1964 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.3 mm; from anterior margin of head to pos-

terior margin of elytra: 2.8 mm. Apterous. Similar to *M. kahuzi* n. sp., but more robust and shorter. Head broader with sparser punctation and larger eyes than in *M. kahuzi* n. sp. Pronotum sub-rectangular, broader and more robust than that of *M. kahuzi* n. sp., a little dilated anteriorly; dorsal series of 9, 10 punctures and lateral series of 5, 6 punctures. Elytra shorter than those of *M. kahuzi* n. sp. Tergite and sternite of the male genital segment as in figures 995, 996. Aedeagus oval (Fig. 997), 1.2 mm long, with characteristic distal structure; parameres large, asymmetrical; inner sac with two long parallel distal series of fine spinules, followed by a long series of robust spines.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is only known from the type locality in Congo.

REMARKS. Female unknown.

5. ***Metocinus leleupi*** n. sp.

EXAMINED MATERIAL. Holotype male: Rwanda, Forêt de Rugege, 2000 m, N. Leleup, III.1951 (MRAC); paratype: same data, 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.2 mm; from anterior margin of head to posterior margin of elytra: 2.4 mm. Apterous. Head and pronotum with traces of transverse micro-striation. Similar to *M. montanellus* n. sp., but with more sub-rectangular head, less narrowed anteriorly, with more narrowly rounded posterior angles and coarser punctation than in *M. montanellus* n. sp. Pronotum longer, much less dilated anteriorly; dorsal series of 9 punctures and lateral series of 5, 6 irregular punctures among other punctures. Elytra more strongly dilated, with deeper punctures and larger scutellum than in *M. montanellus* n. sp. Tergite and sternite of the male genital segment as in figures 998, 999. Aedeagus oval (Fig. 1000), 1.15 mm long, with characteristic distal structure; parameres long, more or less asymmetrical; inner sac with a distal sub-triangular cluster of fine spinules, followed by three distal spines and a large, long, narrow median spine; proximal part of the sac narrow, with two parallel series of small sub-rectangular scales.

VARIABILITY. The paratype has no substantial morphological differences with the holotype described.

ETYMOLOGY. Patronymic. The species is dedicated to Narcisse Leleup of the MRAC who collected a large part of the material studied in this revision. His researchs in Africa, lasted many years, have allowed the collection of hundreds of thousands of specimens that have been studied by leading specialists of the time (Basilewsky, Fagel, Jeannel, etc.) who have described hundreds of new species. To him were dedicated many new species and new genera, such as *Leleupidia* Basilewsky, 1951 (Carabidae), *Leleupiella* Jeannel. 1952 (Pselaphidae), *Leleupidiella* Jarrige, 1853 and *Leleupiridia* Fagel, 1952 (Staphylinidae).

DISTRIBUTION. The species is only known from the type locality in Rwanda.

2. *Metocinus aethiops* group

This group can be divided in some sub-groups, according to the general shape of the aedeagus and inner sac. The first sub-group include the species with sub-ovoid aedeagus, more or less dilated and inner sac ribbon-shaped, narrow or wide, but short and not wrapped itself more times, covered with scales and spinulae (*M. meridionalis* sub-group). The second sub-group includes species with inner sac more or less narrow, very long, ribbon-shaped and frequently rolled up more times, covered with scales and spinulae (*M. allardi* sub-group). The third sub-group include species with ovoid aedeagus and inner sac normally wide and more or less short, provided with large spines, sometimes much thickened (*M. dissimilis* sub-group)

KEY TO THE SUB-GROUPS

1. Inner sac of the aedeagus ribbon-shaped, narrow or wide, but short and not coiled several times, covered with scales and spinules (Figs. 1019, 1027).....1. *M. meridionalis* sub-group
-. Inner sac of the aedeagus more or less narrow, very long, ribbon-shaped and frequently coiled several times, covered with scales and spinules (Figs. 1967, 1070).....2. *M. allardi* sub-group

-. Inner sac of the aedeagus normally wide and more or less short, furnished with large, sometimes very thickened spines (Figs. 1142, 1168).....3. *M. dissimilis* sub-group

1. *Metocinus meridionalis* sub-group

KEY TO THE SPECIES

1. Body larger, about 6 mm long, yellowish or more or less light brown.....2
-. Body smaller, less than 6 mm long, lighter or darker reddish brown.....3

2. Body light reddish brown; eyes small; pronotum longer than head. Aedeagus as in figure 1005; inner sac with a distal series of very long spinules, followed by a wide surface covered with very widely spaced scales and spines. Congo: Lubero.....1. *M. bambusianus* n. sp.
-. Body light brown; eyes medium-sized; pronotum and elytra long, sub-equal in length. Aedeagus as in figure 1008; inner sac with a very long, distal tape of fine spinules, followed by a large swolllen, proximal portion covered with sparse scales and with a short, very close series of stubby spines on the left. Congo: Lubero .....2. *M. rufulus* n. sp.

3 Body 5.7 mm long, broad and robust; head subrectangular (Fig. 1012a); pronotum long and wide. Aedeagus as in figure 1011; inner sac with dense distal series of spinules, followed by 2 parallel series of large scales and spines. Tanzania: Uluguru Mts.....3. *M. kinola* n. sp.
-. Body about 5 mm long.....4
-. Body less than 5 mm long.....9

4. Body more or less pale reddish brown.....5
-. Body darker.....8

5. Inner sac narrow, with a sub-rectangular, distal area, covered with very minute scales, followed by 2 close series of rounded scales (Fig. 1016); head and pronotum long, sub-rectangular, with almost rectilinear sides (Fig. 1013); eyes small. Tanzania: Uluguru Mts.....4. *M. lupanganus* n. sp.
-. Inner sac broad, with scales and series of spines.....6

6. Body larger, 5.3 mm long, brown with darker head; inner of aedeagus sac narrow and long, with 2 series of close scales (Fig. 1019). Cameroon.....5. *M. bafut* n. sp.
-. Body smaller, narrow, 5 mm long, brown.....7

7. Head longer and narrower; pronotum narrower; elytra shorter. Aedeagus (Fig. 1022): inner sac narrow, covered with scales and with a series of small spines. South Africa: Transvaal .....6. *M. meridionalis* n. sp.
-. Head shorter and less narrow; pronotum wider; elytra longer. Aedeagus as in figure 1027; inner sac broad, covered with very sparse, small scales and spines, and with 2 rows of larger spines. Rwanda.....7. *M. rwandensis* n. sp.

8. Head and pronotum elongate, narrow; head subrectangular, with sub-rectilinear sides; eyes smaller; elytra shorter; body more or less dark reddish brown. Aedeagus as in figure 1030; inner sac with very long, distal series of fine spinules, followed by a folded strip, covered with scales. Burundi.....8. *M. elegantissimus* n. sp.
-. Head and pronotum shorter; head subquadrate, with more marked posterior angles; elytra very long; body very dark brown, with black head. Aedeagus as in figure 1033; inner sac narrow and short, strip-like, covered with minute scales and with a series of small, sub-triangular scales. South Africa: Transvaal.....9. *M. longelytratus* n. sp.

9. Eyes visibly protruberent; body reddish brown or brown amaranth.....10
-. Eyes not or only slightly protruberent; body reddish brown.....11

10. Body larger and longer, 4.8 mm long; head less dilated anteriorly (Fig. 1012b), almost impunctate; pronotum and elytra wider. Aedeagus larger (Fig. 1037): inner sac long and very narrow, with a series of sub-rectangular scales. Tanzania: Tanga.....10. *M. tanzanicus* n. sp.
-. Body smaller and shorter, 4.5 mm long; head more dilated anteriorly, with sparse punctation; pronotum and elytra shorter. Aedeagus smaller (Fig. 1040): inner sac short, broader, with minute scales. Tanzania: Urungwa Mts.....11. *M. urungwa* n. sp.

11. Eyes large, a little protruding; body 4.2–4.6 mm long.....12
-. Eyes smaller, not protruberent; body 4.6 mm long. Body narrower; head sub-oval, shorter, not narrow anteriorly; pronotum less robust; elytra wider. Aedeagus shorte (Fig. 1043): inner sac very narrow, with a long, distal strip covered with minute scales, followed by 2 thin series of very small spines. Congo.....12. *M. buye* n. sp.

12. Head wider, not dilated forward; pronotum more massive and wide; elytra longer; body 4.2 mm long. Aedeagus as in figure 1047; inner sac long and very narrow, covered with fine spinules, gradually decreasing in size. Tanzania: Uluguru Mts.....13. *M. anomalus* n. sp.
-. Head narrower, visibly dilated anteriorly; pronotum less massive and narrow; elytra shorter; body 4.6 mm long. Aedeagus as in figure 1050; inner sac with a distal spine, followed by a very large and long spine surrounded by other smaller spines round. Rep. Congo..... .....14. *M. cianferonii* n. sp.

1. ***Metocinus bambusianus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Terr. Lubero, Katondi, 2200 m, N. Leleup, 9.XII.1951 (MRAC); paratypes: same data, 2 females (MRAC), 1 male, 1 female (cB); Congo, Kivu, Itombwe, Mulenge, Mashuba, N. Leleup, X.1959, 1 male (MRAC), 1 female (cB); same data, Contr. S Kahuzi, 2300 m, P. Basilewsky, 26–28.III.1953, 1 male (MRAC); Ruanda, Forêt de Rugege, 2199 m, N. Leleup, III.1951, 2 males, 1 female (MRAC), 2 males (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Fully winged and shiny. Body light reddish brown. Head oval, with largely rounded posterior angles. Eyes medium-sized, scarcely protruberent. Surface of head with fine and sparse punctation. Pronotum sub-rectangular, a little longer than head, not dilated anteriorly where it is as wide as head, with sub-rectilinear and sub-parallel sides, very slightly oblique anterior margins and largely rounded anterior angles; dorsal series of 9, 10 punctures and lateral oblique series of 6 punctures; all the punctures fine. Elytra sub-rectangular, slightly dilated posteriad, a little shorter and wider than pronotum, with marked humeral angles. Surface with coarse punctation, arranged in several series. Tergite and sternite of the male genital segment as in figures 1003, 1004. Aedeagus oval (Fig. 1005), 1 mm long, with characteristic distal structure; parameres short and narrow, asymmetrical; inner sac with a distal series of spinules, followed by two parallel series of spines, large on the left and small on the right; the proximal portion of the sac folded and covered with fine spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the environment in which it specimens were collected.

DISTRIBUTION. The species is known from Congo and Rwanda (Figs. 1002, 1076, 1077).

BIONOMICS. The specimens were collected in "humus *for. mont. avec bambous*", "humus *dans marais boisé*".

2. ***Metocinus rufulus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Terr. Lubero, E Mt Kibatsiro, 2080 m, P.P.M.J. Celis, XII.1954 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.1 mm; from anterior margin of head to posterior margin of elytra: 2.7 mm. Fully winged and shiny. Reddish brown. Head oval, elongate, with rounded sides and posterior angles. Surface with fine, sparse punctures. Pronotum longer than head, dilated anteriorly where it is as wide as head; dorsal series of 8, 9 irregular punctures and lateral oblique series of 5, 6 punctures. Elytra as long as and broader than pronotum, slightly dilated posteriad, with rounded humeral angles. Surface with very fine and sparse punctation arranged in four series, 2 juxtasutural, 1 median and 1 lateral. Abdomen with traces of transverse micro-striation and fine, sparse punctures. Tergite and sternite of the male genital segment as in figures 1006, 1007. Aedeagus oval (Fig. 1008), narrow, 0.85 mm long, with slender parameres; inner sac with a very long, distal tape of fine spinules, followed by a large, swollen, proximal portion, covered with sparse scales and

with a short, very close series of blunt spines on the left side.

ETYMOLOGY. The specific epithet is the Latin *rufulus -a -um* (reddish).

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1077).

REMARKS. Female unknown. I was not able to find the locality Mount Kibatsiro (cf. also *M. fimbriatus* n. sp.).

3. ***Metocinus kinola*** n. sp.

EXAMINED MATERIAL. Holotype male: Tanzania, Uluguru Mts, Kinola for, 1500–1750 m, L. Berger, N. Leleup and J. Debecker, 6–13.VI.1971 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.7 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Fully winged and shiny. Body reddish brown. Similar to *M. tanzanicus* n. sp., but much larger and of paler colouration. Head longer (Fig. 1012a). Eyes smaller. Surface of head with deeper punctures. Pronotum not dilated anteriorly; dorsal series of 8 punctures and lateral series of 7 small punctures. Elytra shorter, with less marked humeral angles and coarser and deeper punctation. Tergite and sternite of the male genital segment as in figures 1009, 1010. Aedeagus oval (Fig. 1011), narrow, very large, 1.44 mm long, with characteristic distal structure; parameres short and asymmetrical; inner sac with a distal series of fine spinules, followed by two very long and narrow tapes, the left one covered with small spines, and the right covered with sub-rectangular scales, both thickened and one behind the other.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is only known from the type locality in Tanzania (Fig. 1001).

REMARKS. Female unknown.

4. ***Metocinus lupanganus*** n. sp.

EXAMINED MATERIAL. Holotype male: Tanzania, Uluguru Mts., Lupanga peak, Kinole For., 3138 m, N. Scharff, 10.IX.1982 (ZMUC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.5 mm. Fully winged. Body reddish brown with elytra and lasts two visible abdominal segments yellowish brown. Shape of the fore-body characteristic (Fig. 1013). Head with polygonal micro-reticulation and fine but deep, very sparse punctures. Pronotum with dense and fine transverse micro-striation; dorsal series of 6 punctures and lateral, oblique series of 4 punctures. Elytra with fine punctures arranged in a few series. Abdomen with polygonal micro-reticulation in the proximal portion and transverse micro-striation on the median and distal surfaces. Tergite and sternite of the male genital segment as in figures 1014, 1015. Aedeagus oval (Fig. 1016), 0.9 mm long, with particular distal portion and parameres; inner sac composed of two juxtaposed series of blunt spines and with a wide distal surface covered in minute scales.

ETYMOLOGY. The specific epithet refers to the type locality.

DISTRIBUTION. The species is only known from the type locality in Tanzania.

REMARKS. Female unknown. This species is similar to *M. rufulus* n. sp. in the structure of the aedeagus but differs by the very different body shape, micro-sculpture and inner sac.

5. ***Metocinus bafut*** n. sp.

EXAMINED MATERIAL. Holotype male: Camerun, Forêt de Bafut, Nguemba, B. de Miré 5.I.1967 (MNHNP); paratypes: same data, 16.VII.1965, 1 female (MNHNP); same data, 16–17.VIII.1965, 3 females (MNHNP); same data, 3.IX.1966, 2 males (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.3 mm; from anterior margin of head to posterior margin of elytra: 2.9 mm. Fully winged. Body reddish brown, with transverse micro-striation on head and pronotum. Similar to *M. kahuzi* n. sp., but larger. Head broader. Eyes a little more protruberent. Surface of head with denser punctures than that of *M. kahuzi* n. sp., pronotum wider, with less oblique anterior margins; dorsal series of 7 widely spaced punctures and lateral oblique series of 5, 6 irregular punctures. Elytra larger and wider than that of *M. kahuzi* n. sp., with more marked humeral angles and finer and sparser punctation. Tergite and

sternite of the male genital segment as in figures 1017, 1018. Aedeagus oval (Fig. 1019), 0.9 mm long, with asymmetrical parameres; inner sac ribbon-shaped, short, with two parallel, opposing series of subquadrate scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is only known from the type locality in Cameroon (Fig. 1034).

6. ***Metocinus meridionalis*** n. sp. (Fig. 1720)

EXAMINED MATERIAL. Holotype male: (South Africa), Transvaal, Blyderiver Canyon, 24.35S, 30.49E, Endrödy-Younga, 2.V.1981 (TMSA); paratypes: same data, 2 males (TMSA), 2 males, 1 female (cB); same data, Vitsoek, Grootfloof ind. for., 25.15S, 30.33E, Endrödy-Younga, 28.IX.1986, 2 females (TMSA), 2 males, 1 female (cB); same data, 8.II.1986, 1 male, 1 female (TMSA), 1 female (cB); same data, 15.XII.1986,1 female (TMSA), 1 male (cB); same data, Berlin Forest St., 25.33S, 30.44E, Endrödy-Younga, 20.IX.1986, 1 male (TMSA); same data, Grasskop, 1500 m, S. Peck, 10.XII.1985, 1 male, 1 female (FMNH), 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Fully winged. Body (Fig. 1023) shiny. Similar to *M. transvaalensis* n. sp., but with head more dilated anteriorly, with more rounded posterior angles and much denser and more evident punctation. Eyes flatter. Mandibles shorter. Pronotum longer than head, with broadly rounded anterior angles; dorsal series of 10, 11 punctures and lateral series of 6, 7 more or less irregular punctures. Elytra sub-rectangular, shorter, with denser punctation. Abdomen with much denser punctation. Tergite and sternite of the male genital segment as in figures 1020, 1021. Aedeagus oval (Fig. 1022), 0.77 mm long, with characteristic distal structure; parameres short, more or less asymmetrical; inner sac narrow, only folded in the proximal portion, with two opposing series of fine spines; the distal portion with a series of fine spinules.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is the Latin *meridionalis -e* (southern).

DISTRIBUTION. The species is only known from South Africa: Transvaal (Fig. 1034).

BIONOMICS. The specimens were collected in traps and on "*pine bark*", in "*netting pine wds. and grass*".

REMARKS. The specimens were probably all dead and desiccated in the traps before they were collected, because they were in very poor condition. I had to remount them after appropriate treatment.

This species differs from *M. longelytratus* n. sp. from Transvaal in its colouration, the very different shape of the body, especially by the head not being quadrate; it also differs in the shape of the inner sac of the aedeagus.

7. ***Metocinus rwandensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Rwanda, Nyakabuye, H. Mühle, 10–25.IV.1984 (MNB); paratypes: same data, 25–30.IV.1984, 1 male (cB); Burundi, Bururi, H. Mühle, 28.I.1986, 1 male: (MNB); Congo, Terr. Lubero, 2200 m, N. Leleup, 30.XI.1951, 1 male (MRAC); same data, 3 females (MRAC), 1 male, 2 females (cB); same data, Dorsale de Lubero, Mt Lubwe, R.P.M.J. Celis, VIII.1963, 1 male, 1 female (MRAC), 1 male, 1 female (cB); Congo (Zaire), Mt Kahuzi, Lobelien, Mühle, 27.V.1985, 1 male (MNB).

DESCRIPTION. Length of body: 5.3 mm; from anterior margin of head to posterior margin of elytra: 2.9 mm. Fully winged. Body shiny, reddish brown with head a little darker. Head oval, slightly narrowed anteriorly, with rounded sides and narrowly rounded posterior angles. Eyes small and slightly protruberent. Surface of head with fine, not sparse puncures, apart from a median band. Pronotum scarcely longer than head, slightly dilated anteriorly where it is as wide as head, with very oblique anterior margins; dorsal series of 10, 11 irregular

punctures and lateral series of 4, 5 widely spaced punctures. Elytra long, sub-rectangular, with sub-rectilinear and sub-parallel sides and marked humeral angles. Surface with fine, very dense punctation, arranged in numerous series. Tergite and sternite of the male genital segment as in figures 1025, 1026. Aedeagus oval (Figs. 1027, 1768), 1.1 mm long, with characteristic distal structure; parameres more or less asymmetrical; inner sac large, only folded in the proximal portion, with a series of short, sometimes double spines on the left and a series of longer spines on the right; between these series and in the proximal part the sac are other sparse small scales; the distal portion of the sac with a long series of fine and dense spinules.

ETYMOLOGY. The specific epithet refers to Rwanda.

DISTRIBUTION. The species is only known from the type locality in Rwanda (Figs. 1002, 1178).

BIONOMICS. Some specimens were collected in "*humus for. mont. bambous*".

REMARKS. The specimen from Bururi is partially damaged.

8. ***Metocinus elegantissimus*** n. sp.

EXAMINED MATERIAL. Holotype male: Burundi, Faille des Allemands, F. Arndt, 20.III.1992 (NME).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Fully winged. Body shiny, reddish brown with antennae and legs yellowish. Characterized by the elongate shape of the fore-body, by long and large head and sub-rectangular pronotum. Head with fine but evident, fairly dense punctation apart from a median band. Pronotum with dorsal series of 9 very fine and deep punctures and lateral oblique series of 8 punctures. Elytra large, with fine and sparse punctures, arranged in a few series. Tergite and sternite of the male genital segment as in figures 1028, 1029. Aedeagus (Fig. 1030) oval, narrow, 0.9 mm long, with characteristic distal structure; parameres narrow, more or less asymmetrical; inner sac narrow, only folded in the proximal portion, with two opposing series of small spines; the distal and median portions of the sac with a very long series of small spines.

ETYMOLOGY. The specific epithet is the Latin *elegantissimus -a -um* (most elegant).

DISTRIBUTION. The species is only known from the type locality in Burundi (Fig. 1178).

REMARKS. Female unknown.

9. ***Metocinus longelytratus*** n. sp.

EXAMINED MATERIAL. Holotype male: (South Africa), Transvaal, Nelshoogte, 25.47S, 30.49E, Endrödy-Younga, 4.XII.1986 (TMSA).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.5 mm. Fully winged. Body (Fig. 1024) shiny. Head black, pronotum dark brown, elytra brown, infuscate near the scutellum; scutellun dark, abdomen brown, more or less infuscate; antennae and legs testaceous. Head convex, sub-quadrate. Mandibles long. Surface of head with deep and sparse punctures; two setiferous punctures between the eyes. Pronotum with dorsal series of 2 anterior and 2 posterior punctures and lateral series of 2 median, widely spaced punctures. Elytra with widely spaced shallow punctures arranged in a few series. Abdomen with traces of transverse micro-striation and fine, sparse punctures. Tergite and sternite of the male genital segment as in figures 1031, 1032. Aedeagus oval (Fig. 1033), 0.9 mm long, with characteristic distal structure; parameres short, more or less asymmetrical; inner sac narrow, only folded in the proximal portion, covered with a series of small sub-rectangular scales.

ETYMOLOGY. The specific epithet is derived from the Latin *longe- elytratus -a -um* (with long elytra).

DISTRIBUTION. The species is only known from the type locality in South Africa: Transvaal (Fig. 1034).

REMARKS. Female unknown.

10. ***Metocinus tanzanicus*** n. sp.

EXAMINED MATERIAL. Holotype male: Tanzania, Tanga reg., Kwamgambia For. Res., 10 km S Kwankoro, S. Mahunka and A. Zicsi, 10.II.1987 (MTM).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.8 mm; from anterior margin of head to posterior margin of elytra: 2.7 mm. Fully winged. Body (Fig. 1012b) shiny. Dark reddish brown, with paler antennae and legs. Similar to *M. dissimilis* n. sp., but shorter and squatter; head longer and broader than that of *M. dissimilis* n. sp. Eyes larger. Surface of head with sparser punctation. Pronotum longer and a little more dilated anteriorly than that in *M. dissimilis* n. sp.; dorsal series of 6 widely spaced punctures and lateral series of 3, 4 fine punctures. Elytra sub-rectangular, shorter, slightly dilated posteriad, with less marked humeral angles. Surface with coarser and much sparser punctures than in *M. dissimilis* n. sp., arranged in a few series. Tergite and sternite of the male genital segment as in figures 1035, 1036. Aedeagus oval and narrow (Fig. 1037), 1.1 mm long, with characteristic distal structure; parameres short and asymmetrical; inner sac narrow and very long, with sub-parallel, narrow, sub-triangular scales; the distal portion of the sac with fine scales.

ETYMOLOGY. The specific epithet refers toTanzania.

DISTRIBUTION. The species is only known from the type locality in Tanzania (Fig. 1001).

REMARKS. Female unknown.

11. ***Metocinus urungwa*** n. sp.

EXAMINED MATERIAL. Holotype male: Tanzania, Urungwa Mts., Mwanihana for. above Sanje, 1800 m, M. Stoltze and N. Scharff, 18.VIII.1982 (MZUC); paratypes: same data, 2 males, 1 female (MZUC), 2 males (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.5 mm; from anterior margin of head to posterior margin of elytra: 2.4 mm. Fully winged. Body reddish brown. Surface shiny, without micro-sculpture, apart from the abdomen which as fine and dense, transverse micro-striation. Head with fine and sparse punctures; ocular grooves not visible. Pronotum with dorsal series of 7, 8 punctures and oblique lateral series of 6 punctures. Elytra with fine, not particularly sparse punctures arranged in a few series. Tergite and sternite of the male genital segment as in figures 1038, 1039. Aedeagus oval (Fig. 1040), small, 0.6 mm long, with characteristic distal portion and parameres; inner sac strip-like, short, covered in minute scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality.

DISTRIBUTION. The species is only known from the type locality in Tanzania (Fig. 1001).

12. ***Metocinus buye*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Buye Bala af. g. Muye, affl. dr. Lufira, 1750 m, G. De Witte, 14.IV.1948 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.6 mm; from anterior margin of head to posterior margin of elytra: 2.4 mm. Fully winged. Body shiny. Similar to *M. lusinganus* n. sp., but smaller and narrower. Head more sub-ovall, elongate and narrow. Eyes larger. Surface of head with finer punctures. Pronotum smaller and narrower than that of *M. lusinganus* n. sp., more narrowed posteriorly; dorsal series of 8, 9 punctures and lateral series of more deep 8, 9 punctures. Elytra long, longer and wider than pronotum, with much more marked humeral angles. Surface with deeper punctures. Tergite and sternite of the male genital segment as in figures 1041, 1042. Aedeagus very narrowly oval (Fig. 1043), 0.74 mm long, with characteristic distal structure; parameres short; inner sac very narrow, filiform, covered with minute scales.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1034).

REMARKS. Female unknown.

13. ***Metocinus anomalus*** n. sp.

EXAMINED MATERIAL. Holotype male: Tanzania, Mts Uluguru, Morning Side, Toelo for., 1450 m, L. Berger, N. Leleup and J. Debecker, 21–29.VI.1971 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.2 mm; from anterior margin of head to posterior margin of elytra: 2.2 mm. Fully winged. Body (Fig. 1044) shiny, reddish brown, with more reddish elytra; antennae and legs testaceous. Eyes medium-sized, slightly protruberent. Surface of head with fine, deep and sparse punctures. Pronotum longer than head, anteriorly dilated where it is as wide as head, with very broadly rounded anterior angles; dorsal series of 7 punctures and lateral oblique series of 7, 8 irregular punctures. Elytra long, slightly dilated posteriad, longer and wider than pronotum, with marked humeral angles. Surface with fine and sparse punctures arranged in a few series. Tergite and sternite of the male genital segment as in figures 1045, 1046. Aedeagus narrowly oval (Fig. 1047), small. 0.66 mm long, with characteristic distal structure; parameres relatively long, more or less asymmetrical; inner sac narrow and long, with fine scales and with a median series of fine spinules.

ETYMOLOGY. The specific epithet is the Latin *anomalus -a -um* (anomalous), alluding to the shape of aedeagus.

DISTRIBUTION. The species is only known from the type locality in Tanzania (Fig. 1001).

REMARKS. Female unknown. The inner sac of the aedeagus of this species is similar to that of *M. kinola* n. sp. but shorter, with smaller scales, without a distal group of scales. Also the body is different in size and colouration.

14. ***Metocinus cianferonii*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Brazzaville, Kindamba, Méya, Endrödy-Younga 11.XI.1963 (MTM); paratypes: same data, 1 female (MTM), 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.6 mm; from anterior margin of head to posterior margin of elytra: 2.2 mm. Fully winged. Body shiny, dark reddish brown with pronotum and abdomen light brown; antennae and legs yellowish. Head sub-rectangular, with slightly rounded sides and broadly rounded posterior angles. Eyes large and slightly protruberent. Surface of head with fine and exceptionally sparse punctation. Pronotum longer than head, anterioly dilated where it is wide as head, with sub-rectilinear sides; dorsal series of 5 punctures and lateral series of 4, 5 punctures. Elytra as long as pronotum, wider than pronotum, dilated posteriad, with rounded humeral angles. Surface with fine, fairly dense punctures, arranged in a few series. Tergite and sternite of the male genital segment as in figures 1048, 1049. Aedeagus elongate-oval (Fig. 1050), 0.66 mm long, with characteristic distal structure; parameres asymmetrical; inner sac narrow, with a hooked distal spine, followed by three small spines; median and proximal portion with a large, long spine, the distal part with a series of 6, 7 short spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. Patronymic. The species is dedicated to Fabio Cianferoni (Museo Zoologico "La Specola", Firenze) for its support.

DISTRIBUTION. The species is only known from the type locality in Rep. Congo (Fig. 1034).

2. *Metocinus allardi* sub-group

KEY TO THE SPECIES

1. Eyes small to medium-sized, slightly protruberent or flat; body reddish brown.....2
-. Eyes large-sized, very protruberent.....6

2. Body about 5 mm long.....3
-. Body about 4 mm long; elytra shorter than pronotum.....5

3. Body slender, narrow, 5-5.3 mm long; head elongate-oval. Aedeagus as in figure 1053; inner sac in the proximal portion tape-like, long, coiled, covered with spines. Tanzania: Kilimanjaro.....1. *M. usaensis* n. sp.
-. Body larger, about 5.7 mm long; head sub-rectangular.....4

4. Eyes larger, more protruberent; pronotum narrower. Aedeagus as in figure 1056; inner sac with 2 distal series of fine spinules, followed by a short series of spines and by a tape-liked, curled shaped covered with dense scales. Congo, Zambia.....2. *M. aethiops*

-. Eyes smaller, only slightly protruberent; pronotum wider (Fig. 1061). Aedeagus as in figure 1059; inner sac tape-like, very long, coiled, very narrow in the distal portion, gradually becoming wider, covered with fine scales. Congo: Upemba.....3. *M. lusinganus* n. sp.

5. Body 4,2 mm long; head sub-rectangular, narrowed anteriorly; eyes small and flat; pronotum dilated anteriorly. Aedeagus as in figure 1064; inner sac with distal series of fine spinules, followed by long narrow bent tape covered with large scales. Tanzania: Uluguru Mts.....4. *M. uluguru* n. sp.
-. Body slender and narrow, 4.8 mm long; head sub-oval, elongate and narrow; eyes a little larger and protruberent; pronotum slightly dilated anteriorly. Aedeagus as in figure 1067; inner sac with 2 long series of close, sub-oval scales, bone shaped in the proximal portion. Tanzania: Usumbara.....5. *M. bilemniscatus* n. sp.

6. Body 6.5–6.8 mm long.....7
-. Body less than 6.5 mm long.....8

7. Head sub-rectangular, with very evident, dense punctation; pronotum and elytra longer; body dark brown, 6.5 mm long. Aedeagus as in figure 1070; inner sac tape-like, coiled like a scroll, covered with scales and spines. Congo: Katanga.....6. *M. allardi* n. sp.
-. Head sub-oval, with fine and sparse punctation; pronotum and elytra shorter; body light brown, 6.8 mm long. Aedeagus as in figure 1073; inner sac tape-like, coiled once, covered with large scales. Congo: Kundelungu.....7. *M. arboreus* n. sp.

8. Body about 6 mm long; eyes large and protruberent; elytra very long.....9
-. Body less than 6 mm long.....12

9. Body yellowish, with darker head.....10
-. Body brown, with black head.....11

10. Head (Fig. 1074) sub-rectangular, not dilated anteriorly apart from the eyes, with narrowly rounded posterior angles, and with sparse punctation; pronotum shorter and more dilated forward; elytra shorter. Aedeagus as in figure 1080; inner sac with 2 distal series of fine spinules, followed by 2 series of large spines, a single very narrow tape of scales and a coiled proximal portion with 2 parallel series of scales. Congo: Mwenga.....8. *M. pseudocephalicus* n. sp.
-. Head sub-rectangular (Fig. 1075), dilated anteriorly, apart from the eyes, with more broadly rounded posterior angles, and denser punctation; pronotum longer and less dilated anteriorly; elytra much longer. Aedeagus as in figure 1083; inner sac with a long distal series of fine spinules, followed by 2 parallel tapes, coiled in the proximal portion, composed of large distal, spines; the median, very narrow portion covered with fine scales and proximal rows large scales. Congo: Kivu.....9. *M. cephalicus* n. sp.

11. Head more quadrate (Fig. 1087), a little dilated anteriorly; pronotum wider and shorter; elytra shorter; body reddish brown with darker elytra. Aedeagus as in figure 1086; inner sac similar to that *M. cephalicus* n. sp., but the distal series is composed of larger spines. Congo: Lubero.....10. *M. fluviatilis* n. sp.
-. Head less quadrate, not dilated anteriorly apart the eyes (Fig. 1089); pronotum narrower and longer; elytra longer, sub-rectangular, very long; body reddish brown with yellowish elytra. Aedeagus as in figure 1092; inner sac similar to that of *M. cephalicus* n. sp. but longer, with larger spines. Zambia.....11. *M. zambianus* n. sp.

12. Body about 5 mm long.....13
-. Body less than 5 mm long.....16

13. Eyes very large and protruberent and elytra very long (Fig. 1088); body reddish brown with yellowish elytra and darker head; head subquadrate; pronotum a little dilated anteriorly. Aedeagus as in figure 1095; inner sac similar to that of *M. cephalicus* n. sp., but distal series with larger spines, gradually becoming shorter, followed by 2 parallel series of spines, one very narrow and one wider. Congo: Kivu.....12. *M. lungwe* n. sp.
-. Eyes less large and less protruberent, and elytra shorter.....14
14. Body more robust, massive, entirely brown; head sub-rectangular, pronotum long, with dorsal series of 6, 7 punctures; elytra very wide.

Aedeagus as in figure 1098; inner sac with 2 parallel distal series of fine spinules, followed by 4, 5 large spines; proximal portion wide, coiled like a scroll, covered with sparse scales. Congo: Ruwenzori.....13. *M. brunneus* n. sp.

-. Body less robust, slender.....15

15. Body longer, 5 mm long; head with smaller eyes; dorsal series of pronotum of 6, 7 punctures. Aedeagus as in figure 1101; inner sac broad, covered in sparse scales, followed by a long coiled series of spines, parallel to a narrow tape covered with fine scales. Tanzania: Usumbara Mts.....14. *M. muzambai* n. sp.

-. Body shorter, 4.8 mm long; head with larger eyes (Fig. 1102); dorsal series of pronotum of 2 anterior and 2 posterior punctures. Aedeagus as in figure 1105; inner sac with 2 distal parallel series of spines, followed by a long, narrow coiled tape covered with scales, close on the margins and sparse in the middle. Cameroon.....15. *M. ocliferius* n. sp.

16. Eyes only slightly protruberent and smaller....17

-. Eyes more protruberent and larger.....18

17. Body broader, entirely light brown; head subrectangular, with rounded sides; pronotum short; elytra long. Aedeagus as in figure 1108; inner sac with a long distal spine among other small spines, followed by a long tape covered in spines. Kenya.....16. *M. illaetabilis* n. sp.

-. Body slender and narrow, light reddish brown; head sub-oval, elongate and narrow; pronotum long; elytra short. Aedeagus as in figure 1111; inner sac with an evident distal series of fine spinules followed by a tape covered in fine scales and with a series of spines. Congo: Kabobo.....17. *M. punctatus* n. sp.

18. Body about 4–4.5 mm long, reddish brown....19

-. Body 3.6 mm long, brown light; pronotum (Fig. 1112) very narrow, with dorsal series of 5 punctures; elytra long and very wide. Aedeagus very small, elongate and narrow (Fig. 1115); inner sac with 2 parallel narrow tapes, coiled proximally and covered with dense scales. Tanzania: Uluguru Mts.....18. *M. minutissimus* n. sp.

19. Body larger, 4.5 mm long; head as in figure 1116; dorsal series of pronotum of 6, 7 punctures. Aedeagus and inner sac cf. Coiffait (1968): 13).....19. *M. sparsepunctatus*

-. Body smaller (Fig. 1117), 4 mm long; dorsal series of pronotum of 2 anterior and 3 posterior punctures. Aedeagus as in figure 1120; inner sac with a short, distal series of fine scales, followed by 2 parallel, close series, partially coiled, composed of evident, oblong scales. Ghana.....20. *M. bobiri* n. sp.

1. ***Metocinus usaensis*** n. sp.

Examined Material. Holotype male: Tanganyika, Usa River, 3900 ft., J. Szonyoghy, 1–10.I.1966 (MTM); paratypes: same data, 1 ex. without genital segment (cB); Tanzania, Kilimanjaro, Marangu, 1550 m, P. Basilewsky and N. Leleup, 27.II.1956, 2 females (MRAC), 1 male, 1 female (cB).

Description of Holotype. Male. Length of body: 5.1 mm; from anterior margin of head to posterior margin of elytra: 2.5 mm. Fully winged, shiny. Body reddish brown, with elytra darker. Similar to *M. dissimilis* n. sp., but narrower and paler. Head proportionately more elongate and narrower, with much finer and sparser punctation. Eyes larger. Pronotum shorter; dorsal series of 9 punctures and lateral oblique series of 7 punctures; all the punctures finer. Elytra narrower and shorter, with less salient humeral angles. Surface with coarser, very sparse punctures arranged in a few series. Tergite and sternite of the male genital segment as in figures 1051, 1052. Aedeagus broadly oval (Fig. 1053), 0.8 mm long, with characteristic distal structure; parameres asymmetrical; inner sac apparently present only in the proximal portion, folded on itself, covered on the margins with small thickened spines.

Variability. The paratypes have no substantial morphological differences with the holotype described. Length of body: 5–5.3 mm; from anterior margin of head to posterior margin of elytra: 2.4–2.6 mm.

Etymology. The specific epithet refers to the type locality.

Distribution. The species is only known from the Kalimanjaro area in Tanzania (Fig. 1001).

2. ***Metocinus aethiops*** Cameron, 1950

Metocinus aethiops - Cameron, 1950: 32; Herman, 2001a: 3703

TYPE MATERIAL. The Musée royal de l'Afrique centrale of Tervuren preserves 2 specimens (cf. REMARKS), the first is labelled "*Holotype*" (printed on orange label), "*Kabasha (1760) / (Kanyabayongo) 7 / 15-XII-1934 de Witte / Parc. Nat. Albert*", "*Coll. Mus. Congo / (ex coll. I.P.N.C.B.)*", "*Type*" (printed on pink label), "Metocinus / aethiops / *TYPE Cam.*" (handwritten by Cameron); the second is labelled "*paratype*" (printed on orange label), "*Congo belge: P. N. A. / Gitebe (volc. Nyamuragira) / 2324 m. 14 au 26-VI-1935 / G. F. de Witte: 1515*", "*Coll. Mus. Congo / (ex coll. I.P.N.C.B.)*", "*M. Cameron det. 1949 /* Metocinus/ aethiops *sp. n.*".

EXAMINED MATERIAL. I ascribe the following specimens to this species:

Congo, Kivu, Ter. Lubero, Mt Bugera, 2100 m, R.P.M.J. Celis, XI–XII.1954, 4 females (MRAC), 2 males, 2 females (cB); Kivu, Terr. Lubero, Bukristu, 2000 m, R.P.M.J. Celis, IX.1954, 1 male, 2 females (MRAC), 1 male (cB); Massif Ruwenzori, Mt Kiurama, c/o Mwenda, 2100 m, P. Vanschuytbroeck and J. Hendrickx, 26.X.1953, 1 male (MRAC).

Zambia, (N Rhodesia), Abercorn, galerie forestiére de la Mwengo, 1800 m, N. Leleup, VII.1960, 3 males, 1 female (MRAC), 1 male, 2 females (cB).

DESCRIPTION. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Fully winged. Head with transverse micro-striation. Body more or less light reddish brown. Head oval, with broadly rounded posterior angles. Eyes medium-sized, slightly protruberent. Surface of head with fine and sparse punctures. Pronotum longer than head, a little dilated anteriorly where it is as wide as head, with oblique anterior margins and rounded anterior angles; dorsal series of 8, 9 fine punctures and lateral series of 4–6 punctures. Elytra large, longer and wider than pronotum, with more or less marked humeral angles. Surface with fine punctures arranged in a few series. Tergite and sternite of the male genital segment as in figures 1054, 1055. Aedeagus oval (Figs. 1056, 1769), large, 1.33 mm long, with characteristic distal structure; parameres short, broad and asymmetrical; inner sac with two tapes covered in sparse scales, combined in the median portion into a single tape covered with scales. At the junction point are 4, 5 evident spines. Female genital segment with large sclerite, without additional lateral sclerites, with large bursa copulatrix, furnished with some sclerified pieces (Fig. 902).

DISTRIBUTION. Congo, Zambia (Fig. 1076).

REMARKS. The holotype is a female. The paratype is in poor condition, missing one leg and the 6th visible abdominal segment and genital segment, so is not possible to define the sex.

The correct locality is Kanyobagonga.

3. ***Metocinus lusinganus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Mukana Lusinga, 1810 m, G. De Witte, 16.IV.1947 (MRAC); paratypes: same data, 3 females (MRAC), 1 male, 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.7 mm. Fully winged. Head with transverse micro-striation. Reddish brown with antennae and legs paler. Fore-body of characteristic shape (Fig. 1061), with massive head and pronotum and elytra slightly longer than pronotum. Head with fine, fairly dense punctures, apart from a median band. Pronotum with dorsal series of 8, 9 fine punctures and lateral series of 6, 7 large, irregular punctures. Elytra with almost obsolete humeral angles and fine punctures arranged in numerous series. Tergite and sternite of the male genital segment as in figures 1057, 1058. Aedeagus oval (Fig. 1059), 0.9 mm long, with characteristic distal structure; parameres short, broad and asymmetrical; inner sac with a long distal series of small scales, one behind the other, followed by a very narrow tape covered in sparse scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality.

DISTRIBUTION. The species is only known from the type locality in the Upemba National Park in Congo.

REMARKS. The aedeagus of this species is similar to that of *M. arboreus* n. sp., but differs in the smaller size, with narrower inner sac with smaller scales. *Metocinus lusinganus* n. sp. also differs in its larger and sub-rectangular head and larger eyes.

4. ***Metocinus uluguru*** n. sp.

EXAMINED MATERIAL. Holotype male: Tanganyika, Terr. Bunduki, Uluguru Mts, gorge Mungula, 1500 m, P. Basilewsky and N. Leleup, 1–6.V.1957 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.2 mm; from anterior margin of head to posterior margin of elytra: 1.9 mm. Fully winged, shiny. Body light brown. Characterized by the very narrow sub-rectangular elytra, shorter than pronotum. Head sub-rectangular, narrowed anteriorly, with slightly rounded sides, and narrowly rounded posterior angles. Eyes small and scarcely protruberent. Surface of head with fine and very sparse punctures, especially on the sides. Pronotum narrow, shorter than head, dilated anteriorly where it is as wide as head, with narrowly rounded anterior angles; dorsal series of 5 shallow, widely spaced punctures and lateral oblique series of 5 punctures. Elytra narrow, shorter and narrower than pronotum, with less marked humeral angles and fine, very sparse punctures arranged in 4, 5 series. Tergite and sternite of the male genital segment as in figures 1062, 1063. Aedeagus oval (Fig. 1064), 0.93 mm long, with characteristic distal structure; parameres long and asymmetrical; inner sac narrow, with long distal portion covered in fine spin-ules, followed by a median-proximal portion, coiled around itself only once, with a series of evident sub-rectangular scales, arranged one behind the other.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is only known from the type locality in Tanzania (Fig. 1001).

BIONOMICS. The specimen was collected in "*humus for. transition*".

REMARKS. Female unknown. This species is similar to *M. bilemniscatus* n. sp., but has smaller body, more rectangular head, more dilated forward pronotum and shorter elytra. The inner sac of the aedeagus contains only one series of scales.

5. ***Metocinus bilemniscatus*** n. sp.

EXAMINED MATERIAL. Holotype male: W Tanzania, Usambara Mts, Muzambai for. res., 1650 m, Exp. D. Biström, N. Nieminen, J. Terhivuo, P. Vilkamaa, 24.XI–2.XII.1996 (ZMH).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.8 mm; from anterior margin of head to posterior margin of elytra: 2.2 mm. Fully winged, shiny. Head and pronotum light brown; elytra brown, abdomen dark brown; antennae and legs testaceous. Head elongate-oval, with slightly rounded sides and very fine and sparse punctation. Eyes medium-sized and slightly protruberent. Pronotum longer than head, dilated anteriorly where it is as wide as head, with slightly oblique anterior margins and broadly rounded anterior angles; dorsal series of 2 anterior and 2 posterior fine punctures and lateral series of 4 fine, widely spaced punctures. Elytra sub-rectangular, narrow and short, shorter and a little wider than pronotum, with marked humeral angles. Surface with superficial and sparse punctation. Tergite and sternite of the male genital segment as in figures 1065, 1066. Aedeagus narrowly oval (Figs. 1067, 1770), 1.15 mm long, with characteristic distal structure; parameres asymmetrical; inner sac with distal portion enlarged and covered with scales; the median portion of the sac narrow, with small thickened, spines on the margins, divided in two proximal tapes.

ETYMOLOGY. The specific epithet is derived from the Latin *bi- leminiscatus -a -um* (with two tapes), in reference to the shape of the inner sac of the aedeagus.

DISTRIBUTION. The species is only known from the type locality in Tanzania. *Metocinus muzambai* n. sp. also lives in the same locality, but at a different altitude (Fig. 1001).

REMARKS. Female unknown.

6. ***Metocinus allardi*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, H. Katanga, Kolwezi, D.V. Allard, VII.1954 (MNHNP); paratypes: same data, 3 males

(MNHNP), 1 male (cB); same data, D. Allard, VII.1954, 2 males (MNHNP); same data, Musonoie, D.V. Allard, 1.I.1963, 5 males (MNHNP), 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.5 mm; from anterior margin of head to posterior margin of elytra: 3.1 mm. Fully winged, shiny. Similar to *M. aethiops*, but much darker, reddish brown. Head more rectangular. Third antennomere longer. Pronotum shorter and broader, elytra longer. Head with much deeper and denser punctation; pronotum with dorsal series of fewer punctures and elytra with more denser punctation. Tergite abd sternite of the male genital segment as in figures 1068, 1069. Aedeagus sub-rectangular (Fig. 1070), 1.1 mm long, with characteristic distal structure; parameres short and braod, asymmetrical; inner sac folded on itself covered with parallel, opposing series of different scales; distal portion of the sac with two parallel series of fine spinules.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. Patronymic. Dedicated to Vincent Allard, specialist in Cetoniinae.

DISTRIBUTION. The species is only known from the Katanga region in Congo (Fig. 1060).

BIONOMICS. The specimens were collected "*sous éorces*", "*feuilles mortes*".

7. ***Metocinus arboreus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, (N. P.) Kundelungu, 1750 m, N. Leleup, 3.IV.1950 (MRAC); paratypes: same data, 1 male (MRAC), 1 female (cB); same data, 1725 m, N. Leleup, X.1950, 1 female (MRAC), 1 male, 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.5 mm; from anterior margin of head to posterior margin of elytra: 2.9 mm. Fully winged. Head and pronotum with traces of transverse micro-striation. Similar to *M. bambusianus* n. sp., but of paler colouration. Head more robust, with more narrowly rounded posterior angles. Eyes smaller. Pronotum anteriorly more dilated, with more oblique anterior margins; dorsal series of 8, 9 punctures and lateral oblique series of 5, 6 irregular punctures; with other surrounding punctures. Elytra with very finer punctation than in *M. bambusianus* n. sp.; scutellum larger. Tergite and sternite of the male genital segment as in figures 1071, 1072. Aedeagus elongate-oval (Figs. 1073, 1771), 1.15 mm long, with characteristic distal structure; parameres short and broad, asymmetrical; inner sac coiled on itself several times, narrow, covered on the margins whit minute spines; distal portion with a series of fine spinules.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is the Latin *arboreus -a -um*, in refernce to the habitat in which the specimens were collected.

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1060).

BIONOMICS. The specimen was collected in "*arbre pourris*".

REMARKS. The aedeagus of this species is very similar to that of *M. punctatus* n. sp., but the distal and proximal portions of the inner sac are different and the body is much larger.

8. ***Metocinus pseudocephalicus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Mwenga, 1250 m, N. Leleup, 24.IV.1958 (MRAC); paratypes: same data, 1 male (cB); same data, Kitutu, 650 m, N. Leleup, IV.1958, 1 male (cB); same data, Kalehe, Bitale, NO Kahuzi, 1800 m, N. Leleup, 22.VI.1958, 1 male (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Fully winged. Head and pronotum with traces of transverse micro-striation. Characterized by sub-rectangular head (Fig. 1074) with large very protruberent eyes and by the very long and broad elytra. Similar to *M. cephalicus* n. sp., but a little shorter. Head of different shape, impunctate median band wider. Pronotum anteriorly more dilated with more rounded anterior angles; dorsal series of 4 punctures and lateral oblique series of 5 punctures. Elytra with more evident and denser punctures arranged in several series. Ter-

gite and sternite of the male genital segment as in figures 1078, 1079. Aedeagus elongate-oval (Fig. 1080), 1.18 mm long, with characteristic distal structure; parameres very short and broad, asymmetrical; inner sac narrow, coiled on itself in the proximal portion, with a double median series of spines, followed by a narrow series of fine scales; the proximal part of the sac consist in two parallel tapes covered with thickened spines on the margins; the distal portion of the sac with a series of fine spinules.

VARIABILITY. The paratype males has no substantial morphological differences with the holotype described. Female unknown.

ETYMOLOGY. The specific epithet is the Latin *pseudo- cephalicus -a -um* (pseudo, and with big head).

DISTRIBUTION. The species is only known from Kivu region in Congo (Fig. 1077).

BIONOMICS. The specimens were collected in "£*marais boisé avec* Pandanus", "*for. transition*".

9. ***Metocinus cephalicus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, T. Kabare, SE Kahuzi, N. Leleup, 13.VIII.1951 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.2 mm; from anterior margin of head to posterior margin of elytra: 3.3 mm. Fully winged, shiny. Body yellowish with brown, partially reddish head and elytra infuscate posteriad. Characterized by the shape of head (Fig. 1075), large, sub-rectangular with large protruberent eyes, and by the very large, very long and broad elytra. Head with visible umbilicate and fairly dense punctation, apart from a median band. Antennae with very second and third segments. Pronotum as long as head, a little dilated anteriorly where it is narrower than head, with narrolwy rounded anterior angles; dorsal series of 4 large widely spaced punctures and lateral oblique series of 4 punctures. Elytra dilated posteriad, with rounded humeral angles. Surface with shallow, sparse punctures arranged in a few series. Tergite and sternite of the male genital segment as in figures 1081, 1082. Aedeagus broadly oval (Fig. 1083), 1 mm long, with characteristic distal structure; parameres long and asymmetrical; inner sac folded on itself, composed of two very narrow tapes covered, on the margins, with fine scales; the median portion of the tapes almost without scales; the distal portion of the sac with two series of fine spinules.

ETYMOLOGY. The specific epithet is the Latin *cephalicus -a -um* (with big head).

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1077).

BIONOMICS. The specimen was collected in "*humus* Hagenia".

REMARKS. Female unknown.

10. ***Metocinus fluviatilis*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Ruiss. Musumumbu, SW Lubero, R.P.M.J. Celis, VII.1966 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Fully winged, shiny. Body reddish brown, with elytra darker and abdomen lighter; antennae and legs yellowish. Similar to *M. lungwe* n. sp., but larger and longer, with darker colouration. Head and pronotum (Fig. 1087) of different shape, with smaller eyes. Head without transverse micro-striation and with larger punctures. Pronotum more massive, broader, much less narrowed posteriad; dorsal series of 2 anterior and 3 posterior punctures and lateral series of 2 anterior and 1 posterior punctures; all the punctures smaller than thosse of *M. lungwe* n. sp. Elytra larger, longer and wider than that of *M. lungwe* n. sp., with coarser punctation. Tergite and sternite of the male genital segment as in figures 1084, 1085. Aedeagus broadly oval (Fig. 1086), 0.9 mm long, with characteristic distal structure; parameres very short and broad, asymmetrical; inner sac folded on itself, with two median parallel series of different and evident spines, followed by the folded part, covered on the margins with small thickenedl spines.

ETYMOLOGY. The specific epithet is the Latin *fluviatilis -e* (fluvial).

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1076).

REMARKS. Female unknown.

11. ***Metocinus zambianus*** n. sp. (Fig. 1721)

EXAMINED MATERIAL. Holotype male: Zambia, North Western, 10 km E Solwezi, 1600 m, M. Bednaarik, 17–18.I.2006 (cJ); paratype: same data, 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.1 mm; from anterior margin of head to posterior margin of elytra: 3.1 mm. Fully winged. Head and pronotum with traces of transverse micro-striation. Head black, pronotum reddish brown, elytra yellowish, abdomen dark brown; antennae and legs yellowish. Characterized by the shape of the forebody (Fig. 1089). Head with very sparse and fine punctures. Pronotum with dorsal series of 2 anterior and 2 posterior punctures and lateral series of 4 punctures. Elytra with coarse, very shallow punctures arranged in series. Tergite and sternite of the male genital segment as in figures 1090, 1091. Aedeagus broadly oval (Fig. 1092), 1.1 mm long, with characteristic distal structure; parameres short and broad, asymmetrical; inner sac folded on itself, with two median parallel series of fine and similar spines, followed by the folded part, the margins covered with small thickened spines; the distal portion of the sac with two series of fine spinules.

VARIABILITY. The paratype male has no substantial morphological differences with the holotype described. Female unknown.

ETYMOLOGY. The specific epithet refers to Zambia.

DISTRIBUTION. The species is only known from the type locality in Zambia (Fig. 1034).

12. ***Metocinus lungwe*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Terr. Uvira, Lac Lungwe, N. Leleup, IX.1957 (MRAC); paratypes: Congo, Kivu, Terr. Mwenga, Kitutu, 650 m, N. Leleup, IV.1958, 1 male, 1 female (MRAC), 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Fully winged. Head with transverse micro-striation. Similar to *M. fluviatilis* n. sp. but shorter and of paler colour. Head dark brown, pronotum and abdomen light brownt, elytra yellowish. Head of different shape (Fig. 1088), with rounded but not convex sides, and with finer punctation. Eyes larger. Pronotum smaller, with sinuate sides; dorsal series of 2 anterior and 2 posterior punctures and lateral series of 3 large punctures. Elytra smaller and shorter, with finer punctures arranged in a few series. Tergite and sternite of the male genital segment as in figures 1093, 1094. Aedeagus oval (Fig. 1095), 0.85 mm long, with characteristic distal structure; parameres large and asymmetrical; inner sac with a distal series of fine spinules, followed by two series of spines continuing in two separate very narrow tapes, almost devoid of scales, combined in the proximal portion into a single tape covered with spines on the right margin and by scales on the left margin.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1077).

13. ***Metocinus brunneus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Massif Ruwenzori, Kyandolire, Camp des Gareds, 1700 m, P. Vanschuytbroeck and J. Kekenbosch, 7–9.X.1952 (MRAC); paratypes: same data, 1 female (MRAC), 2 males (cB); same data, R. Malaku, affl. Kakolari, 1750 m, P. Vanschuytbroeck and J. Kekenbosch, 15.X.1952, 1 male (MRAC), 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.5 mm. Fully winged, shiny. Similar to *M. dissimilis* n. sp., but smaller. Head more rectangular, with sparser punctation. Eyes smaller. Pronotum a little more massive; dorsal series of 6, 7 smaller punctures and lateral oblique series of 5, 6 punctures. Elytra shorter, with more rounded humeral angles. Surface with finer and sparser punctures arranged in fewer series. Tergite and sternite of the male genital segment as in figures 1096, 1097. Aedeagus oval (Fig. 1098), 0.88 mm long, with characteristic distal structure; parameres large and asymmetrical; inner sac with

two long, parallel distal series of spinules, followed by some small spines; the proximal portion of the sac enlarged, covered with thickened spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is the Latin *brunneus -a -um* (brown).

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1076).

BIONOMICS. The specimens were collected in "*terreau*".

14. ***Metocinus muzambai*** n. sp.

EXAMINED MATERIAL. Holotype male: W Tanzania, Usambara Mts, Muzambai for. res., 1450 m, Exp. D. Biström, P. Vilkamaa, 2–4.XII.1996 (ZMH); paratypes: same data, 1 female /ZMH), 2 females (cB); Tanzania, Uluguru Mts, Chenzema, 1700 m, L. Berger, N. Leleup and J. Debecker, 21–22.VII.1971, 1 male (MRAC); same data, Terr. Bunduki, Uluguru Mts., 1500 m, gorge Mungula, P. Basilewsky and N. Leleup, 1–6,V.1957, 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.3 mm. Fully winged, shiny. Similar to *M. bilemniscatus* n. sp., but more robust, with darker head dilated anteriorly, broadly rounded posterior angles and fine and very sparse punctation. Eyes larger and protruberent. Pronotum a little longer than head, not dilated anteriorly, as wide as head, with very oblique anterior margins and almost obsolete anterior angles; dorsal series of 6, 7 fine punctures and lateral series of 5, 6 irregular punctures. Elytra broader than and almost as long as pronotum, dilated posteriad with marked humeral angles. Surface with very fine, deep punctures, arranged in numerous series. Tergite and sternite of the male genital segment as in figures 1099, 1100. Aedeagus oval (Fig. 1101), large, 1.2 mm long, with characteristic distal structure; parameres asymmetrical; inner sac with distal portion with very sparse small scales; median portion with fine spines on the margins and then with a single series of small narrow spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is only known from the type locality in Tanzania (Fig. 1001).

15. ***Metocinus ocliferius*** n. sp.

EXAMINED MATERIAL. Holotype male: Cameron, Yaoundé, L. Lavasseur ?, X.1956 (MNHNP).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.8 mm; from anterior margin of head to posterior margin of elytra: 2.4 mm. Winged. Head with transverse micro-striation. Characterized by the subquadrate head, with very large and protruberent eyes (Fig. 1102). Surface of head with fine and sparse punctures. Pronotum a little longer than head, anteriorly slightly dilated where it is narrower than head; dorsal series of 2 anterior and 2 posterior punctures and lateral series of 4 widely spaced punctures. Elytra broad, much longer and wider than pronotum, with less marked humeral angles. Surface with fine and very sparse punctures arranged in a few series. Tergite and sternite of the male genital segment as in figures 1103, 1104. Aedeagus oval (Fig. 1106), narrow, 0.77 mm long, with characteristic distal structure; parameres asymmetrical; inner sac with two distal, parallel series of spines, followed by an extremely narrow median portion and by a portion folded on itself, its margins bearing small spines.

ETYMOLOGY. The specific epithet is the Latin adjective *ocliferius -a -um* (evident).

DISTRIBUTION. The species is only known from the type locality in Cameroon (Fig. 1034).

REMARKS. Female unknown. The specimen is originally labelled "*Holotype in litt.,* Metocinopsis *n. g.,* yaoundensis *n. sp., L. Levasseur det. 1968*".

16. ***Metocinus illaetabilis*** n. sp.

EXAMINED MATERIAL. Holotype male: Kenya, Kakamega Rainfor. Res., 1500–1700 m, 0°19'.21"'N, 34°52'.53"'E, J. Dechert, 10–12.II.1999 (MNB).

DESCRIPTION OF HOLOTYPE. Male. Length of

body: 4.1 mm; from anterior margin of head to posterior margin of elytra: 2.1 mm. Fully winged, shiny. Reddish brown with paler abdomen; antennae and legs testaceous. Head oval, a little dilated anteriorly, with rounded sides and broadly rounded posterior angles. Eyes large and protruberent. Surface of head with fine and very sparse punctures. Pronotum a little longer than head, dilated anteriorly where it is as wide as head; dorsal series and lateral oblique series of 6, 7 punctures. Elytra broad, longer and wider than pronotum, with slightly rounded sides, not dilated posteriad, with marked humeral angles. Surface with fine, visible, fairly dense punctures arranged in several series. Tergite and sternite of the male genital segment as in figures 1106, 1107. Aedeagus oval and narrow (Fig. 1108), 0.88 mm long, with characteristic distal structure; parameres asymmetrical; inner sac with a distal cluster of spines next to a single long spine, followed by a median and proximal portion covered with very thickened spines.

ETYMOLOGY. The specific epithet is the Latin *illaetabilis -e* (gloomy), in reference to the colour of the body.

DISTRIBUTION. The species is only known from the type locality in Kenya (Fig. 1034).

REMARKS. Female unknown. The Kakamega Forest National Reserve is situated in the Lake Victoria basin, about 50 km north of Kisumu. It is the only remnant of the Guineo-Congolese forest ecosystem in Kenya.

17. ***Metocinus punctatus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Mt Kabobo, Terr. Albertville, N Hte Kiymbi, 2200 m, N. Leleup, X.1958 (MRAC); paratypes: same data, 1 male, 1 female (MRAC), 1 male, 1 female (cB); same data, 1700 m, N. Leleup, X.1958, 2 males,1 female (MRAC), 2 males, 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.1 mm; from anterior margin of head to posterior margin of elytra: 2.1 mm. Fully winged, shiny. Similar to *M. bambusianus* n. sp., but smaller. Head sub-rectangular, with less rounded sides and with deeper and sparser punctures. Pronotum more dilated anteriorly, with more oblique anterior margins; dorsal series of 9 larger and deeper punctures and lateral series of 8 smaller, irregular punctures. Elytra longer than those of *M. bambusianus* n. sp., longer and wider than pronotum, with less marked humeral angles. Surface with finer and very dense punctures arranged in several series. Tergite and sternite of the male genital segment as in figures 1109, 1110. Aedeagus narrowly oval (Fig. 1111), 1 mm long, with characteristic distal structure; parameres short and asymmetrical; inner sac with a distal series of fine spinules, followed by a relatively wide median and proximal portion covered in the median part with more or less rounded scales, and in the proximal part with fine spinules on the right margin and with small thickened, spines on the left margin.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is the Latin *punctatus -a -um* (with punctures), in reference to the punctation of the elytra.

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1060).

REMARKS. This species lives in the same locality as *M. kiymbi* n. sp. and *M. pseudokiymbi* n. sp. from both of which differs by the very different inner sac.

18. ***Metocinus minutissimus*** n. sp.

EXAMINED MATERIAL. Holotype male: Tanzania, Mt Uluguru, Morogoro Campus Fac. Agr., 600 m, L. Berger, N. Leleup and J. Debecker, V–VI.1971 (MRAC); paratypes: same data, Kinola, 1500–1750 m, L. Berger, N. Leleup and J. Debecker, 6–13.VI.1971, 2 males (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 3.6 mm; from anterior margin of head to posterior margin of elytra: 2 mm. Winged. Head with traces of more or less transverse micro-striation. Body light brown. Head of characteristic shape (Fig. 1112), with fine, sparse setiferous punctures. Pronotum as long as head, slightly dilated anteriorly where it is narrower than head, with sinuate sides; dorsal series of 5 punctures and lateral series of 3 punctures. Elytra long, much longer and wider than pronotum, with less marked humeral angles. Surface with fine, sparse punctures arranged in a few

series. Tergite and sternite of the male genital segment as in figures 1113, 1114. Aedeagus oval (Fig. 1115), small, 0.6 mm long, with characteristic distal structure; parameres very asymmetrical; inner sac with a long and narrow median distal portion covered in fine and sparse scales; proximal portion coiled on itself once, covered, the margins with fine spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is the Latin *minutissimus -a -um* (smallest).

DISTRIBUTION. Female unknown. The species is only known from the Uluguru Mts. in Tanzania (Fig. 1001).

19. ***Metocinus sparsepunctatus*** (Coiffait, 1968) comb. n.

Leptacinus sparsepunctatus - Coiffait, 1968: 133; Herman, 2001: 3685

TYPE MATERIAL. The Natural History Museum in Paris preserves 2 specimens; the first is a male labelled "*Belinga / 50 / H. Coiffait*", "*Holotype*" (printed on red label), "Leptacinus *(s. str.) /* sparsepunctatus *Coiff. / H. Coiffait det. 1967*"; the second bears the same first label and "*Belinga / 16.V.63 /H. Coiffait*", "*Paratype*" (printed on red label); it is a female.

DESCRIPTION. Length of body 4.5 mm; from anterior margin of head to posterior margin of elytra: 2.2 mm. Fully winged, shiny. Body reddish brown, short, with head not dilated posteriad, with sparse punctation. Eyes medium-sized and protruberent (Fig. 1116). Pronotum longer than head and as wide as head; dorsal series of 6, 7 punctures and lateral series of 5, 6 punctures. Elytra sub-rectangular, narrow, with little marked humeral angles and sub-rectilinear sides. Surface with sparse punctures arranged in some widely spaced series.

DISTRIBUTION. The species is only known from the type locality in Gabon.

REMARKS. The Coiffait's microscope preparation containing the genital segment and aedeagus was not found, so I refer to the figure provided by Coiffait (1968: 131, figure 6). The correct systematic position of this species can probably only be established through study of another male.

20. ***Metocinus bobiri*** n. sp.

EXAMINED MATERIAL. Holotype male: Ghana, Kumasi, Bobiri For. Res., S. Endrödy-Younga, 2–3.I.1966 (ZSM); paratypes: same data, 4 exx. (ZSM), 2 exx. (cB); sama data, Ashanti region, Bobiri For. Res., 320 m, 6.40N, 1.15W, S. Endrödy-Younga, 2–3.I.1966, 2 males, 1 female (MTM), 1 male, 2 females (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4 mm; from anterior margin of head to posterior margin of elytra: 2.2 mm. Fully winged. Head with transverse micro-striation. Body reddish brown with antennae and legs yellowish. Head oval, a little dilated anteriorly (Fig. 1117), with largely rounded posterior angles. Eyes medium-sized, protruberent. Surface of head with fine and very sparse punctation. Pronotum large, longer than head, as wide as head, the sides not sinuate and narrowly rounded anterior angles; dorsal series of 2 anterior and 3 posterior fine punctures and lateral series of 4 punctures. Elytra broad, wider than and as long as pronotum, with very marked humeral angles. Surface with fine widely spaced punctures, arranged in 4, 5 series. Tergite and sternite of the male genital segment as in figures 1118, 1119. Aedeagus oval (Fig. 1120), 1.1 mm long, with characteristic distal structure; parameres short and asymmetrical; inner sac with a distal series of fine spinules, followed by a median portion covered with fine and sparse scales; the proximal portion, coiled on itself once, covered with evident spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is only known from the type locality in Ghana (Fig. 1034).

REMARKS. Bobiri Reserve is a high canopy forest, located about 20 km southeast of Kumasi.

3. *Metocinus dissimilis* sub-group

KEY TO THE SPECIES

1. Body 6–6.5 mm long.....2
-. Body less than 6 mm long.....4

2. Body larger, 6.5 mm long, reddish brown; eyes a little protruberent; pronotum and elytra sub-rectangular, not dilated forward or behind. Aedeagus as in figure 1123; inner sac with a large group of long spines, followed by 2 very narrow, parallel tapes of scales. Burundi, Congo.....1. *M. sclerophyllicus* n. sp.
-. Body smaller, about 6 mm long.....3

3. Body light reddish brown; eyes protruberent; dorsal series of pronotum of 8, 9 punctures. Aedeagus as in figure 1126; inner sac with a long, irregular series of long, close spines, followed by a narrow tape with different, narrow scales on the margins. Congo: Kabobo.....2. *M. pseudokiymbi* n. sp.
-. Body yellowish brown; eyes flat; dorsal series of pronotum of 6, 7 punctures. Aedeagus as in figure 1129; inner sac with a large series of very long spines among oblong scales. Sierra Leone.....3. *M. lomaensis* n. sp.

4. Body longer, 5.5–5.7 mm long.....5
-. Body shorter, less than 5.5 mm long.....9

5. Elytra broad and long (Fig. 1130); body reddish brown; variable species. Aedeagus as in figure 1133; inner sac with a large group of long spines, followed by 2 narrow tapes of small spines. Congo: Kalehe, Kabobo, Ruwenzori.....4. *M. dissimilis* n. sp.
-. Elytra shorter and narrower.....6

6. Head sub-rectangular, evidently narrowed forward.....7
-. Head not narrowed forward.....8

7. Eyes larger, protruberent; body reddish brown with paler elytra. Aedeagus as in figure 1136; inner sac with an isolated, distal spine, followed by a row of spines, gradually increasing in length; proximal portion with spinules. Congo: Katanga.....5. *M. levasseuri* n. sp.
-. Eyes less large and not protruberent; body reddish brown with black head and yellowish elytra. Aedeagus as in figure 1139; inner sac with a row of short, close spines. Congo: Katanga.....6. *M. cavernicolus* n. sp.

8. Body more robust, 5.7 mm long, reddish brown with darker head; head wider; eyes less protruberent; pronotum more dilated forward; elytra longer, dilated posteriad. Aedeagus as in figure 1142; inner sac with 2 very long spines near a series of short, robust spines. Zambia.....7. *M. rhodesianus* n. sp.
-. Body smaller and narrower, 5.5 mm long, reddish brown with infuscate elytra; head narrower, sub-rectangular; eyes more protruberent; pronotum less dilated forward; elytra shorter, sub-rectangular. Aedeagus as in figure 1147; inner sac with 3 long spines, followed by a long coiled tape covered with small divergent spines. Congo: central region.....8. *M. muye* n. sp.

9. Body about 5 mm long.....10
-. Body 4.6 mm long, reddish brown; eyes almost flat; dorsal series of pronotum of 7, 8 punctures; elytra sub-rectangular. Aedeagus as in figure 1150; inner sac with 3, 4 distal spines, followed by a row of close spines and, in the proximal portion, by a large coiled tape, covered with dense scales; this portion, in the last part, is narrow an covered with minute, sparse scales. Congo: Lubero.....9. *M. fimbriatus* n. sp.

10. Eyes evidently protruberent.....11
-. Eyes only slightly protruberent or almost flat.....14

11. Body light brown; head sub-rectangular, elongate; dorsal series of pronotum of 10 punctures. Aedeagus as in figure 1153; inner sac with a short, distal series of long spinules, followed by a series of spines, with other spines in the proximal portion. Congo: Katanga.....10. *M. katanganus* n. sp.
-. Body brown dark.....12

12. Head wider, almost quadrate; body brown with darker head; dorsal series of pronotum of 10 punctures. Aedeagus as in figure 1156; inner sac with a distal series of irregular spines, followed by a row

of large spines; proximal portion with 4 very long spines. Sierra Leone.....11. *M. leonensis* n. sp.
-. Head narrower; dorsal series of pronotum of 7–8 punctures.....13

13. Body longer; head and pronotum longer and narrower. Aedeagus as in figure 1159; inner sac with a row of very large spines, gradually decreasing in size, followed by a narrow tape, covered with scales. Congo: Kabobo.....12. *M. kiymbi* n. sp.
-. Body shorter; head and pronotum shorter and wider. Aedeagus as in figure 1162; inner sac with a row of very large close spines, near a very long spine. Sierra Leone.....13. *M. denkalensis* n. sp.

14. Elytra long, sub-rectangular, not dilated posteriad; head oval, narrowed forward; pronotum almost long as elytra; body brown. Aedeagus long and narrow as in figure 1165; inner sac with 4 large, separate, distal spines, followed by a tape, gradually wider, covered with dense scales. Gambia.....14. *M. gambicus* n. sp.
-. Elytra shorter, dilated posteriad.....15

15. Body more robust; eyes a little protruberent.....16
-. Body less robust; eyes flat.....17

16. Pronotum sub-rectangular, shorter; body very dark brown. Aedeagus as in figure 1168; inner sac ∩-shaped, with a very large and long spine on the right and a series of close, large spines on the left; a short, narrow, rolled up, proximal tape, covered with scales. Angola.....15. *M. fulvus* n. sp.
-. Pronotum sub-rectangular, longer; body less dark brown. Aedeagus as in figure 1171; inner sac with a distal series of small scales, followed by a very large long spine among smaller spines and a short, proximal tape covered with sparse, minute scales. Congo: Katanga.....16. *M. kolwezi* n. sp.
17. Body reddish brown with yellowish orange elytra; head and pronotum sub-rectangular. Aedeagus as in figure 1174; inner sac with a long, narrow, distal spine, followed by some large spines; a short, narrow, proximal tape, covered with sparse scales. Angola.....17. *M. angolanus* n. sp.
-. Body dark reddish brown; head oval, elongate; pronotum narrow and sub-oval. Aedeagus as in figure 1177; inner sac with a row of long, close spines, followed by a broad surface covered with dense scales and a long and narrow tape covered with sparse scales. Congo: Lubero.....18. *M. visiki* n. sp.

1. ***Metocinus sclerophyllicus*** n. sp.

Examined Material. Holotype male: Urundi, T. Bururi, R. Sikuvyaya, 1000 m, N. Leleup, 16.VII.1951 (MRAC); paratypes: same data, 3 females (MRAC), 1 male, 1 female (cB); Congo, Kivu, Terr. Mwenga, SO Itombwe, Luiko, 1900 m, N. Leleup, 26.I.1952, 1 male (MRAC), 1 male (cB).

Description of Holotype. Male. Length of body: 6.5 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Fully winged, shiny. Similar to *M. katanganus* n. sp., but larger and a lighter reddish brown and paler legs. Pronotum and elytra sub-rectangular. Head narrower and less dilated posteriad, with finer punctation. Pronotum a little longer, with more oblique anterior margins and shallower punctures; dorsal series of 9, 10 small but deep punctures and lateral oblique series of 8, 9 irregular punctures. Elytra a little longer, longer and wider than pronotum, with very marked humeral angles and sub-rectilinear and sub-parallel sides. Surface with denser punctures arranged in numerous series. Tergite and sternite of the male genital segment as in figures 1121, 1122. Aedeagus oval (Figs. 1123, 1772), large, 1.33 mm long, with characteristic distal structure; parameres asymmetrical; inner sac with a distal cluster of fine spinules, followed by numerous, large thickened spines; the proximal portion with some scales and below divided in two long series of small spines.

Variability. The paratypes have no substantial morphological differences with the holotype described.

Etymology. The specific epithet is the Latin *sclerophyllicus -a -um*, in reference to the habitat in which specimens were collected.

Distribution. The species is known from Burundi and Congo (Figs. 1144, 1178).

BIONOMICS. The specimens were collected above all in "*for. scléroph.*".

REMARKS. The inner sac of this species is similar to that of *M. dissimilis* n. sp. but the median spines are different and the aedeagus is smaller.

2. ***Metocinus pseudokiymbi*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Terr. Albertville, My Kabobo, Ht Kiymbi, 1850 m, N. Leleup, X.1958 (MRAC); paratypes: same data, 1 female (MRAC), 2 males (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 3.5 mm. Fully winged. Yellowish brown. Similar to *M. punctatus* n. sp. from the same locality but larger, paler, with head wider, dilated posteriad; eyes smaller; pronotum wider, slightly dilated anteriorly; elytra shorter. Tergite and sternite of the male genital segment as in figures 1124, 1125. Aedeagus ovoid elongate (Figs. 1126, 1773), very large, 1.48 mm long, with short parameres; inner sac with numerous large spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the similarity of the conformation of the inner sac of the aedeagus to that of *M. kiymbi* n. sp.

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1160).

BIONOMICS. The specimens were collected in "*humus en forêt*".

REMARKS. This species differs from *M. punctatus* n. sp. especially in the inner sac of the aedeagus, which is similar to that of *M. kiymbi* n. sp. It differs in the longer and paler body, and larger aedeagus with different inner sac.

3. ***Metocinus lomaensis*** n. sp.

EXAMINED MATERIAL. Holotype male: E Sierra Leone, Mt Loma, 1600 m, Mission ENS-IFAN, 3.I.1966 (MNHNP); paratypes: same data, 16.II.1966, 2 females (MNHNP).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 3.2 mm. Fully winged, shiny. Similar to *M. katanganus* n. sp., but a lighter, reddish brown. Head wider, with broadly rounded posterior angles. Eyes more small and similarly protruberent. Surface of head with smaller and sparser punctures. Pronotum sub-rectangular, with oblique anterior margins and slightly sinuate sides; dorsal series of 6, 7 punctures and lateral series of 5, 6 punctures; all the punctures shallow. Elytra very wide, longer and wider than pronotum, with marked humeral angles. Surface with sparse shallow punctures arranged in several series. Tergite and sternite of the male genital segment as in figures 1127, 1128. Aedeagus oval (Fig. 1129), large, 1.3 mm long, with characteristic distal structure; parameres large and asymmetrical; inner sac with a distal series of fine spinules, followed by numerous, large, long thickened spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the Loma Mountains.

DISTRIBUTION. The species is only known from the type locality in Sierra Leone.

BIONOMICS. The specimens were collected in "*tamisage dans ravin*".

REMARKS. The specimens bear the label "Metocinus lomaensis *sp. n., Levasseur 1968, in litt.*".

4. ***Metocinus dissimilis*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Massif Ruwenzori, Kalonge, Riv. Katsambu, affl. Butahu, 2000 m, P. Vanschuytbroeck and J. Kekenbosch, 29.IX–3.X.1952 (MRAC); paratypes: same data, 1 female (MRAC), 1 male, 2 females (cB); same data, 27.I–9.II.1953, 1 male, 1 female (MRAC), 1 male (cB); same data, Ruiss. Karambura, affl. Katauleko, 2060 m, P. Vanschuytbroeck and J. Kekenbosch, 30.I–21.II.1953, 2 males (MRAC); same data, Riv. Nyamwamba, affl. Butahu, 2010 m, P. Vanschuytbroeck and J. Kekenbosch, 2–3.II.1963, 1 male (cB); same data, Kyandolire, Camp des Gardes, P. Vanschuytbroeck

and J. Kekenbosch, 25.X.1952, 1 male (MRAC); same data, Ruiss. Katsamu, affl. Butahu, 2000 mm, P. Vanschuytbroeck and J. Kekenbosch, 27.I–9.II.1953, 1 male (MRAC); same data, Gite Ruwenzori, 2030 m, P. Vanschuytbroeck and J. Kekenbosch, 24–29.IX.1952, 1 male (cB); Kivu, T, Kalehe, Riv. Mukabe, SO Kahuzi, 2200 m, N. Leleup, VII.1951, 1 male (MRAC); Dorsale de Lubero, Mt Muleke, R.P.M.J. Celis, VI–VII.1963, 1 male (MRAC); Mt Kabobo, Terr. Albertville, Hte Kiymbi, 1700 m, N. Leleup, X.1958, 1 male, 3 females (MRAC), 1 female (cB).

Description of Holotype. Male. Length of body: 5.7 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Winged and shiny. Body reddish brown with antennae and legs paler. Characterized by the shape of the fore-body (Fig. 1130), narrow and elongate. Head with deep, sparse punctures, apart from a median band. Pronotum with dorsal series of 10, 11 punctures and lateral oblique series of 5, 6 punctures. Elytra large, longer and wider than pronotum, slightly dilated posteriad, with marked humeral angles. Surface with fine and very dense punctures arranged in numerous series. Tergite and sternite of the male genital segment as in figures 1131, 1132. Aedeagus oval (Figs. 1133, 1774), large, 1.1 mm long, with characteristic distal structure; parameres short and asymmetrical; inner sac with a short, distal series of fine spinules, followed by numerous, much thickened large and long spines, arranged to form a confusing dark mass, the proximal portion narrow and long, covered with scales.

Variability. The paratypes have no substantial morphological differences with the holotype described.

Etymology. The specific epithet is the Latin *dissimilis -e* (dissimilar).

Distribution. The species is known from Ruwenzori and Kivu regions in Congo (Fig. 1160).

Bionomics. The specimens were collected in "*terreau*", "*humus bambous et* Hagenia".

Remarks. The species occurs in large numbers in some localities; it is variable in size, colouration and the size of aedeagus and structure of the inner sac. The characters given in the description are therefore a rough guide.

5. ***Metocinus levasseuri*** n. sp.

Examined Material. Holotype male: Congo, reg. Kolwezi, Katanga, Musonoie, V. Allard, 30.IV.1962 (MNHNP); paratypes: same data, 20.X.1962, 2 females (MNHNP); same data, 6.V.1962, 1 female (cB); same data, Musonoie, V. Allard, 24.IX.1960, 1 male (MNHNP), 1 male (cB).

Description of Holotype. Male. Length of body: 5.6 mm; from anterior margin of head to posterior margin of elytra: 2.9 mm. Fully winged, shiny. Body reddish brown. Similar to *M. katanganus* n. sp., but longer and darker. Head more dilated posteriad, with more rounded posterior angles. Eyes more protruberent. Surface of head with sparser punctures. Pronotum more massive, with more broaadly rounded anterior angles; dorsal series of 8, 9 punctures and lateral series of 7, 8 irregular punctures. Elytra with very fine and denser punctures arranged in more series. Tergite and sternite of the male genital segment as in figures 1134, 1135. Aedeagus oval (Fig. 1136), large, 1.4 mm long, with characteristic distal structure; parameres more or less asymmetrical; inner sac with a distal cluster of spinules, followed with a very long series of spines, gradually increasing in length; in the proximal part of the basal bulb there is a sub-rectangular surface, more or less coiled around itself and covered in fine scales.

Variability. The paratypes have no substantial morphological differences with the holotype described.

Etymology. Patronymic. This new species is dedicated to Louis Levasseur who devoted much time to the study of Staphylinidae from Africa. In his collection, preserved in the Muséum national d'Histoire naturelle in Paris, I found interesting species, some "*in litteris*".

Distribution. The species is actually known from Katanga, in Congo (Fig. 1060).

Bionomics. The specimens were collected in "*crottin*", "*fruit pourri*", "*marais*".

Remarks. I found a paratype from Musonoie with prepared aedeagus but without parameres, mixed with other specimens identificated as "Metocinus katanganus *n. sp. in litt.*" which is a different species (see below).

6. ***Metocinus cavernicolus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Elisabetville, entr. grot. Kakontwé, N. Leleup, 21.V.1950 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.7 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Fully winged, shiny. Similar to *M. bambusianus* n. sp., but larger and more robust, darker, with paler elytra. Head larger and dilated posteriad. Eyes larger and protruber-ent. Surface of head with larger and sparser punctures than that of *M. bambusianus* n. sp. Pronotum more rectangular, with more oblique anterior margins and more broadly rounded anterior angles; dorsal series of 7, 8 punctures and lateral series of 5, 6 larger punctures among some surrounding punctures. Elytra large, broad, longer and wider than pronotum, with well marked humeral angles. Surface with larger, dense punctures arranged in numerous series. Tergite and sternite of the male genital segment as in figures 1137, 1138. Aedeagus oval (Fig. 1139), large, 1.3 mm long, with characteristic distal structure; parameres short and asymmetrical; inner sac with two large spines among other, very thickened and juxtaposed smaller spines, and some sub-rectangular scales; in the proximal part of the basal bulb there is a sub-triangular surface covered with fine sparse scales.

ETYMOLOGY. The specific epithet is the Latin *cavernicolus -a -um* (living in caves), in reference to the occasional habitat in which the specimen was collected.

DISTRIBUTION. The species is only known from the type locality in Katanga, Congo (Fig. 1060).

REMARKS. Female unknown.

7. ***Metocinus rhodesianus*** n. sp.

EXAMINED MATERIAL. Holotype male: N Rhodesia, Abercorn, galerie forestiére de la Mwengo, 1800 m, N. Leleup, VII.1960, 3 males, 1 female (MRAC), 1 male, 2 females (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.7 mm; from anterior margin of head to posterior margin of elytra: 2.9 mm. Winged and shiny, without micro-sculpture. Body reddish brown, with paler elytra. Head large, oval, narrowed anteriorly. Eyes medium-sized, a little protruberent. Surface of head with fine but deep, very sparse punctures. Pronotum much longer than head, a little dilated anteriorly where it is as wide as head. Surface with dorsal series of 7, 8 punctures and lateral series of 4, 5 punctures. Elytra large, longer and wider than pronotum, with rounded humeral angles, and fine, dense punctures, arranged in numerous series. Abdomen with fine, sparse punctation. Tergite and sternite of the male genital segment as in figures 1140, 1141. Aedeagus 1.37 mm long (Fig. 1142), with short parameres; inner sac with 2 long and large spines on the right, and a series of short, robust spines on the left, followed by a narrow proximal tape, covered with sparse scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Rhodesia.

DISTRIBUTION. This species is only known from the type locality in Zambia (Fig. 1034).

8. ***Metocinus muye*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kabwoe sur Muye, 1370 m, G. de Witte, 26.IV.1948 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.5 mm; from anterior margin of head to posterior margin of elytra: 2.7 mm. Fully winged, shiny. Body reddish brown with darker elytra. Head sub-rectangular, with slightly rounded sides and broadly rounded posterior angles. Eyes large and protruberent. Surface of head with very sparse but clearly visible punctures. Pronotum slightly longer and wider than head; dorsal series of 7, 8 large and very deep punctures and lateral series of 4, 5 irregular punctures and other surrounding punctures. Elytra sub-rectangular, narrow and long, much longer and wider than pronotum, with rounded humeral angles. Surface with coarse shallow punctures, arranged in several series. Tergite and sternite of the male genital segment as in figures 1145, 1146. Aedeagus oval (Fig. 1147), 0.88 mm long, with characteristic distal structure; parameres

short and broad, asymmetrical; inner sac with three large spines, followed by the long narrow proximal portion which is coiled around itself, covered on the margins with scales and then with evident small sub-triangular spines.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is only known from the type locality in central-southern Congo, near Katanga (Fig. 1060).

REMARKS. Female unknown.

9. ***Metocinus fimbriatus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Terr. Lubero, Mt Kibatsiro, Visiki, 2080 m, R.P.M.J. Celis, XII.1954, 1 female (MRAC), 2 males, 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.6 mm; from anterior margin of head to posterior margin of elytra: 2.3 mm. Fully winged, shiny. Body reddish brown; head oval, narrowed anteriorly, with broadly rounded posterior angles. Eyes medium-sized and almost flat. Surface of head with fine, very sparse punctures. Pronotum longer than head and anteriorly a little wider than head, with oblique anterior margins and broadly rounded anterior angles; dorsal series of 7, 8 punctures and lateral, irregular series of 5, 6 punctures. Elytra sub-rectangular, not dilated posteriad, longer and wider than pronotum, with rounded humeral angles. Surface with fine punctures arranged in several series. Abdomen with transverse microstriation and fine, moderately dense punctation. Tergite and sternite of the male genital segment as in figures 1148, 1149. Aedeagus 1.1 mm long (Fig. 1150), with short parameres; inner sac with some distal spines, followed by a series of close spines, a broad surface covered with dense scales and a narrow proximal tape, covered in sparse scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epither is the Latin adjective *fimbriatus -a -um* (fringe shaped), in reference to the distal portion of the inner sac of the aedeagus.

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1143).

10. ***Metocinus katanganus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Katanga, Reg. Kolwezi, V. Allard, V.1961 (MNHNP); paratype: same data, 1 female (MNHNP).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Fully winged, shiny; head with traces of transverse microstriation. Body light brown. Head elongate, slightly dilated posteriad, with slightly rounded sides and narrowly rounded posterior angles. Eyes large and protruberent. Surface of head with fine and sparse punctures. Pronotum a little longer than head, as wide as head anteriorly, with slightly oblique anterior margins; dorsal series of 10 punctures and lateral series of 6 punctures; between these series there is another series of 6 larger punctures. Elytra sub-rectangular, longer and wider than pronotum, with marked humeral angles. Surface with large shallow punctures, arranged in several series. Tergite and sternite of the male genital segment as in figures 1151, 1152. Aedeagus oval (Fig. 1153), very large, 1.55 mm long, with characteristic distal structure; parameres large and asymmetrical; inner sac with a distal series of spinules followed by a series of medium-size spines, next to numerous scales; the proximal part of the basal bulb with a short series of small spines, next to a narrow surface covered with fine scales.

VARIABILITY. The paratype female has no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Katanga.

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1060).

BIONOMICS. The specimen was collected in "*mousses*".

REMARKS. The specimens were identified by Levasseur as "Metocinus katanganus *n. sp. in litt., 1968*".

11. ***Metocinus leonensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Sierra Leone, Mts Loma, Denkale waterfall, 800 m, W. Rossi, 26–28.XI.2004 (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Fully winged, shiny. Similar to *M. denkalensis* n. sp., but with paler elytra. Head wider. Eyes a little larger and more protruberent. Pronotum shorter, well dilated anteriorly, with more oblique anterior margins; dorsal series of 10 punctures and lateral series of 8, 9 irregular punctures. Elytra with more marked humeral angles and finer and sparser punctation. Tergite and sternite of the male genital segment as in figures 1154, 1155. Aedeagus oval (Fig. 1156), 1 mm long, with characteristic distal structure; parameres large and asymmetrical; inner sac with a distal group of spines, followed by some large much thickened spines spread like the fingers of a hand in the proximal portion.

ETYMOLOGY. The specific epithet refers to Sierra Leone.

DISTRIBUTION. The species is only known from the type locality in Sierra Leone (Fig. 1034).

REMARKS. Female unknown.

12. ***Metocinus kiymbi*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Mt Kabobo, Terr. Albertville, Hte Kiymbi, 1700 m, N. Leleup, X.1958 (MRAC); paratypes: same data, 1 male (MRAC); same data, 1 male, 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Fully winged, shiny. Similar to *M. visiki* n. sp., but narrower and paler. Head sub-rectangular, narrower, with broadly rounded posterior angles and slightly denser punctation, especially on the sides. Eyes more protruberent. Pronotum sub-rectangular, narrower and longer, longer than head and anteriorly as wide as head, not dilated anteriorly; dorsal series of 7, 8 punctures and lateral series of 5, 6 punctures. Elytra longer and wider than pronotum, with more marked humeral angles. Surface with finer and much denser punctures, arranged in more series. Tergite and sternite of the male genital segment as in figures 1157, 1158. Aedeagus oval (Fig. 1159), very large, 1.33 mm long, with characteristic distal structure; parameres asymmetrical; inner sac with a distal series of fine spinules followed by some large spines and next by more small spines; the proximal portion of the sac long and very narrow, covered with small spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1060).

BIONOMICS. The specimens were collected in "*humus en forêt*", "*racines plantes basses*".

13. ***Metocinus denkalensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Sierra Leone, Mts Loma, vers. N river Denkale, W. Rossi, 2.I.1983 (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.9 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Fully winged, shiny. Body reddish brown with dark head and elytra. Head sub-rectangular, with less rounded sides, broadly rounded posterior angles and dense and fine punctures, apart a narrow median band. Eyes relatively large and protruberent. Pronotum as long and as wide as head, with oblique anterior margins and marked anterior angles; dorsal series of 7, 8 punctures and lateral series of 6, 7 fine and irregular punctures. Elytra long and narrow, much longer and wider than pronotum, with very rounded humeral angles and sub-rectilinear sides. Surface with fine and dense punctures arranged in numerous series. Tergite and sternite of the male genital segment as in figures 1160, 1161. Aedeagus oval (Fig. 1162), 1.18 mm long, with characteristic distal

structure; parameres long and asymmetrical; inner sac with a distal series of fine spinules, followed by numerous much thickened spines beside a very long spine; proximal portion of the sac narrow and short, the margins covered with scales superimposed on another protruding spine.

ETYMOLOGY. The specific epithet refers to the Denkala river.

DISTRIBUTION. The species is only known from the type locality in Sierra Leone (Fig. 1134).

REMARKS. Female unknown.

14. ***Metocinus gambicus*** n. sp.

EXAMINED MATERIAL. Holotype male: Gambia, river Tanji, 3 km W Brufut, 10.00S, 21.00E, Cederholm, Danielsson, Larsson, Norling and Samuelsson, 28.II.1977 (ZML); paratypes: same data, 1 female (ZML), 1 male (cB); same data, Abuco Nat. Res., Cederholm, Danielsson, Larsson, Norling and Samuelsson, 18.XI.1977, 1 male (cB); Senegal, 1.5 km NE Djibélor, 6.5 km SW Ziguinchor, 19.00S, 21.30E, Cederholm, Danielsson, Larsson, Norling and Samuelsson, 8.III.1977, 1 male (ZML).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Fully winged, shiny; head with traces of transverse micro-striation. Body reddish brown. Similar to *M. lusinganus* n. sp., but smaller and narrower. Head more oval and narrow, with more larger punctures. Eyes larger and a little more protruberent. Pronotum of similar shape, with less oblique anterior margins; dorsal series of 9, 10 punctures and lateral series of 6, 7 irregular punctures; all the punctures fine. Elytra longer, with more marked and protruberent humeral angles. Surface with sparser punctures, arranged in few series. Tergite and sternite of the male genital segment as in figures 1163, 1164. Aedeagus oval (Fig. 1165), very large, 1.37 mm long, with characteristic distal structure; parameres short and asymmetrical; inner sac with some more or less rounded scales besides three very large spines; the proximal portion of the sac enlarged and covered with scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Gambia (Fig. 1134).

DISTRIBUTION. The species is so far known from Gambia and Senegal.

15. ***Metocinus fulvus*** n. sp.

EXAMINED MATERIAL. Holotype male: Angola, Alto Cuilo, Cacolo, A. de Barros Machado, VI.1954 (MRAC); paratypes: same data, 2 females (MRAC), 2 females (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Fully winged, shiny. Body brown with paler legs. Head sub-rectangular, with slightly rounded sides. Eyes large and less protrubrent. Pronotum sub-rectangular, much longer than head, dilated anteriorly where it is as wide as head, with very slightly oblique anterior margins and narrowly rounded anterior angles; dorsal series of 9, 10 deep punctures and lateral oblique series of 5, 6 irregular punctures. Elytra broad, as long as and wider than pronotum. Surface with deep, dense punctures arranged in numerous series. Tergite and sternite of the male genital segment as in figures 1166, 1167. Aedeagus oval (Fig. 1168), broad, 1.1 mm long, with characteristic distal structure; parameres asymmetrical; inner sac long, ∩-shaped and covered with evident spines, one behind the other.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is the Latin adjective *fulvus -a -um* (fulvous).

DISTRIBUTION. The species is only known from Alto Cuilo, in Angola (Fig. 1034).

REMARKS. The holotype is damaged.

16. ***Metocinus kolwezi*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Katanga, Reg. Kolwezi, Musonoie, V. Allard, 6.V.1962 (MNHNP).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.5 mm; from anterior margin of head to posterior margin of elytra: 2.7 mm. Fully winged. Head with traces of transverse micro-striation. Very similar to and difficult to distinguish from *M. levasseuri* n. sp. Body more slender and darker. Head narrower. Eyes smaller. Pronotum narrower; dorsal series of 10 punctures and lateral series of 4 irregular punctures, among other surrounding punctures. Tergite and sternite of the male genital segment as in figures 1169, 1170. Aedeagus oval (Fig. 1171), 0.96 mm long; inner sac with a short distal series of small spines, followed by three massive partially overlapping spines; to the sides of these are some other spines and large scales; the proximal part of the sac narrow, covered with scales.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1060).

REMARKS. Female unknown. The aedeagus of the specimen is missing the distal structure and parameres.

17. ***Metocinus angolanus*** n. sp.

EXAMINED MATERIAL. Holotype male: Angola, Alto Cuilo, Cacolo, A. de Barrois Machado, VI.1954 (MRAC); paratypes: same data, 1 female (MRAC); same data, Léua, 65 km E Vila Luso, A. de Barrois Machado, I. 1955, 2 males (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Fully winged, shiny. Body reddish brown with darker head and light reddish pronotum. Similar to *M. fulvus* n. sp., but narrower, with narrower head. Eyes larger and more protruberent. Surface of head with slightly denser punctation. Pronotum with more oblique anterior margins and finer punctures. Elytra narrower, with less marked humeral angles and shallower punctures. Tergite and sternite of the male genital segment as in figures 1172, 1173. Aedeagus oval (Fig. 1174), broad, 1.37 mm long, with characteristic distal structure; parameres asymmetrical; inner sac with three consecutive spines, followed by some scales and by three other long spines; the proximal part of the sac narrow and short, covered with fine scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Angola.

DISTRIBUTION. The species is only known from Alto Cuilo, in Angola (Fig. 1034).

18. ***Metocinus visiki*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Terr. Lubero, Mt Kibatsiro, Visiki, 2080 m, R.P.M.J. Celis, XII.1954 (MRAC).

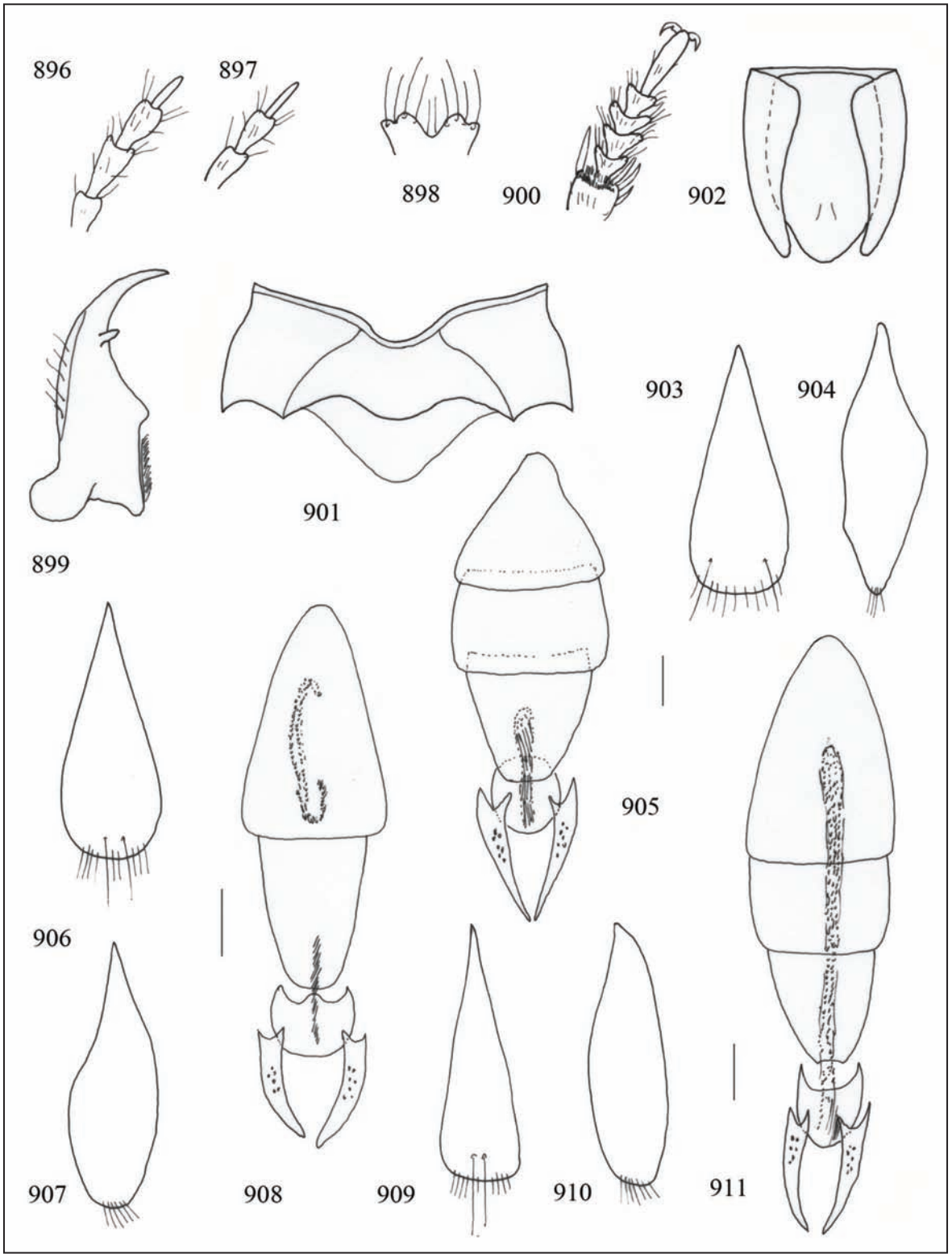
DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.5 mm. Fully winged, shiny. Body dark reddish brown; antennae and legs yellowish. Head oval, narrow anteriorly, with broadly rounded posterior angles. Eyes large and a little protruberent. Surface of head with coarse and very sparse punctation. Pronotum much longer than head, slightly dilated anteriorly where it is as wide as head; dorsal series of 8 clearly visible punctures and lateral series of 6, 7 irregular punctures. Elytra quadrate, dilated posteriad, longer and wider than pronotum, with less marked humeral angles. Surface with fine, clearly visible punctures, arranged in some widely spaced series. Tergite and sternite of the male genital segment as in figures 1175, 1176. Aedeagus oval (Fig. 1177), short, enlarged, 0.77 mm long, with characteristic distal structure; parameres large and asymmetrical; inner sac with a distal series of fine spinules followed by a series of very large spines; the proximal portion of the sac wide at first and then narrowed, covered respectively with small spines and fine scales.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

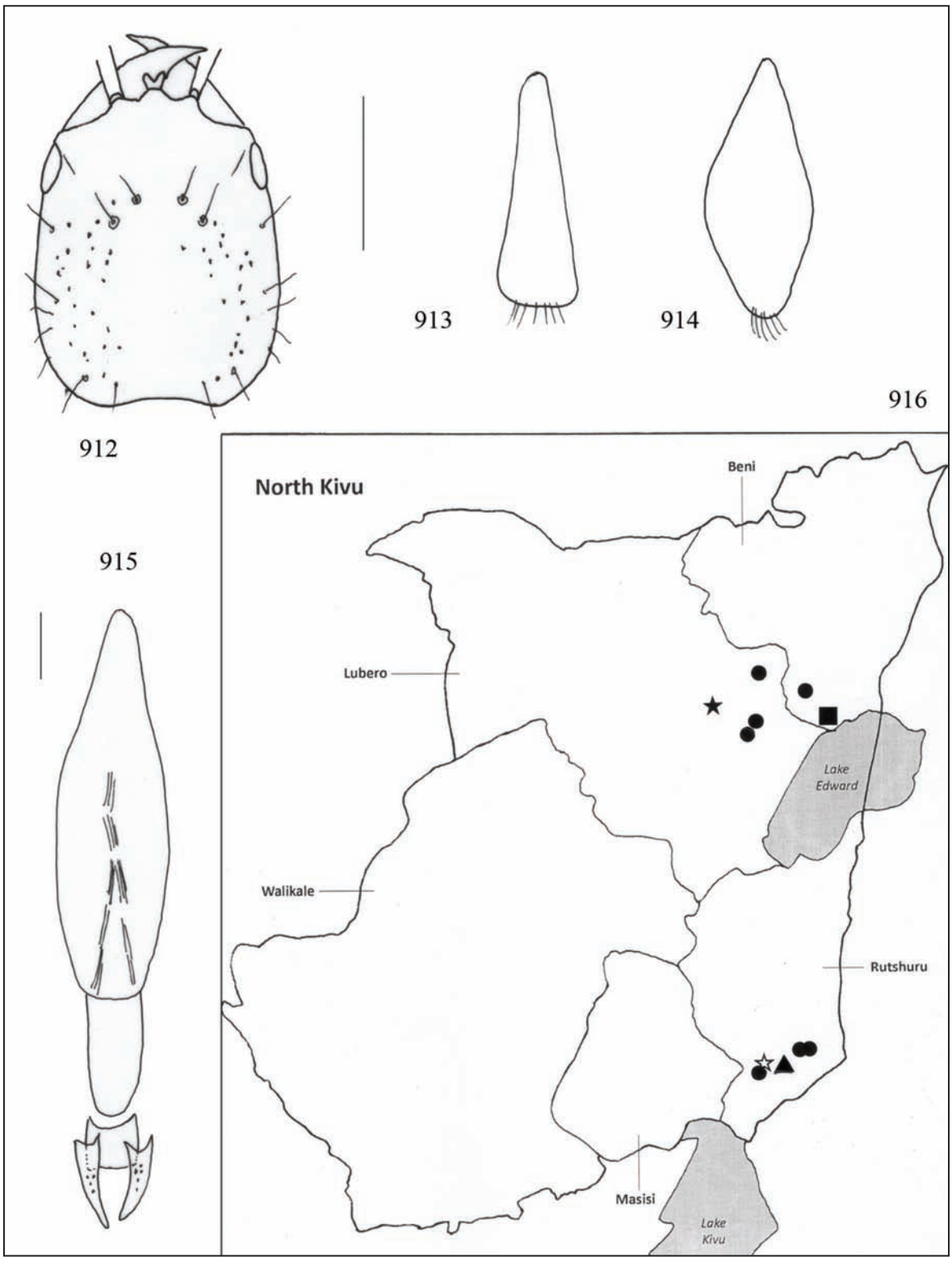
DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1143).

BIONOMICS. The specimen was collected in "*terreau*".

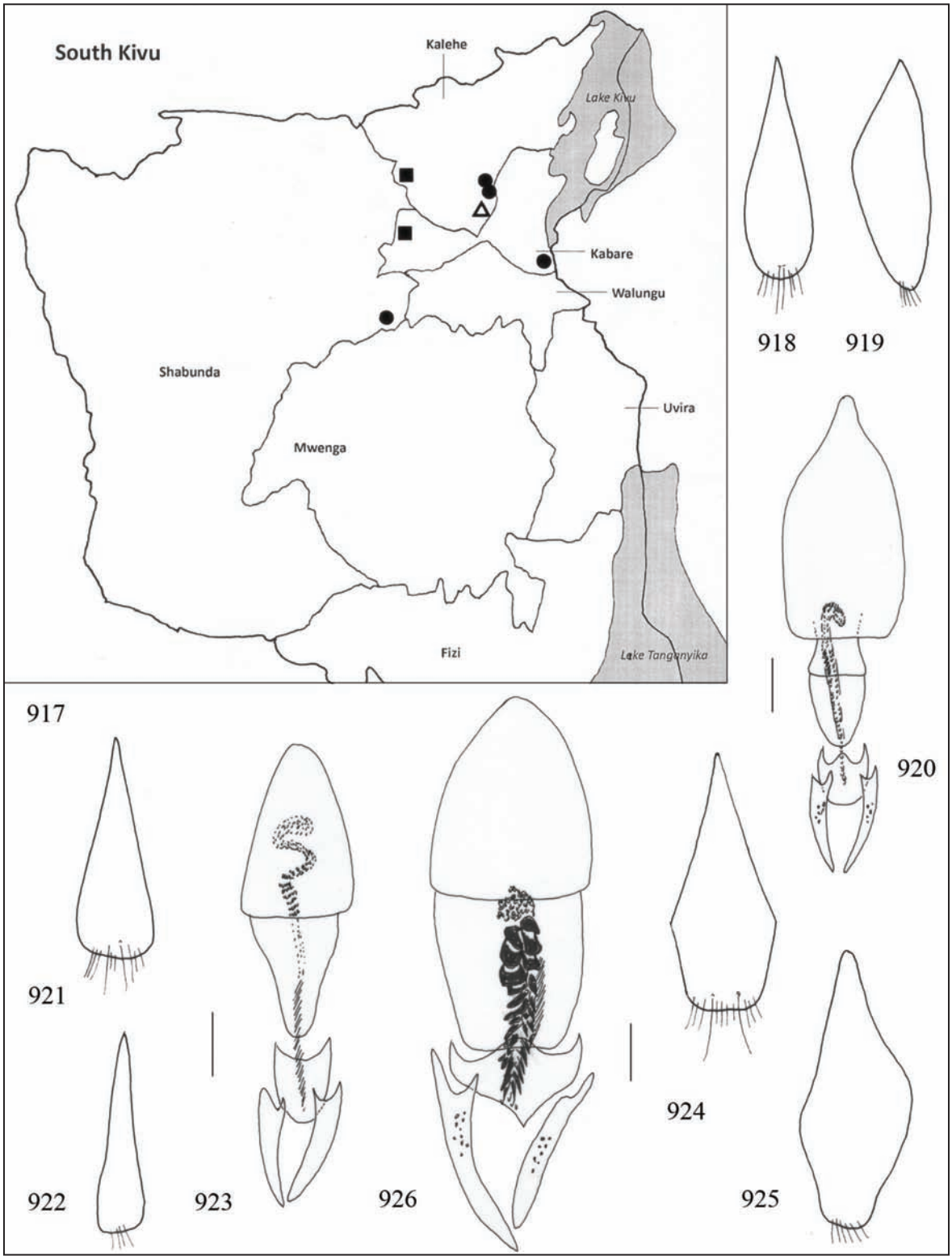
REMARKS. Female unknown. The specimen is in poor condition.



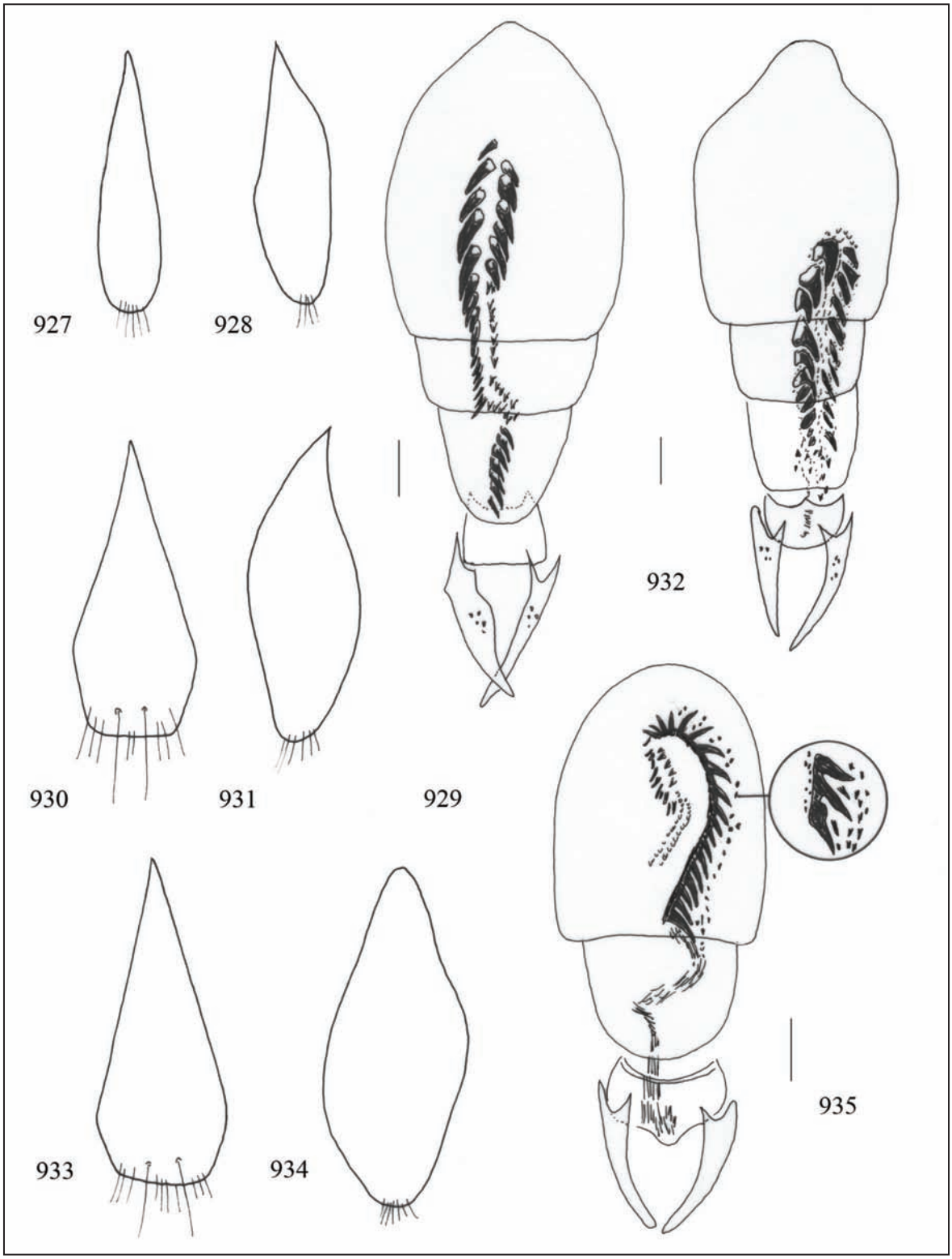
Figures 896–911. *Metocinus* sp.: maxillary and labial palpi (Figs. 896, 897), labrum (Fig. 898), mandible (Fig. 899), anterior tarsus (Fig. 900), mesosternum (Fig. 901), female genital segment (Fig. 902). Tergite and sternite of the male genital segment, aedeagus of *M. vulcanius* n. sp. (bar scale: 0.1 mm) (Figs. 903–905). Tergite and sternite of the male genital segment, aedeagus of *M. kahuzi* n. sp. (Figs. 906–908). Tergite and sternite of the male genital segment, aedeagus of *M. longiphallus* n. sp. (Figs. 909–911).



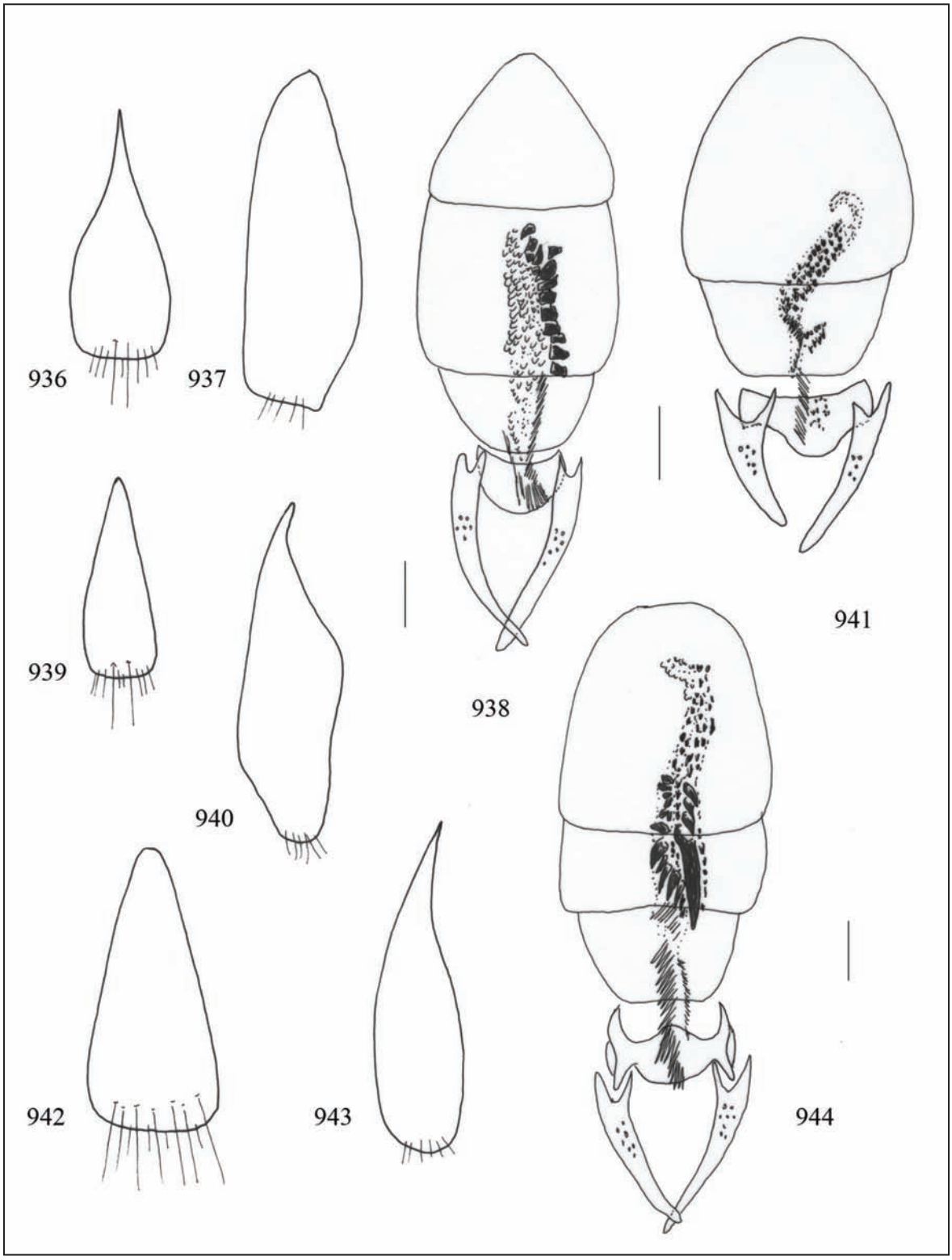
Figures 912–916. *Metocinus longiphallus* n. sp.: head (bar scale: 0.5 mm) (Fig. 912). *Metocinus parvioculatus* n. sp.: tergite and sternite of the male genital segment, aedeagus (Figs. 913–915) (bar scale: 0.1 mm). Fig. 916: distribution of *M. kahuzi* sub-group in North Kivu (Congo): *M. vulcanius* n. sp. (filled triangle), *M. kahuzi* n. sp. (circle), *M. longiphallus* n. sp. (open star), *M. parvioculatis* n. sp. (filled star), and *M. sabinyo* sub-group: *M. virunga* n. sp. (big square).



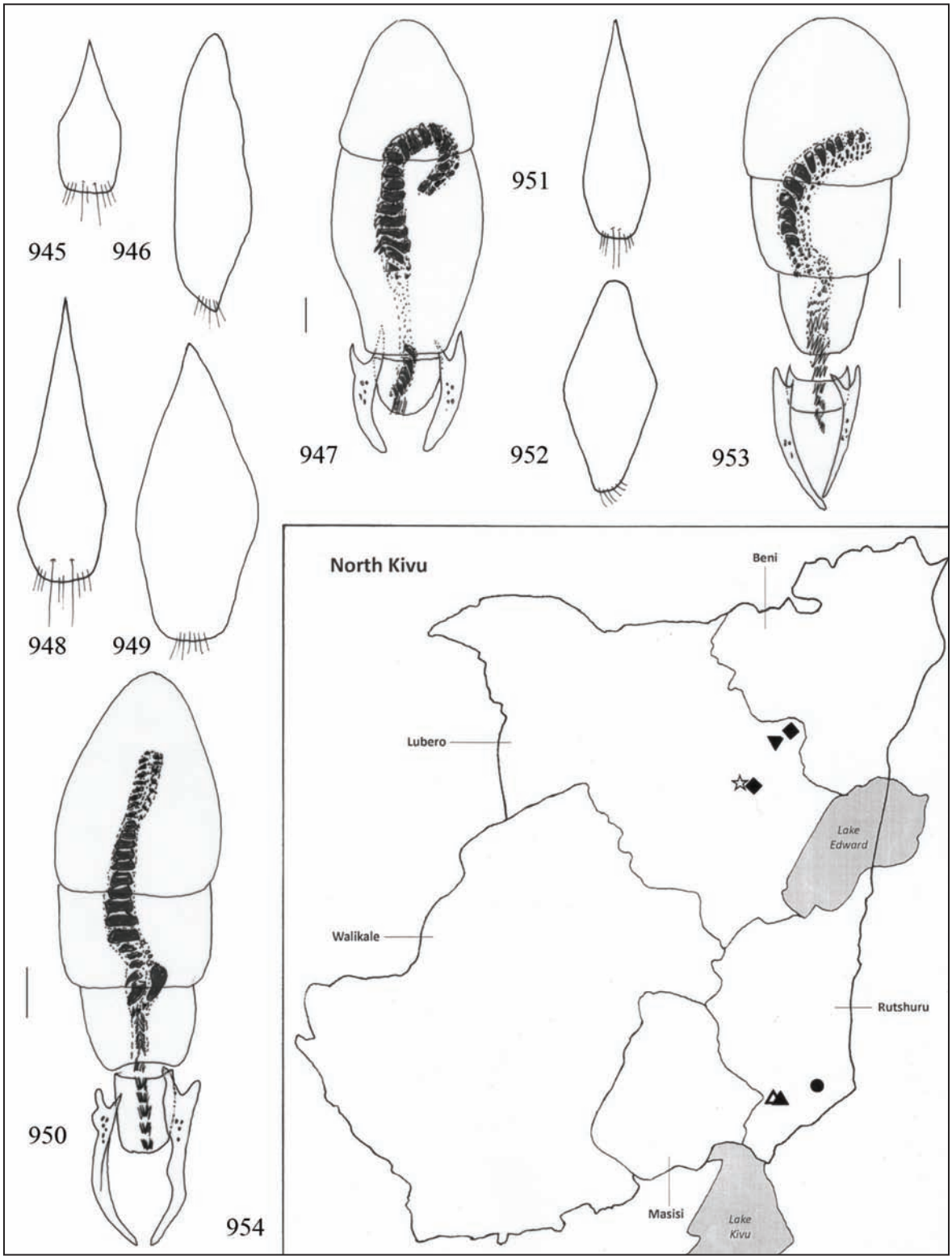
Figures 917–926. Fig. 917: distribution of *Metocinus kahuzi* sub-group in South Kivu (Congo): *M. kahuzi* n. sp. (circle), *M. kivuensis* n. sp. (square), *M. submontanus* n. sp. (open triangle). Figs. 918–926. Tergite and sternite of the male genital segment, aedeagus of *M. kivuensis* n. sp. (Figs. 918–920), *M. submontanus* n. sp. (Figs. 921–923), and *M. mikeno* n. sp. (Figs. 924–926) (bar scale: 0.1 mm).



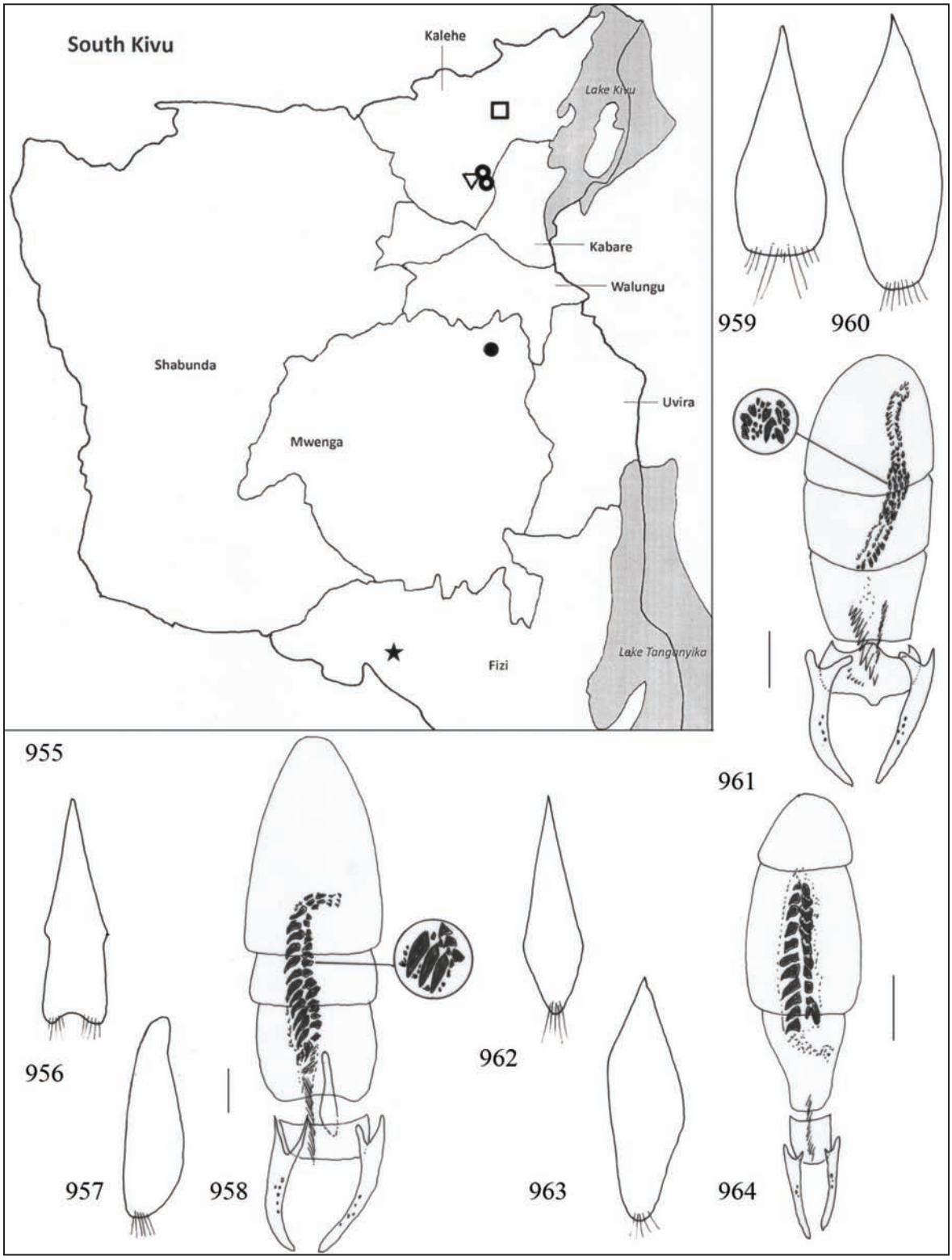
Figures 927–935. Tergite and sternite of the male genital segment, aedeagus of *M. rubellianus* n. sp. (bar scale: 0.1 mm) (Figs. 927–929). Tergite and sternite of the male genital segment, aedeagus of *M. nyakabiba* n. sp. (Figs. 930–932). Tergite and sternite of the male genital segment, aedeagus of *M. luiko* n. sp. (bar scale: 0.1 mm) (Figs. 933–935).



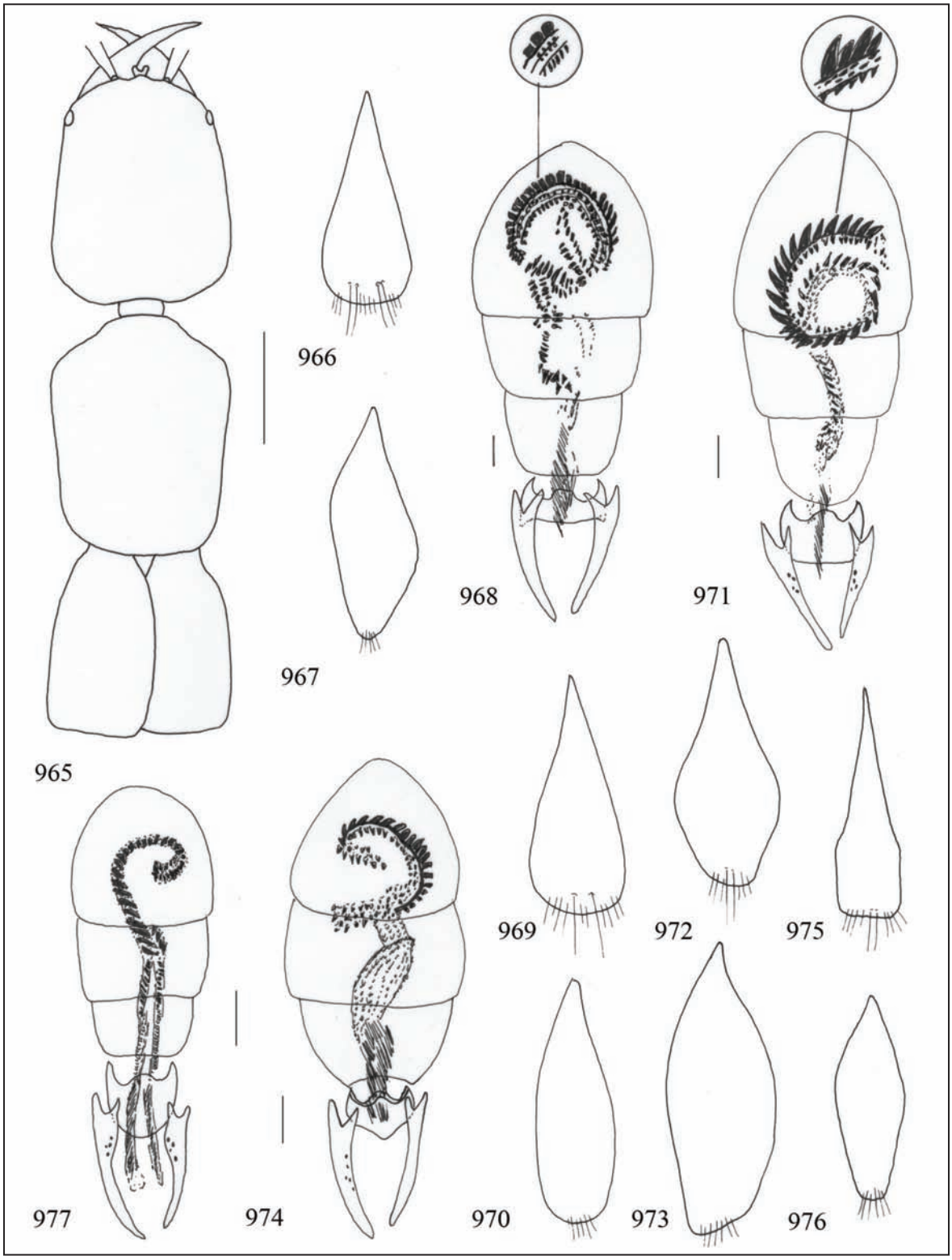
Figures 936–944. Tergite and sternite of the male genital segment, aedeagus of *M. silvanus* n. sp. (bar scale: 0.1 mm) (Figs. 936–938). Tergite and sternite of the male genital segment, aedeagus of *M. monticolus* n. sp. (Figs. 939–941). Tergite and sternite of the male genital segment, aedeagus of *M. katondi* n. sp. (bar scale: 0.1 mm) (Figs. 942–944).



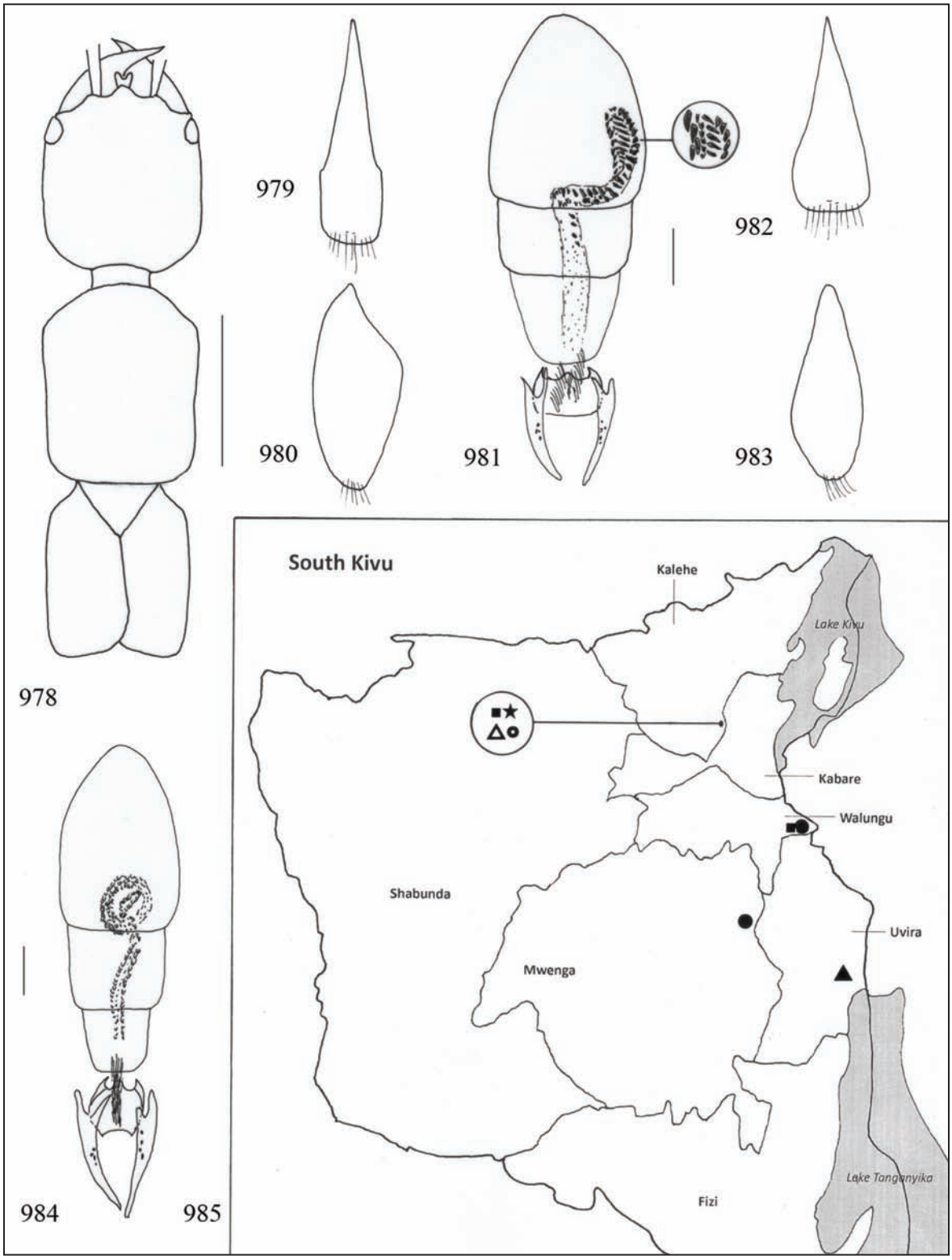
Figures 945–954. Tergite and sternite of the male genital segment, aedeagus of *Metocinus mlozilozi* n. sp. (Figs. 945–947), *M. kidundanus* n. sp. (Figs. 948–950), and *M. lucidus* n. sp. (Figs. 951–953) (bar scale: 0.1 mm). Figure 954: distribution of *M. lucidus* sub-group in North Kivu (Congo): *M. mikeno* n. sp. (open triangle), *M. rubellianus* n. sp. (filled triangle), *M. nyakabiba* n. sp. (circle), *M. silvanus* n. sp. (open star), *M. katondi* n. sp. (inverted filled triangle), *M. lucidus* n. sp. (rhombus).



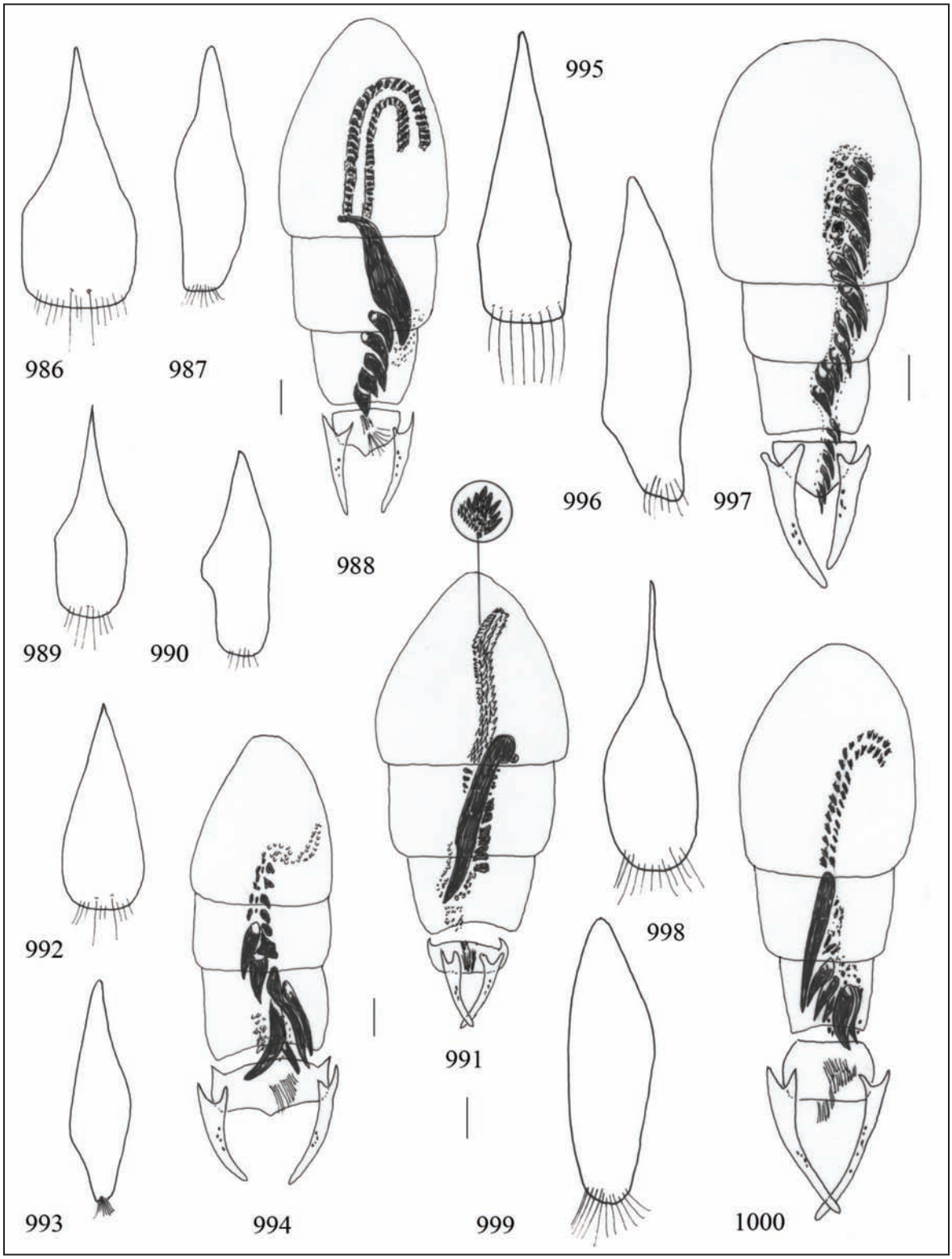
Figures 955–964. Fig. 955: distribution of *Metocinus lucidus* sub-group in South Kivu (Congo): *M. nyakasiba* n. sp. (filled circle), *M. luiko* n. sp. (star), *M. monticolus* n. sp. (open square), *M. mlozilozi* n. sp. (inverted open triangle), *M. zairensis* n. sp. (open circle). Figs. 956–964. Tergite and sternite of the male genital segment, aedeagus of *M. blukwa* n. sp. (Figs. 956–958), *M. zairensis* n. sp. (959–961), and *M. microps* n. sp. (Fig. 962–964) (bar scale: 0.1 mm).



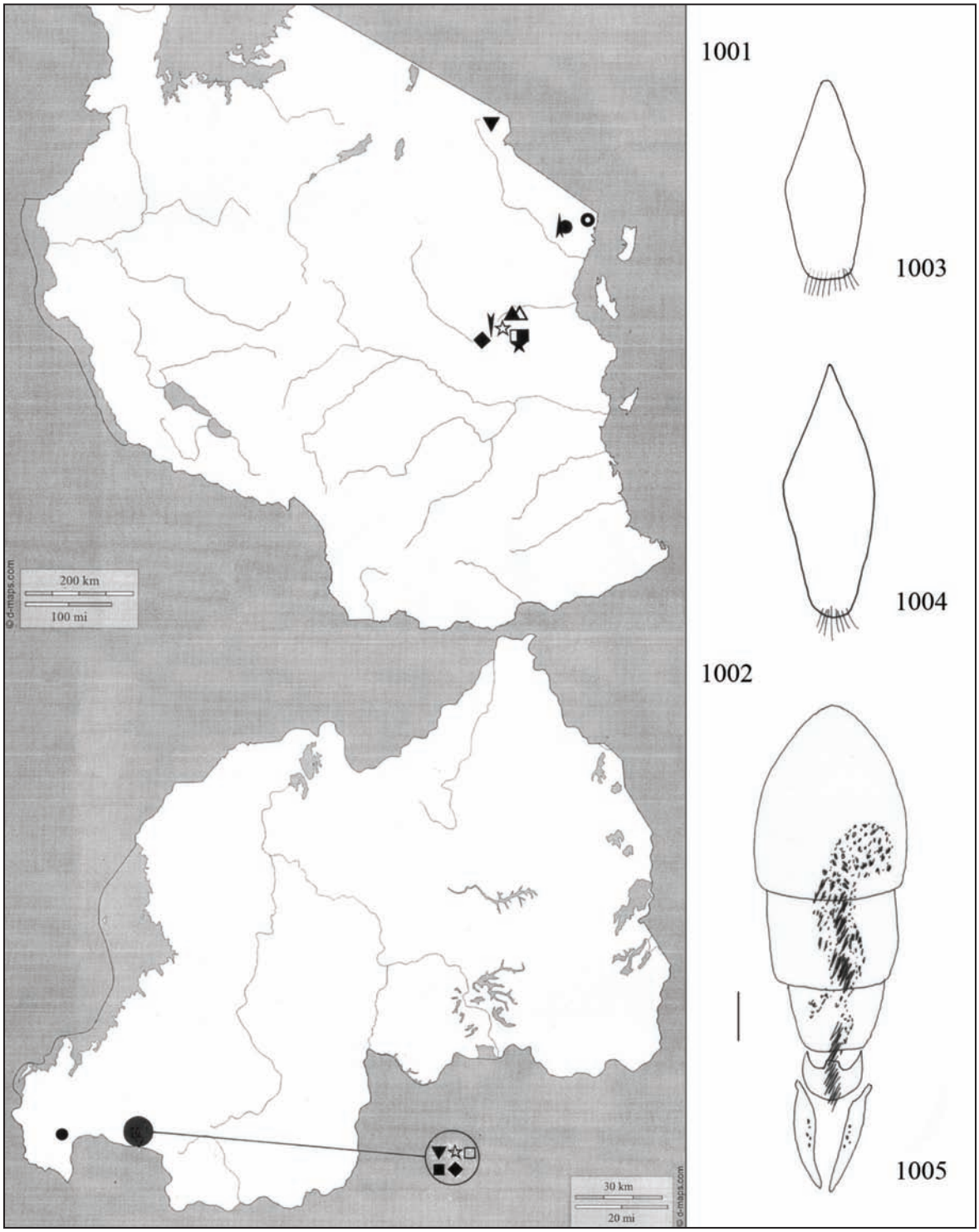
Figures 965-977. *Metocinus afroalpestris* n. sp.: fore-body (bar scale: 0.5 mm) (Fig. 965), tergite and sternite of the male genital segment, aedeagus (Figs. 966–968) (bar scale: 0.1 mm). Tergite and sternite of the male genital segment, aedeagus of *M. hagenianus* n. sp. (Figs. 969–971), *M. congoensis* n. sp. (Figs. 972–974), and *M. confectus* n. sp. (Figs. 975–977) (bar scale: 0.1 mm).



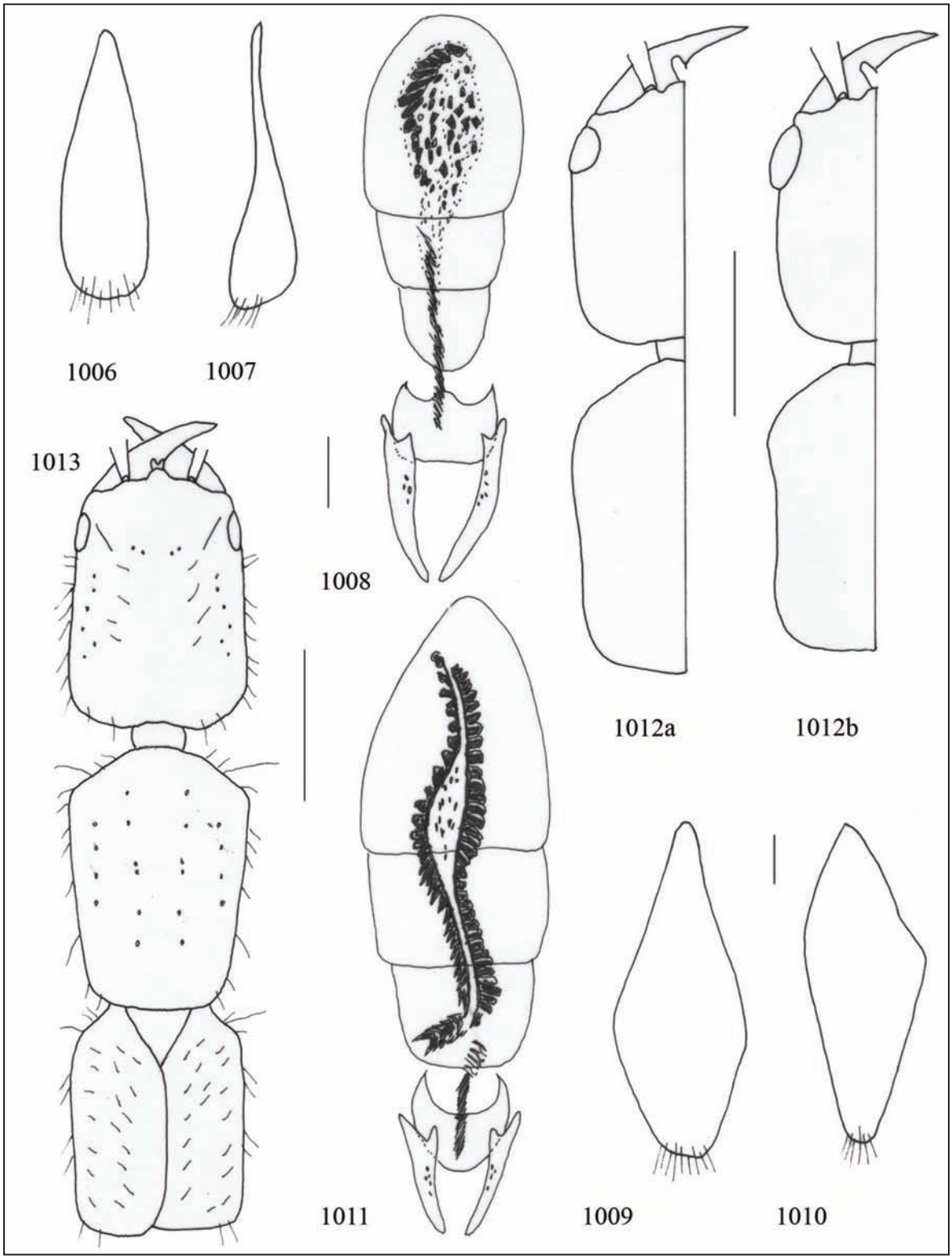
Figures 978–985. Fore-body of *Metocinus confectus* n. sp. (bar scale: 0.5 mm) (Fig. 978). Tergite and sternite of the male genital segment, aedeagus of *M. montanellus* n. sp. (Figs. 979–981) and *M. flavens* n. sp. (Figs. 982–984). Fig. 985: distribution of *M. afroalpestris* sub-group: *M. afroalpestris* n. sp. (open triangle), *M. hagenianus* n. sp. (filled circle), *M. congoensis* n. sp. (small filled square), *M. montanellus* n. sp. (star), *M. flavens* n. sp. (open circle), and *M. sabinyo* sub-group: *M. reductus* (filled triangle).



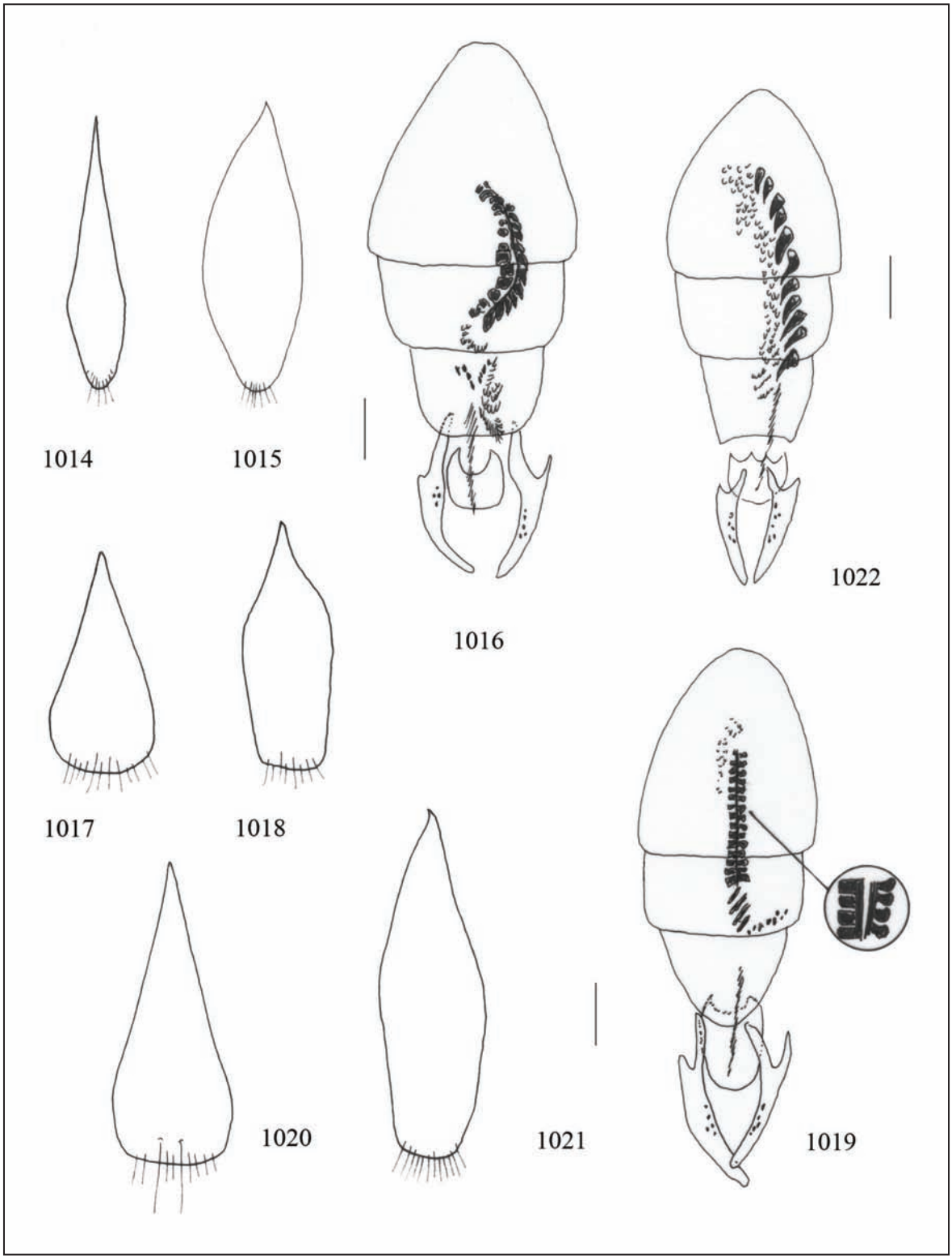
Figures 986–1000. Tergite and sternite of the male genital segment, aedeagus of *Metocinus afromontanus* n. sp. (Figs. 986–988), *M. virunga* n. sp. (Figs. 989–991), and *M. reductus* (Figs. 992–994) (bar scale: 0.1 mm). Tergite and sternite of the male genital segment, aedeagus of *M. sabinyo* n. sp. (Figs. 995–997) and *M. leleupi* n. sp. (Figs. 998–1000) (bar scale: 0.1 mm).



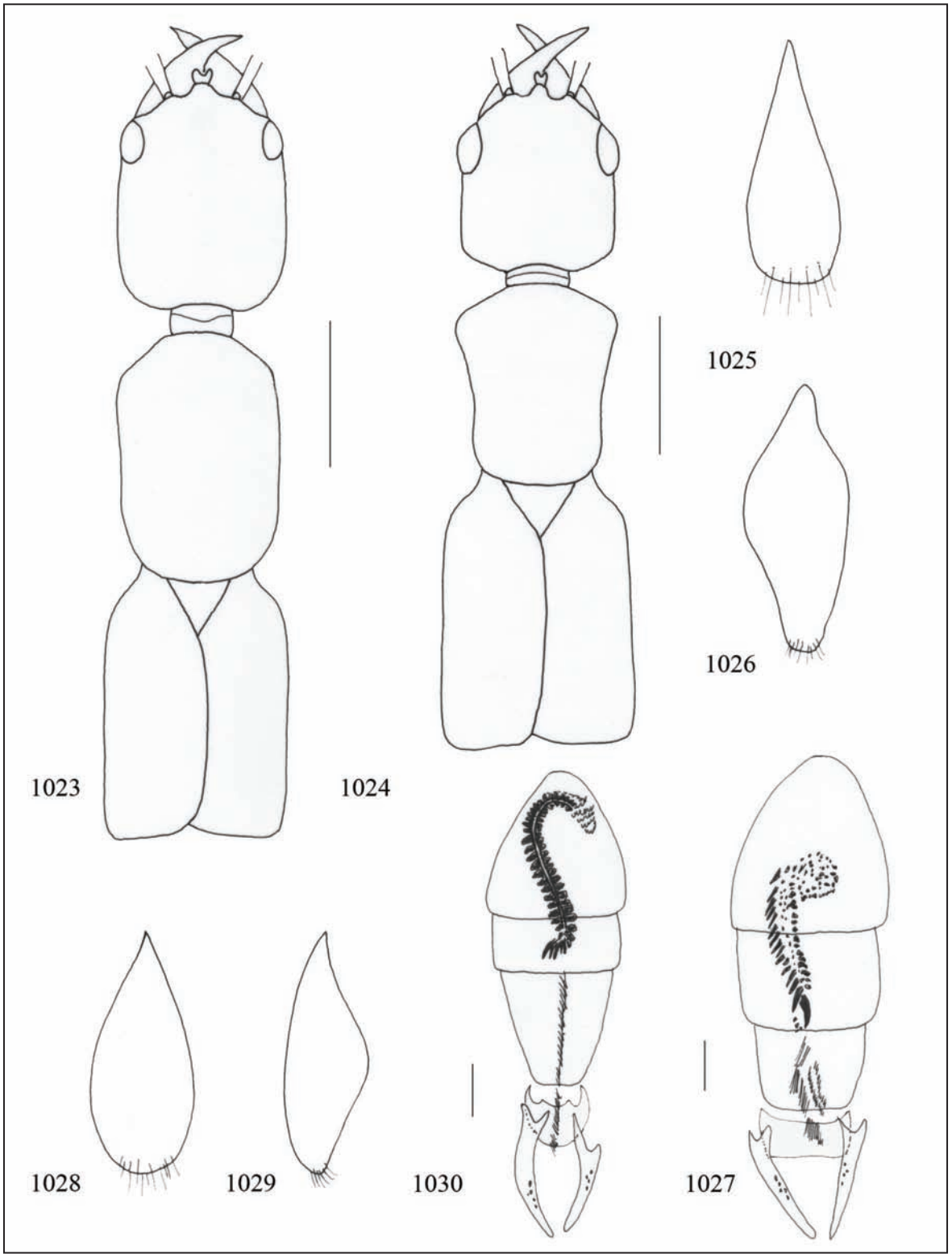
Figures 1001–1005. Fig. 101: distribution of the genus *Metocinus* in Tanzania. *M. lucidus* sub-group: *M. kidundanus* n. sp. (filled square); *M. afroalpestris* sub-group: *M. confectus* n. sp. (open square); *M. meridionalis* sub-group: *M. kinola* n. sp. (filled triangle), *M. lupanganus* n. sp. (open triangle), *M. tanzanicus* n. sp. (oper circle), *M. urungwa* n. sp. (rhombus), *M. anomalus* n. sp. (star); *M. allardi* sub-group: *M. usaensis* n. sp. (inverted filled triangle), *M. uluguru* n. sp. (open star), *M. bilemniscatus* n. sp. (filled circle), *M. muzambai* n. sp. (arrow), *M. minutissimus* n. sp. (inverted arrow). Fig. 1002: distribution of the genus *Metocinus* in Rwanda. *M. lucidus* sub-group: *M. microps* n. sp. (filled square); *M. sabinyo* sub-group: *M. afromontanus* n. sp. (open square), *M. reductus* (open star), *M. leleupi* n. sp. (inverted filled triangle); *M. meridionalis* sub-group: *M. rwandensis* n. sp. (filled circle), *M. bambusianus* n. sp. (rhombus). Figs. 1003–1005. Tergite and sternite of the male genital segment, aedeagus of *M. bambusianus* n. sp.



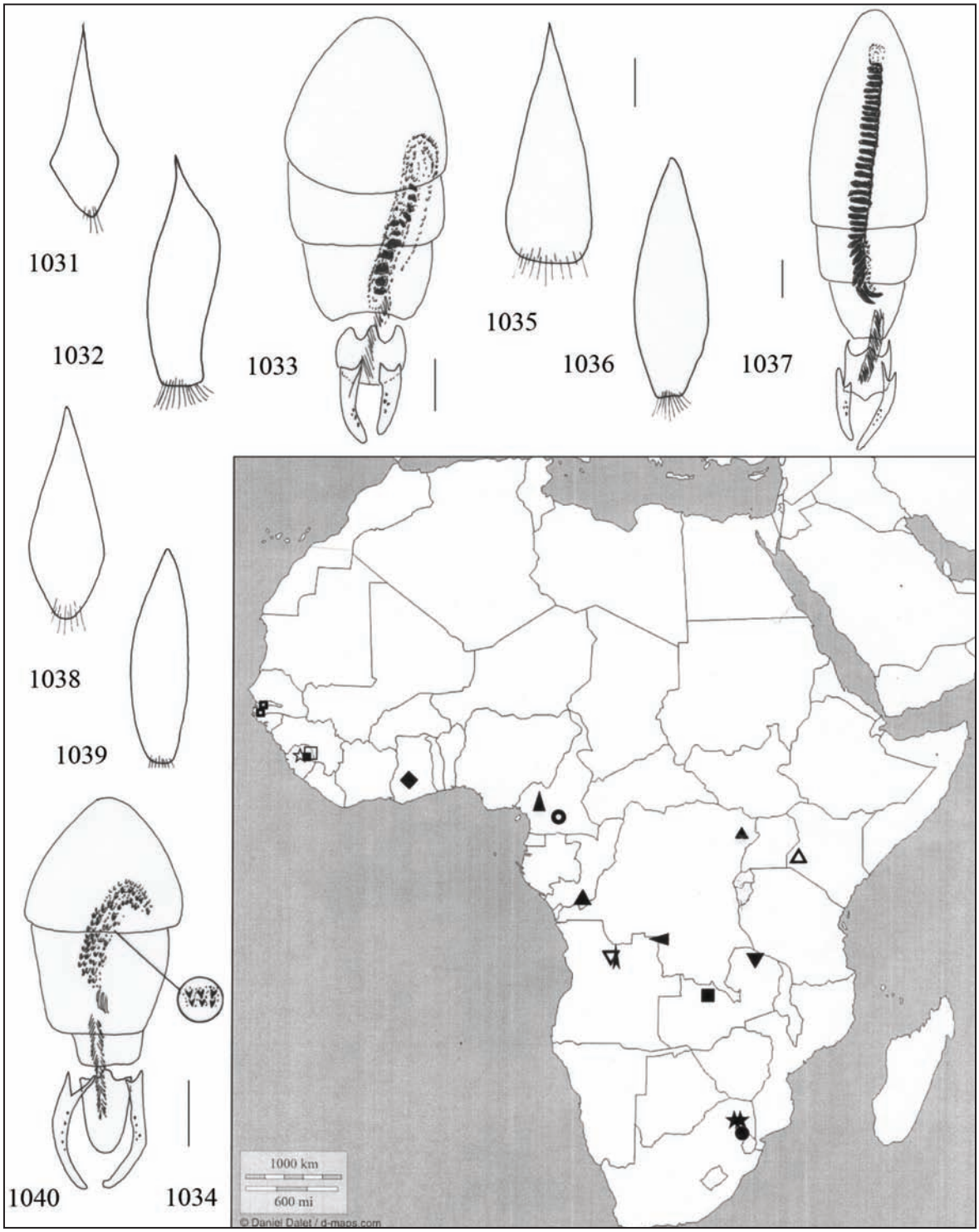
Figures 1006–1013. Tergite and sternite of the male genital segment, aedeagus of *Metocinus rufulus* n. sp. (Figs. 1006–1008), and *M. kinola* n. sp. (Figs. 1009–1011) (bar scale: 0.1 mm). Head and pronotum of *M. kinola* n. sp. (Fig. 1012a) and *M. tanzanicus* (Fig. 1012b). Fore-body of *Metocinus lupanganus* n. sp. (Fig. 1013) (bar scale: 0.5 mm).



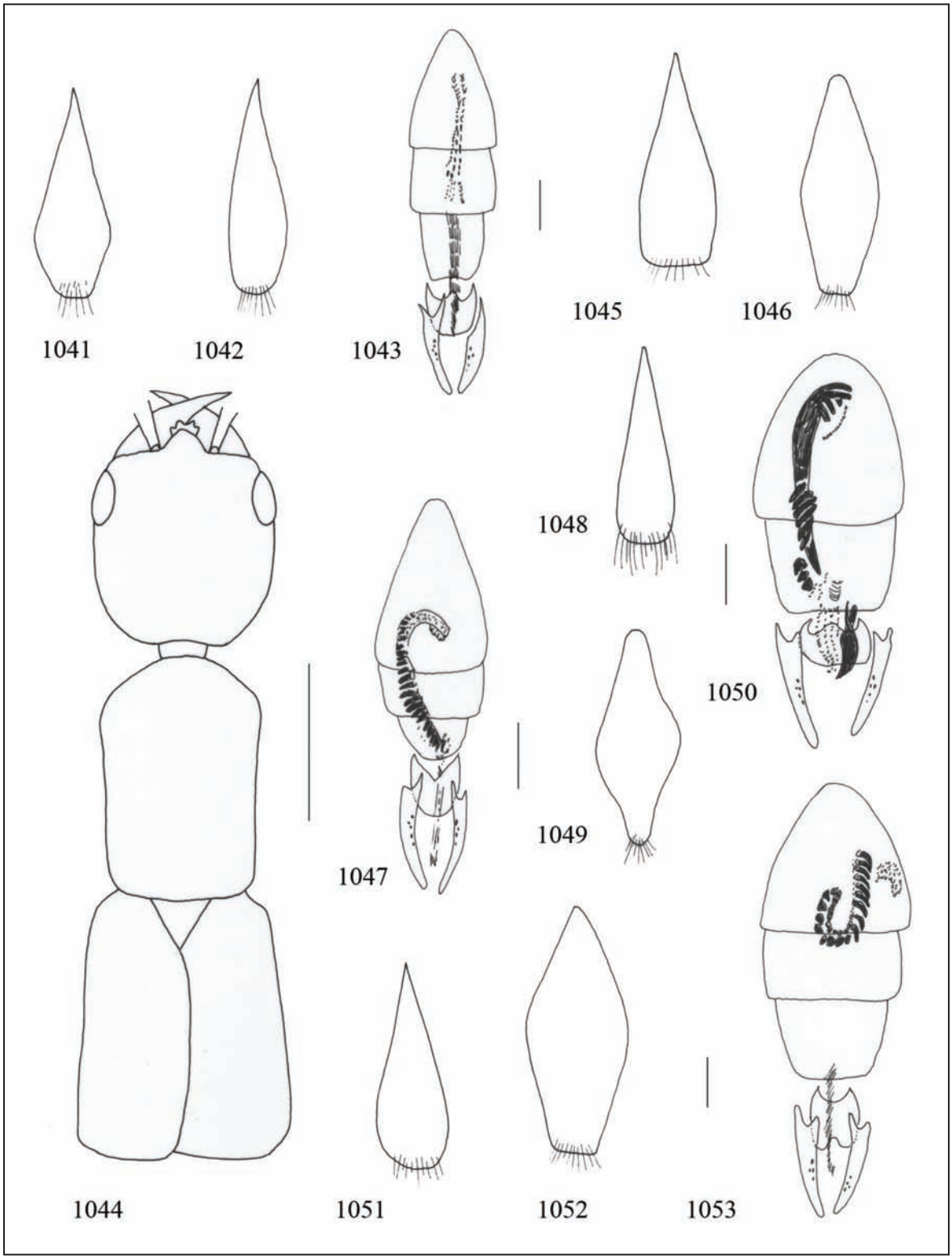
Figures 1014–1022. Tergite and sternite of the male genital segment, aedeagus of *Metocinus lupanganus* n. sp. (Figs. 1014–1016), tergite and sternite of the male genital segment, aedeagus of *M. bafut* n. sp. (Figs. 1017–1019), and tergite and sternite of the male genital segment, aedeagus of *M. meridionalis* n. sp. (Figs. 1020–1022) (bar scale: 0.1 mm).



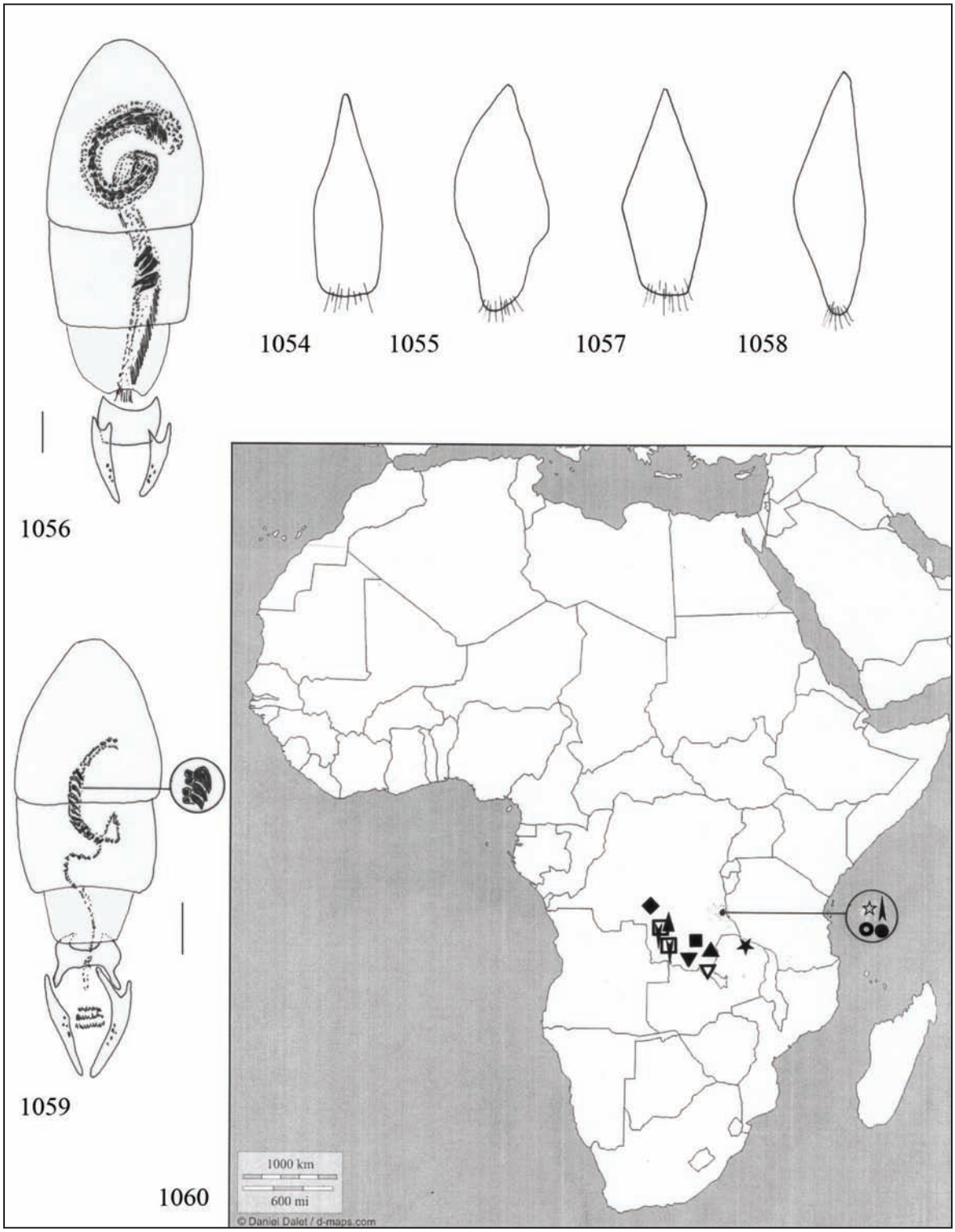
Figures 1023–1030. Fore-body of *Metocinus meridionalis* n. sp. (Fig. 1023) and *M. longelytratus* n. sp. (Fig. 1024) (bar scale: 0.5 mm). Tergite and sternite of the male genital segment, aedeagus of *M. rwandensis* n. sp. (Figs. 1025–1027), tergite and sternite of the male genital segment, aedeagus of*M. elegantissimus* n. sp. (Figs. 1028–1030).



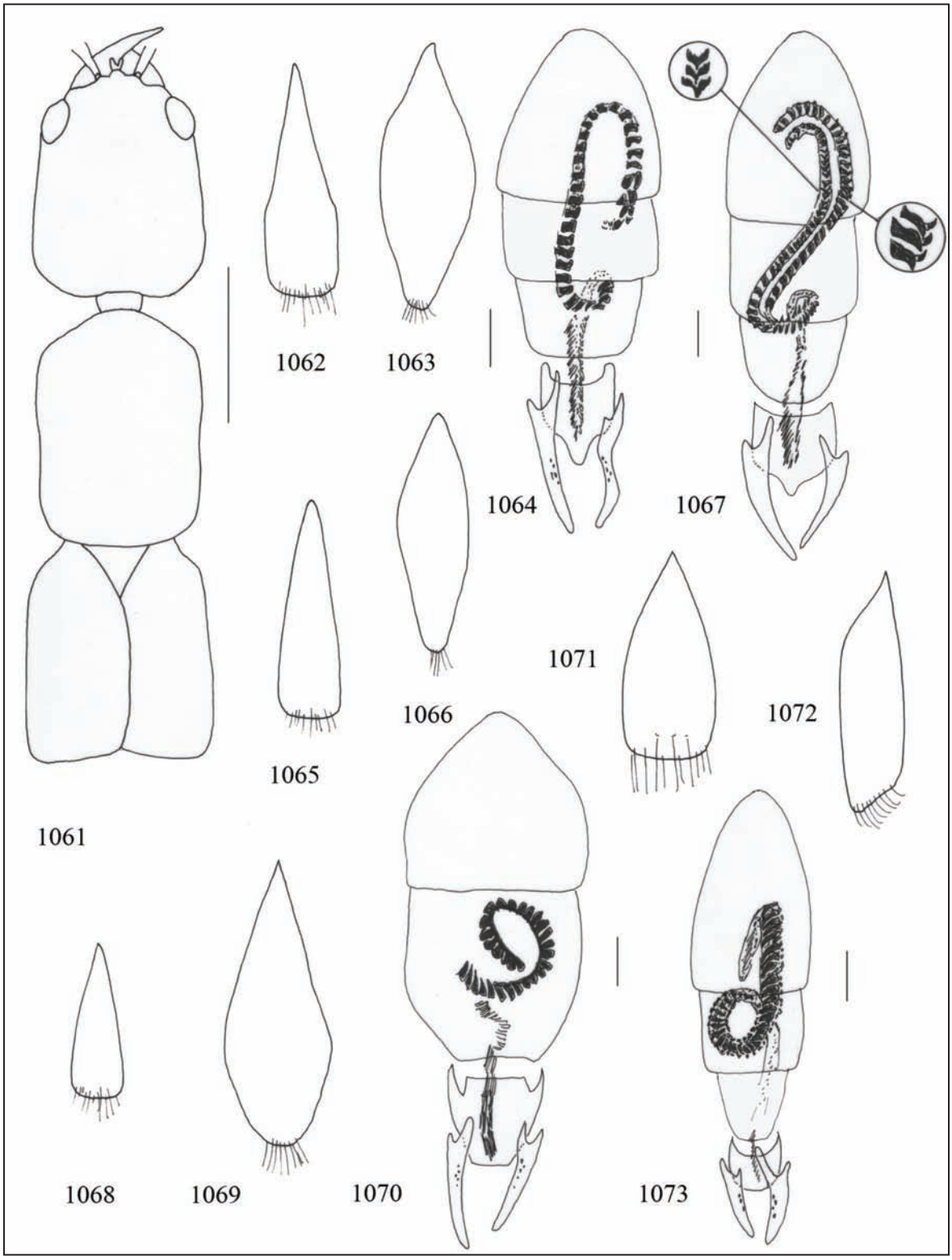
Figures 1031–1040. *Metocinus longelytratus* n. sp. (Figs. 1031–1033) (bar scale: 0.1 mm). Fig. 1034: distribution of the genus *Metocinus*: *M. lucidus* sub-group: *M. blukwa* n. sp. (small filled triangle); *M. meridionalis* sub-group: *M. meridionalis* n. sp. (filled star), *M. bafut* n. sp. (long filled triangle), *M. buye* n. sp. (turning left triangle), *M. longelytratus* n. sp. (filled circle), "*M. cianferonii* n. sp. (filled triangle); *M. allardi* sub-group: *M. zambianus* n. sp. (filled square), *M. ocliferius* n. sp. (open circle), *M. illaetabilis* n. sp. (open triangle), *M. bobiri* n. sp. (rhombus); *M. dissimilis* sub-group: *M. lomaensis* n. sp. (small filled square), *M. rhodesianus* n. sp. (inverted filled triangle), *M. leonensis* n. sp. (open star), *M. denkalensis* n. sp. (big open square), *M. gambicus* n. sp. (small open square), *M. fulvus* n. sp. (inverted open triangle), *M. angolanus* n. sp. (arrow). Figs. 1035–1040. Tergite and sternite of the male genital segment, aedeagus of *M. tanzanicus* n. sp. (Figs. 1035–1037), *M. urungwa* n. sp. (Figs. 1038–1040).



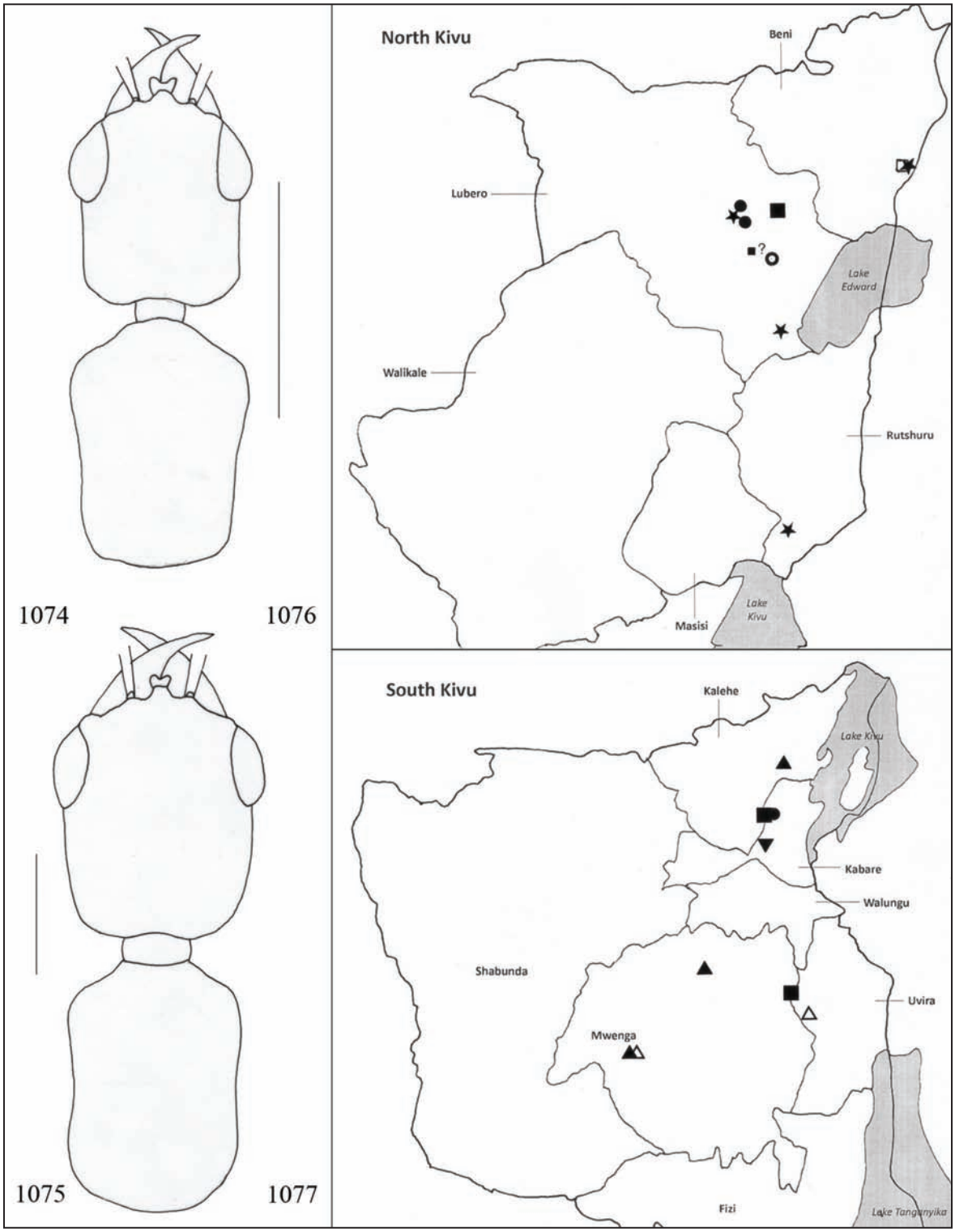
Figures 1041–1053. Tergite and sternite of the male genital segment, aedeagus of *Metocinus buye* n. sp. (Figs. 1041–1043) (bar scale: 0.1 mm). *Metocinus dissimilis* n. sp.: fore-body (bar scale: 0.5 mm) (Fig. 1044), tergite and sternite of the male genital segment, aedeagus (Figs. 1045–1047). Tergite and sternite of the male genital segment, aedeagus of *M. cianferonii* n. sp. (Figs. 1048–1050) (bar scale: 0.1 mm), and of *M. usaensis* n. sp. (Figs. 1051–1053).



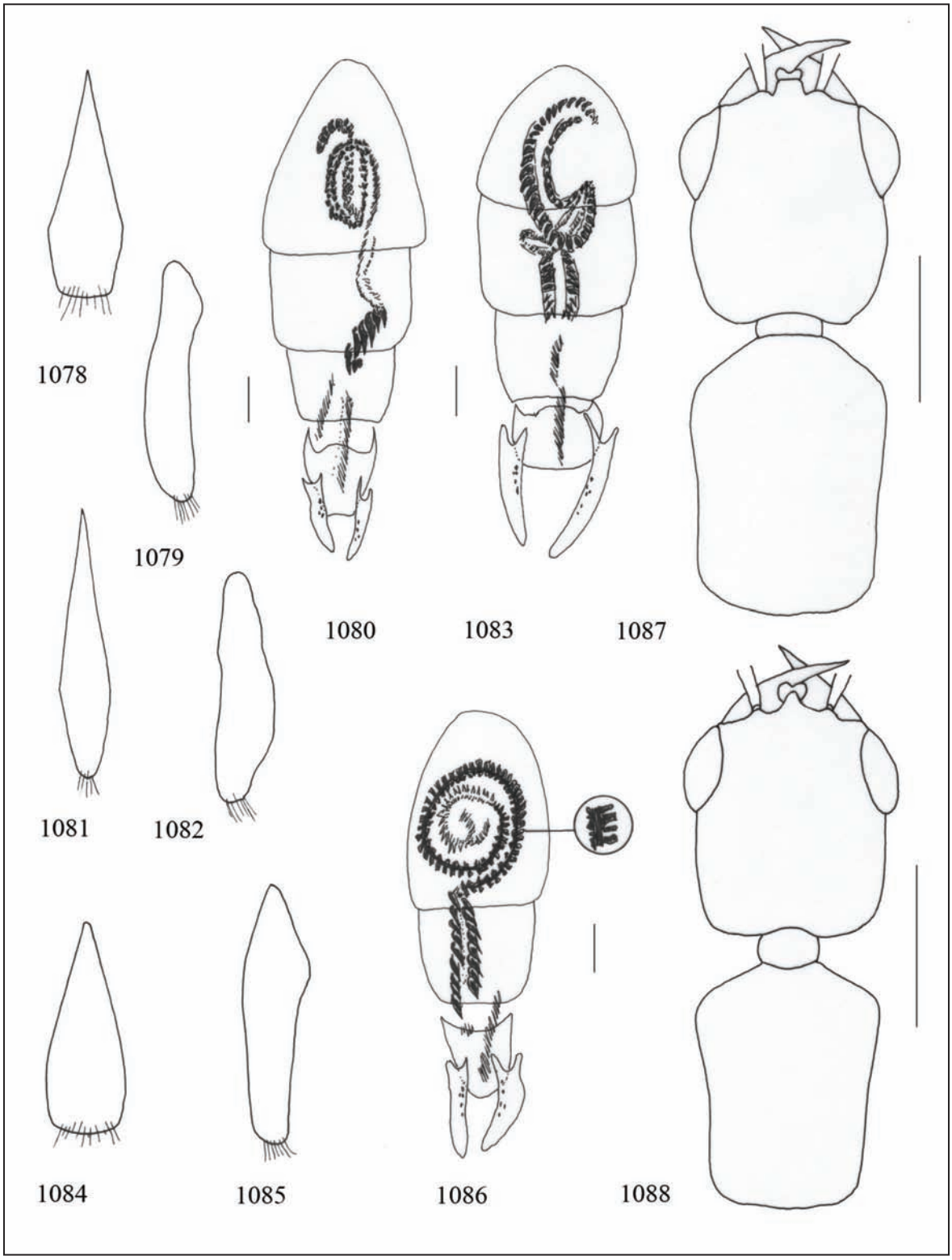
Figures 1054–1060. *Metocinus aethiops* (Figs. 1054–1056), and *M. lusinganus* n. sp. (Figs. 1057–1059) (bar scale: 0.1 mm). Fig. 1060: distribution of the genus *Metocinus*: *M. allardi* sub-group: *M. aethiops* (filled star), *M. lusinganus* n. sp. (filled square), *M. allardi* n. sp. (open square), *M. arboreus* n. sp. (filled triangle), *M. punctatus* n. sp. (filled circle); *M. dissimilis* sub-group: *M. pseudokiymbi* n. sp. (open star), *M. dissimilis* n. sp. (arrow), *M. levasseuri* n. sp. (inverted arrow), *M. cavernicolus* n. sp. (open triangle), *M. muye* n. sp. (rhombus), *M. katanganus* n. sp. (inverted filled triangle), *M. kiymbi* n. sp. (open circle), *M. kolwezi* n. sp. (long filled triangle).



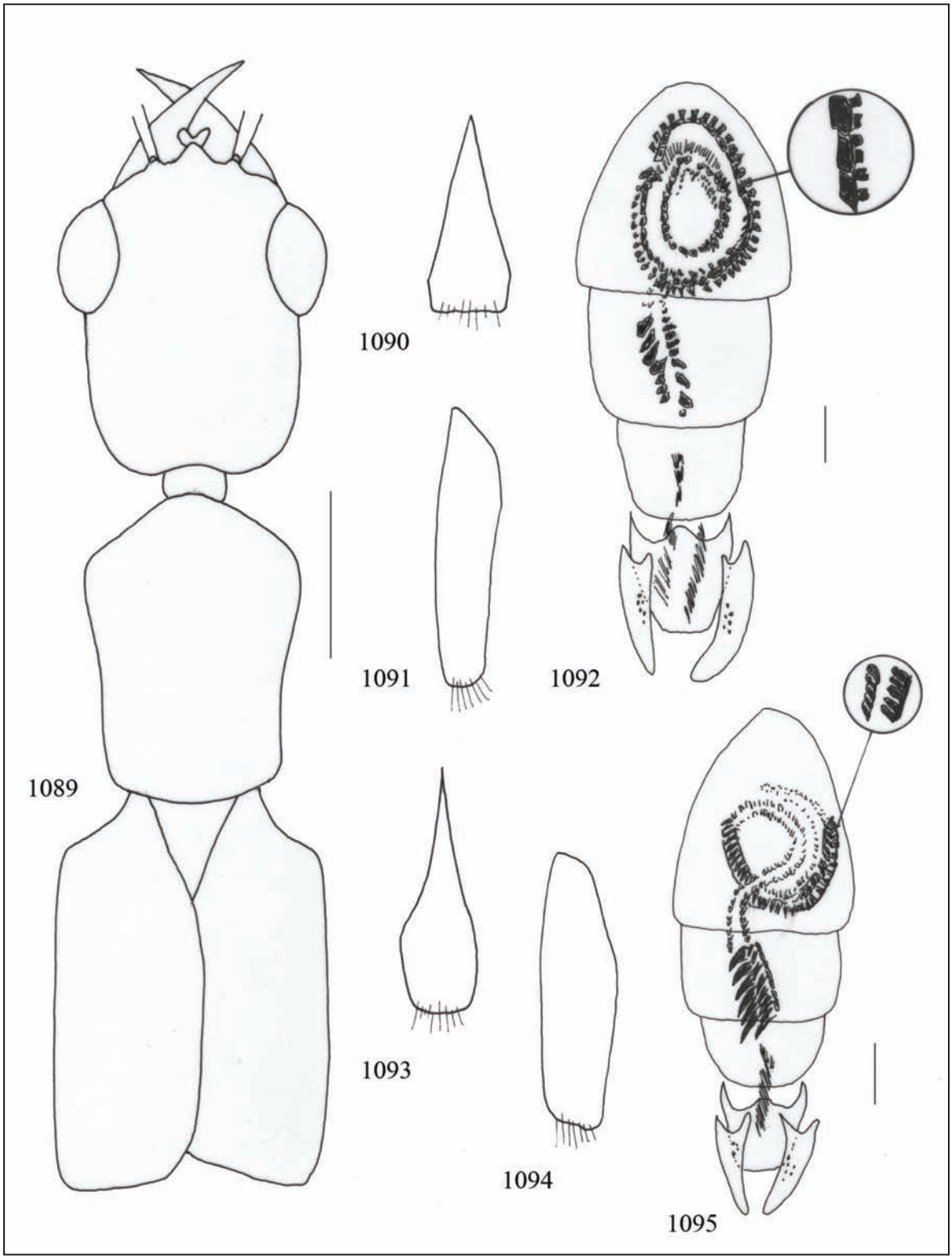
Figures 1061–1073. Fore-body of *Metocinus lusinganus* n. sp. (bar scale: 0.5 mm) (Fig. 1061). Tergite and sternite of the male genital segment, aedeagus of *M. uluguru* n. sp. (Figs. 1062–1064), *M. bilemniscatus* n. sp. (Figs. 1065–1067), and *M. allardi* n. sp. (Figs. 1068–1070) (bar scale: 0.1 mm). Tergite and sternite of the male genital segment, aedeagus of *M. arboreus* n. sp. (Figs. 1071–1073) (bar scale: 0.1 mm).



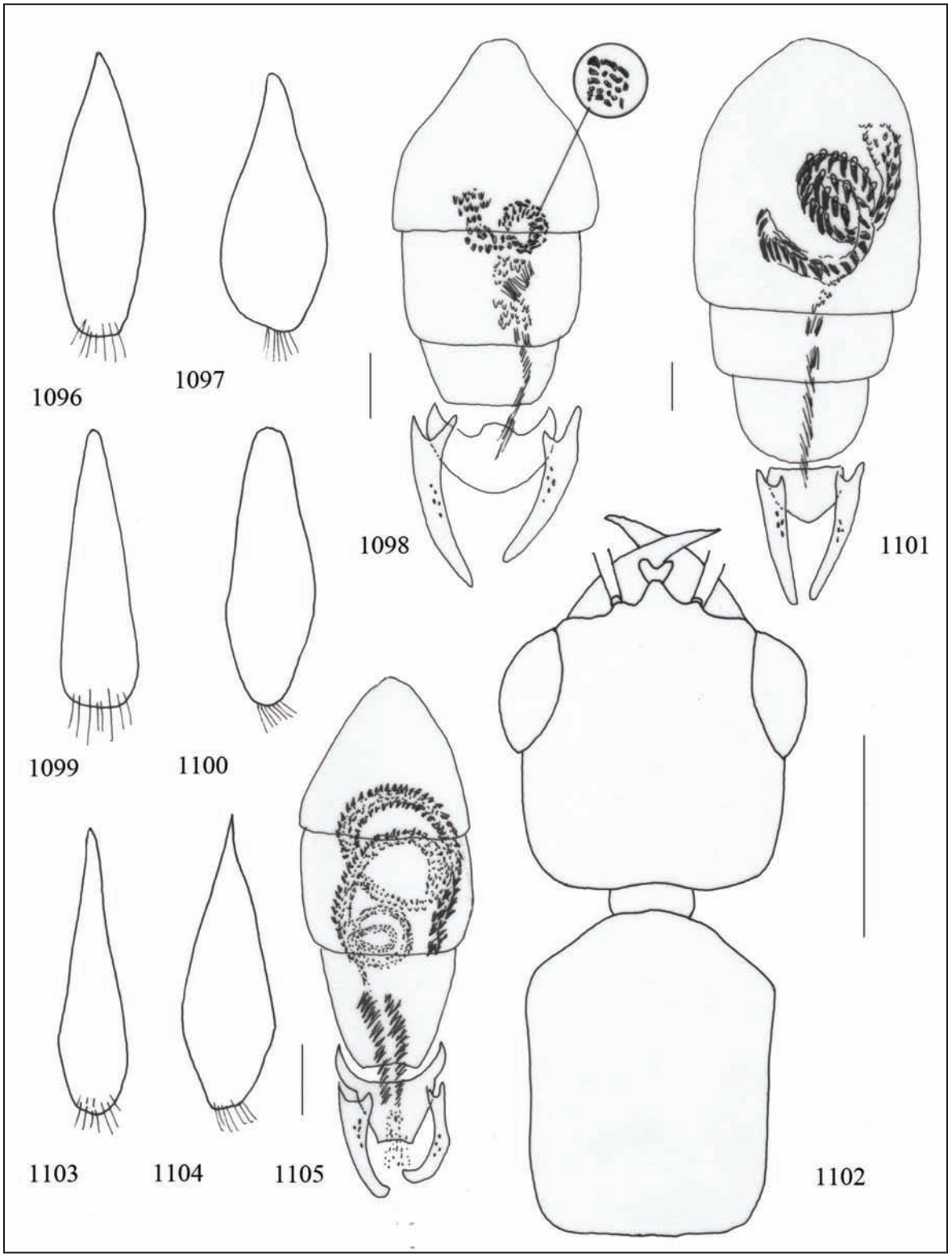
Figures 1074–1077. Fore body (bar scale: 0.5 mm) of *Metocinus pseudocephalicus* n. sp. (Fig. 1074) and *M. cephalicus* n. sp. (Fig. 1075). Fig. 1076: distribution of the genus *M. aethiops*-group in North Kivu (Congo): *M. meridionalis* sub-group: *M. bambusianus* n. sp. (big square), *M. rufulus* n. sp. (small square), *M. rwandensis* n. sp. (filled circle); *M. allardi* sub-group: *M. aethiops* (filled star), *M. brunneus* n. sp. (open square), *M. fluviatilis* n. sp. (open circle). Fig. 1077: distribution of the genus *M. aethiops*-group in South Kivu (Congo): *M. meridionalis* sub-group: *M. bambusianus* n. sp. (square), *M. rwandensis* n. sp. (circle); *M. allardi* sub-group: *M. pseudocephalicus* n. sp. (filled triangle), *M. cephalicus* n. sp. (inverted filled triangle), *M. lungwe* n. sp. (open triangle).



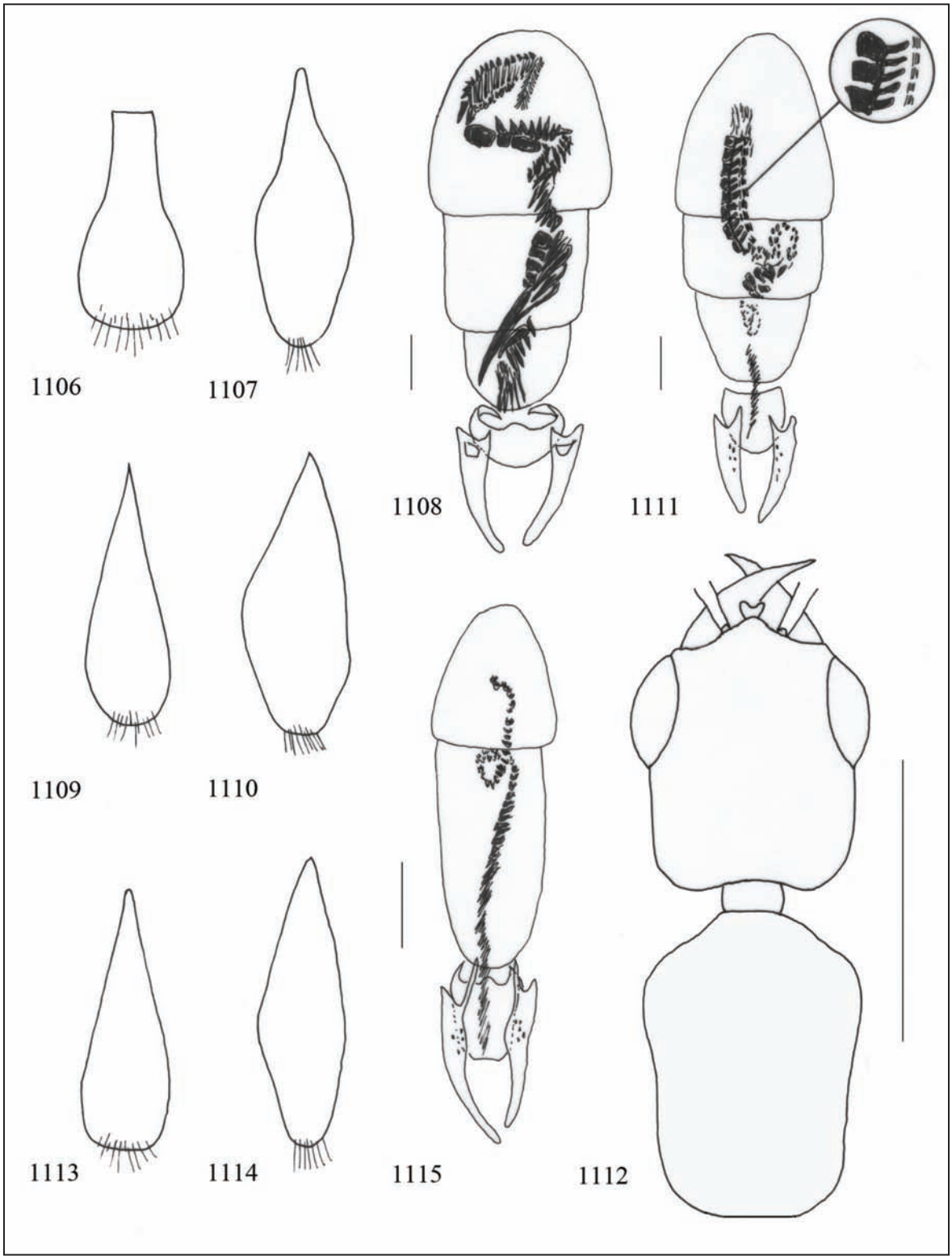
Figures 1078–1088. Tergite and sternite of the male genital segment, aedeagus of *Metocinus pseucocephalicus* sp. n. (Figs. 1078–1080), *M. cephalicus* n. sp. (Figs. 1081–1083), and *M. fluviatilis* n. sp. (Figs. 1084–1086) (bar scale: 0.1 mm). Figs 1087, 1088. Fore-body of *M. fluviatilis* n. sp. (Fig. 1087) and *M. lungwe* n. sp. (Fig. 1088) (bar scale: 0.5 mm).



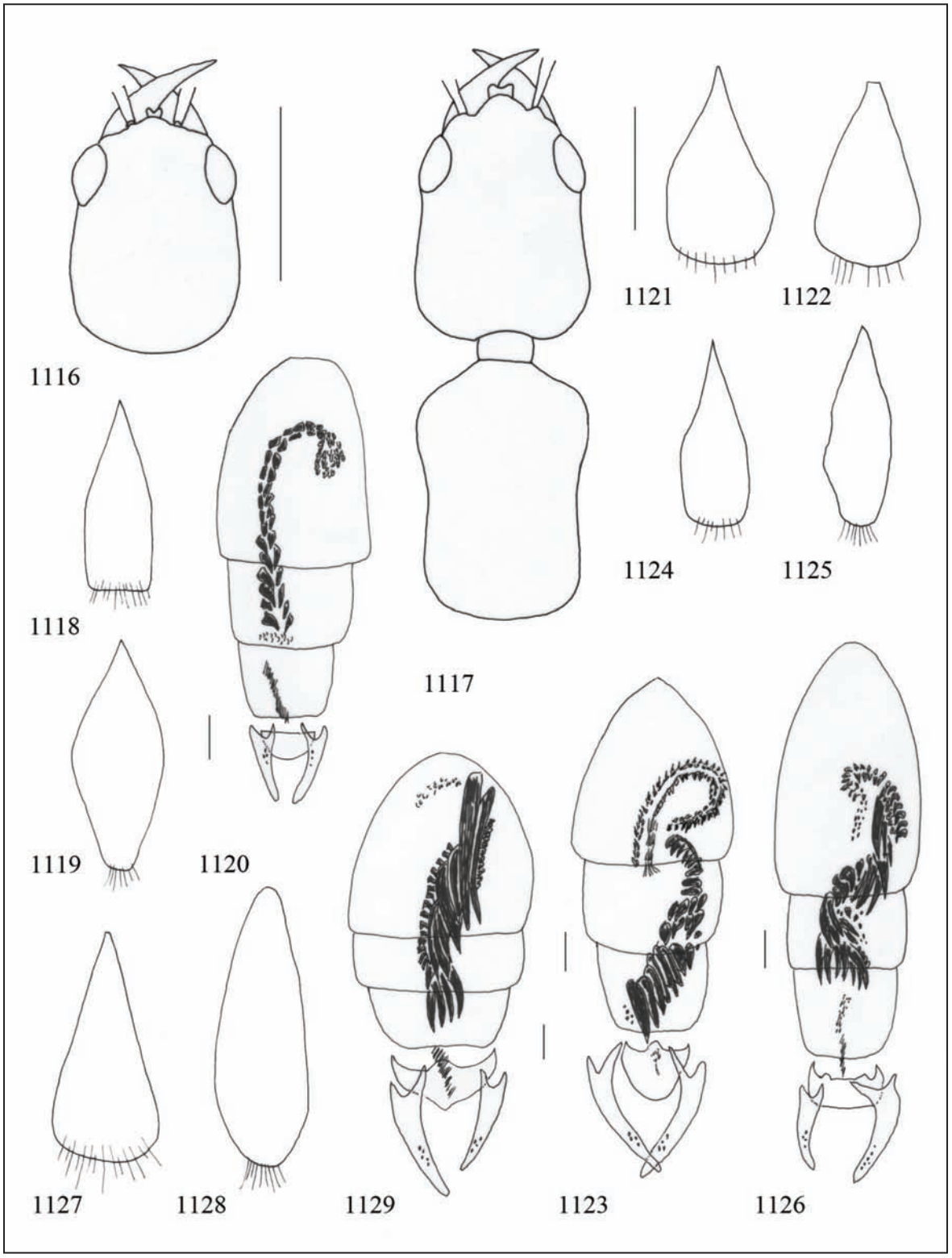
Figures 1089–1095. *Metocinus zambianus* n. sp.: fore-body (bar scale: 0.5 mm) (Fig. 1089), tergite and sternite of the male genital segment, aedeagus (Figs. 1090–1092). Tergite and sternite of the male genital segment, aedeagus of *M. lungwe* n. sp. (Figs. 1093–1095) (bar scale: 0.1 mm).



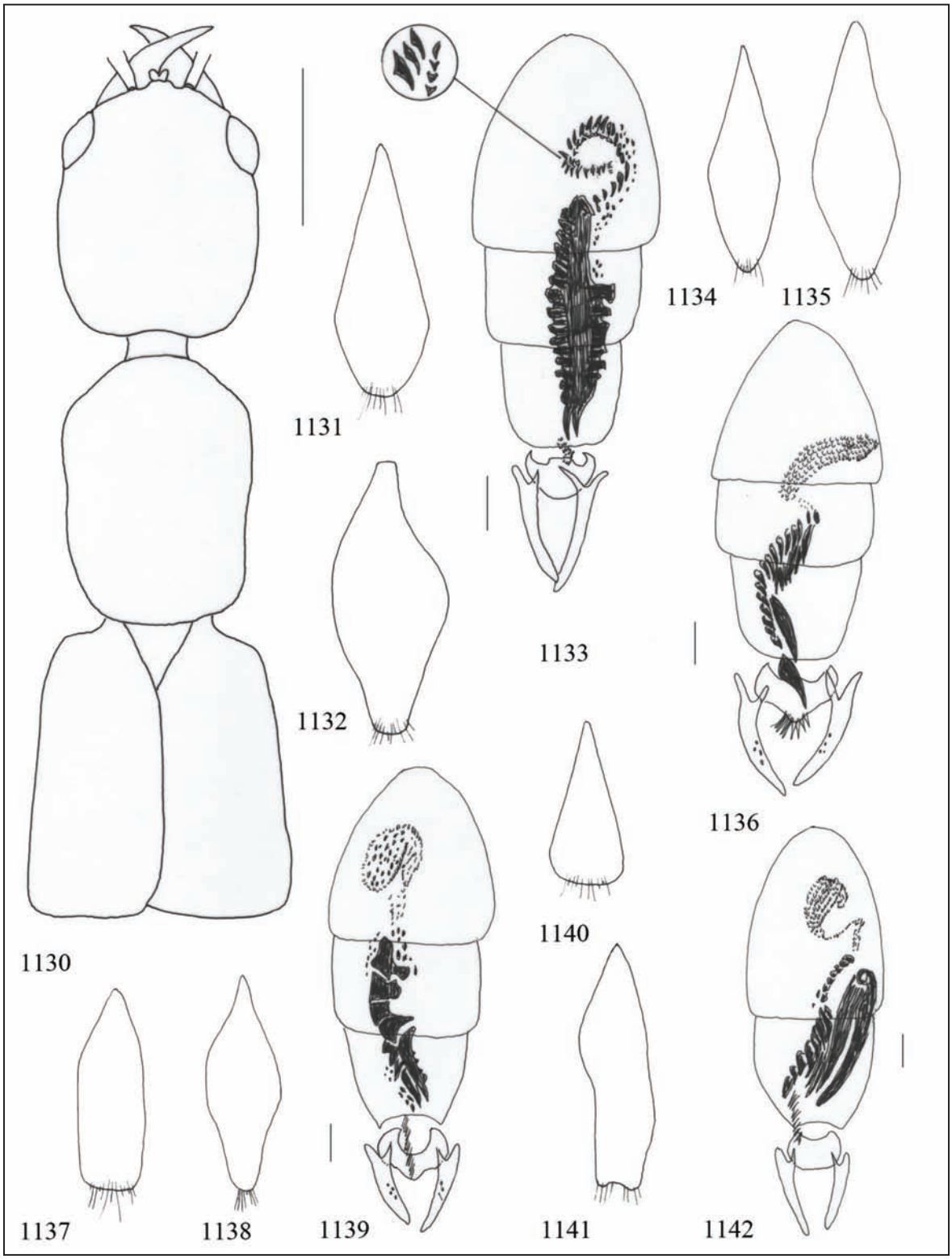
Figures 1096–1105. Tergite and sternite of the male genital segment, aedeagus of *Metocinus brunneus* n. sp. (Figs. 1096–1098) and *M. muzambai* n. sp. (Figs. 1099–1101); head and pronotum (bar scale: 0.5 mm) (Fig. 1102), tergite and sternite of the male genital segment, aedeagus of *M. ocliferius* n. sp. (Figs. 1103–1105) (bar scale: 0.1 mm).



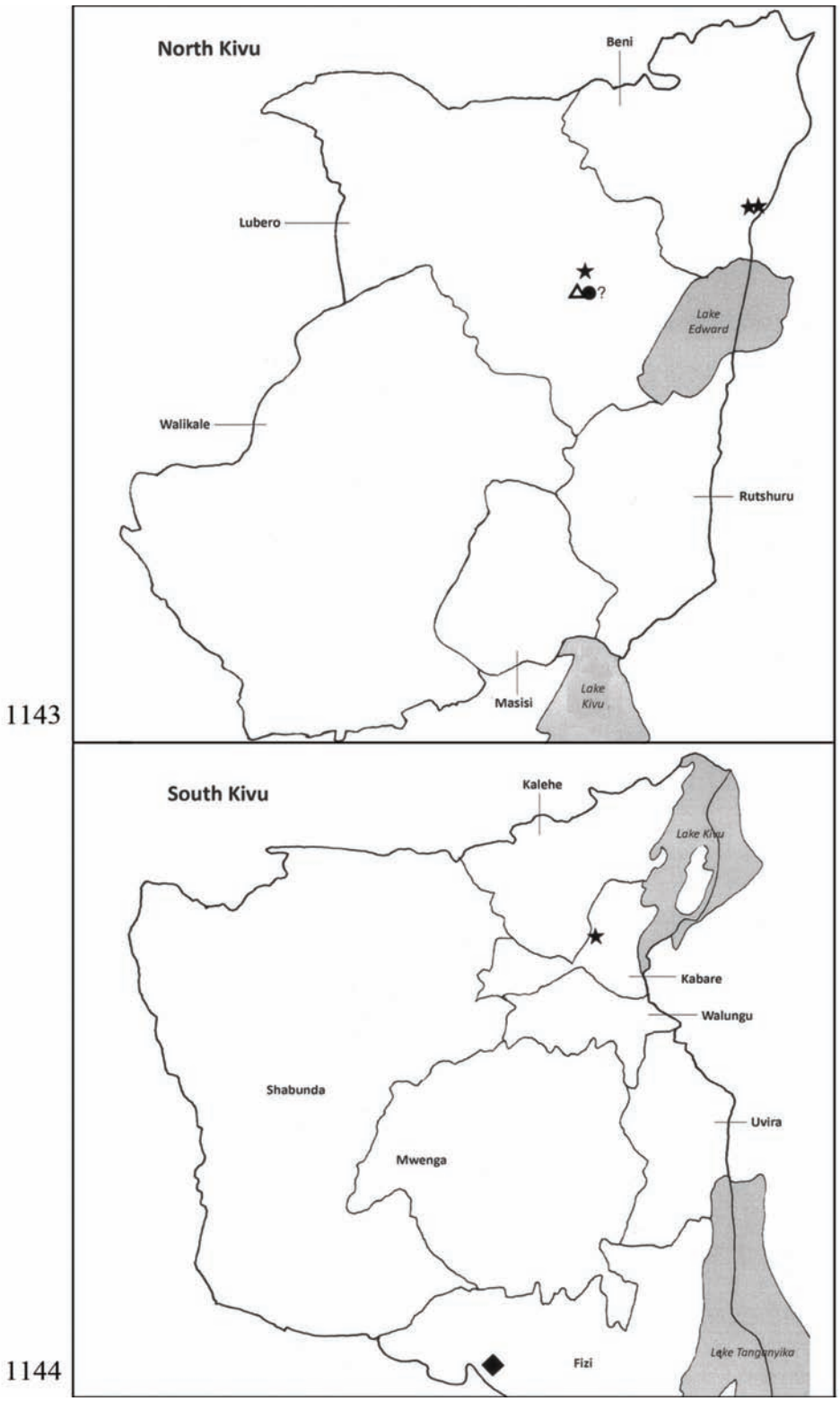
Figures 1106–1115. Tergite and sternite of the male genital segment, aedeagus of *M. illaetabilis* n. sp. (Figs. 1106–1108) and *M. punctatus* n. sp. (Figs. 1109–1111). Head and pronotum (bar scale: 0.5 mm) (Fig. 1112), tergite and sternite of the male genital segment, aedeagus of *M. minutissimus* n. sp. (Figs. 1113–1115) (bar scale: 0.1 mm).



Figures 1116–1129. Head (bar scale: 0.5 mm) of *Metocinus sparsepunctatus* (Fig. 1116). Head and pronotum (bar scale: 0.5 mm) (Fig. 1117), tergite and sternite of the male genital segment, aedeagus of *M. bobiri* n. sp. (Figs. 1118–1120) (bar scale: 0.1 mm). Tergite and sternite of the male genital segment, aedeagus of *M. sclerophyllicus* n. sp. (Figs. 1121–1123), *M. pseudokiymbi* n. sp. (1124-1126), and *M. lomaensis* n. sp. (1127–1129) (bar scale: 0.1 mm).



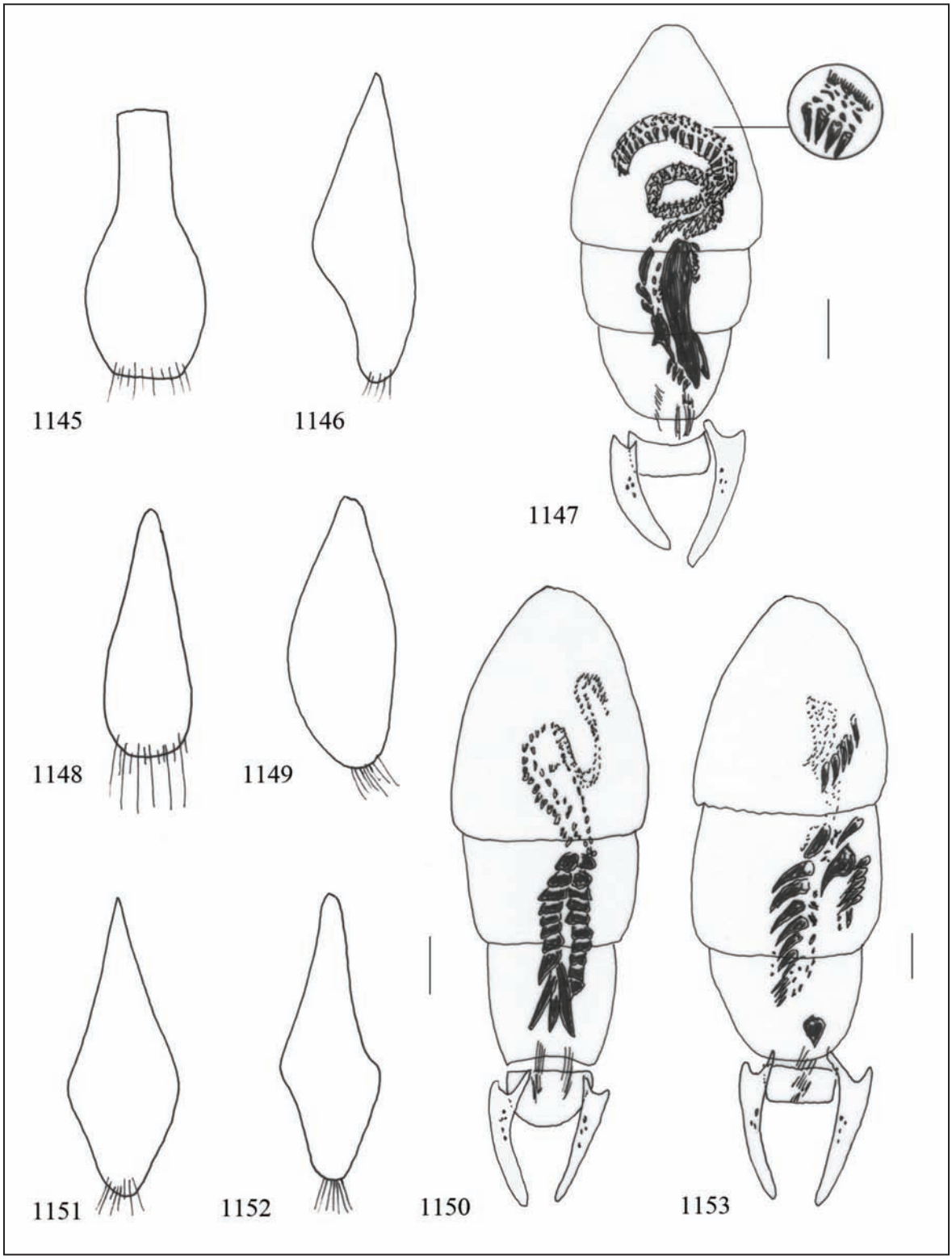
Figures 1130–1142. *Metocinus dissimilis* n. sp.: fore-body (bar scale: 0.5 mm) (Fig. 1130), tergite and sternite of the male genital segment, aedeagus (Figs. 1131–1133) (bar scale: 0.1 mm). Tergite and sternite of the male genital segment, aedeagus of *M. levasseuri* n. sp. (1134–1136), *M. cavernicolus* n. sp. (Figs. 1137–1139), and *M. rhodesianus* n. sp. (Figs. 1140–1142) (bar scale: 0.1 mm).



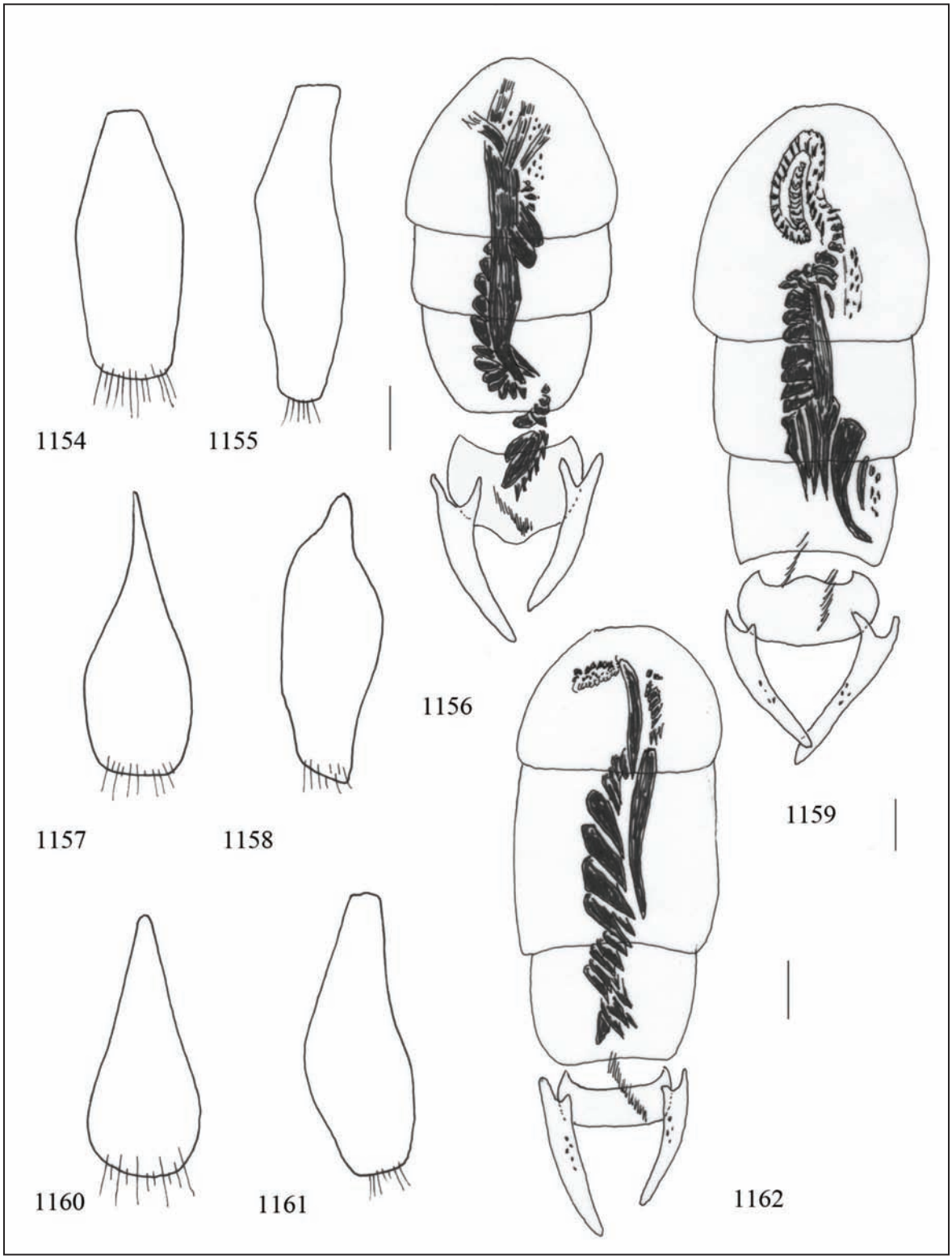
1143

1144

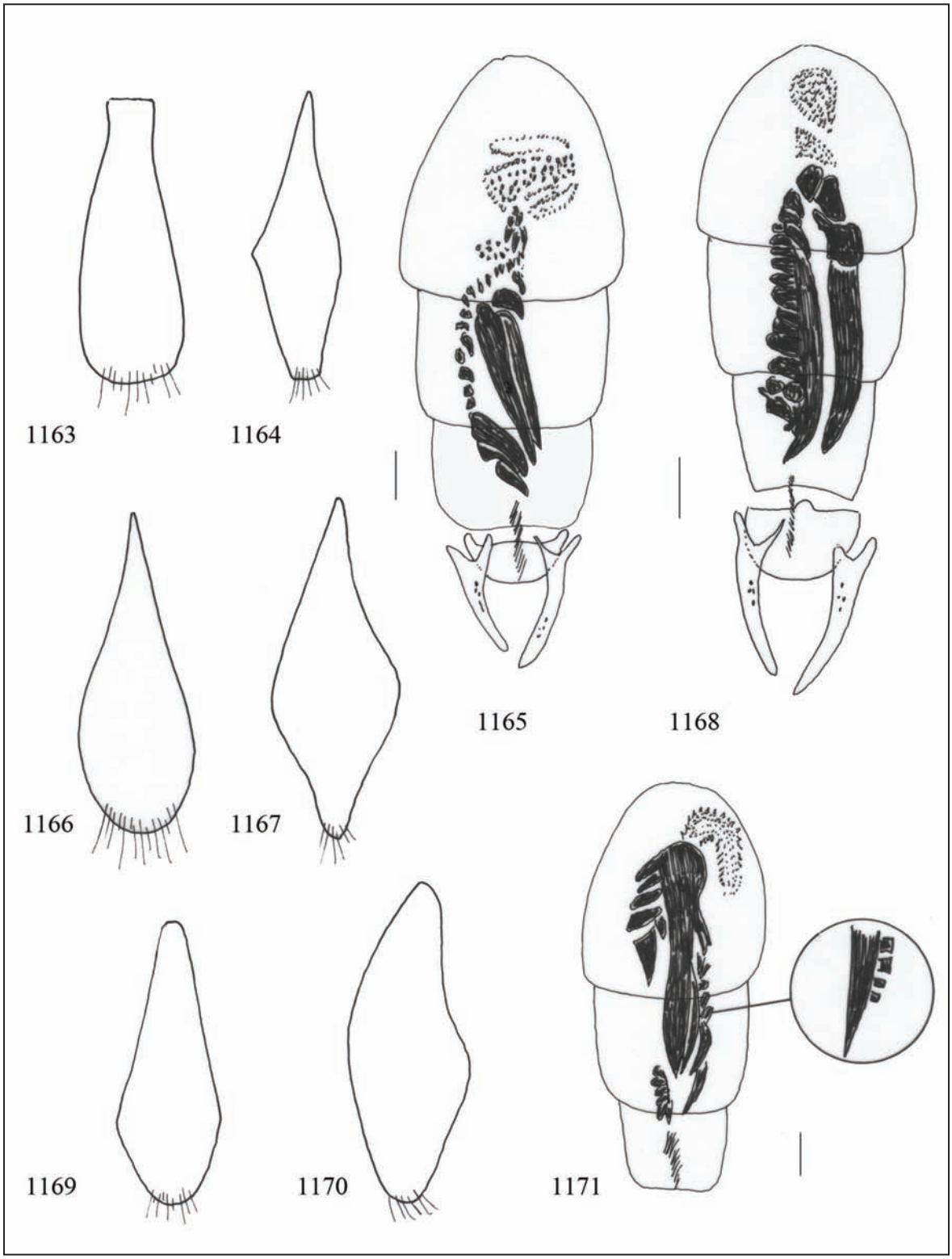
Figures 1143, 1144. Fig. 1143: distribution of *Metocinus dissimilis* sub-group in North Kivu (Congo): *M. dissimilis* n. sp. (star), *M. fimbriatus* n. sp. (circle), *M. visiki* (open triangle). Fig. 1144: distribution of *M. dissimilis* sub-group in South Kivu (Congo): *M. dissimilis* n. sp. (star), *M. sclerophyllicus* n. sp. (rhombus).



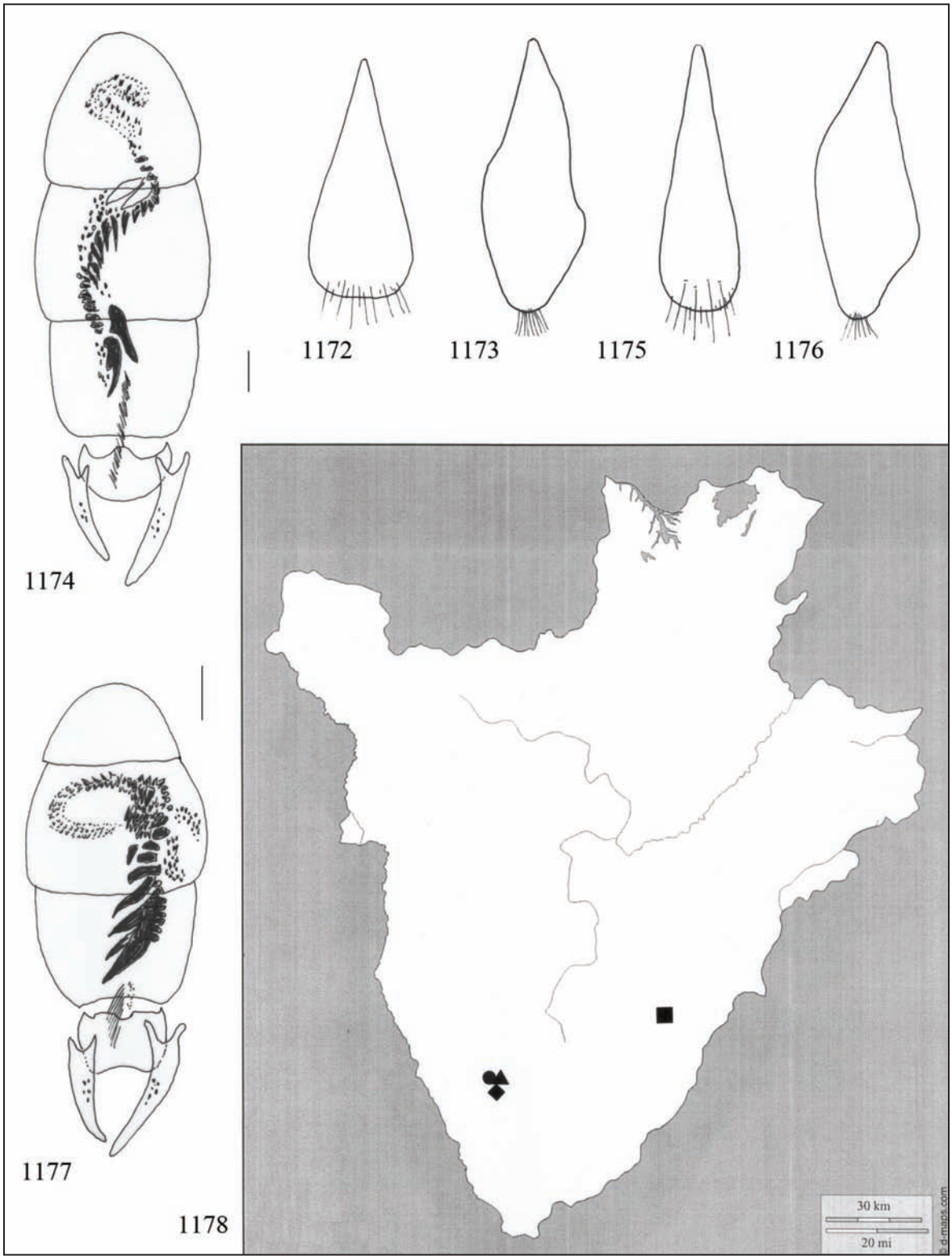
Figures 1145–1153. Tergite and sternite of the male genital segment, aedeagus of *Metocinus muye* n. sp. (Figs. 1145–1147), tergite and sternite of the male genital segment, aedeagus of *M. fimbriatus* n. sp. (Figs. 1148–1150), tergite and sternite of the male genital segment, aedeagus of *M. katanganus* n. sp. (Figs. 1151–1153) (bar scale: 0.1 mm).



Figures 1154–1162. Tergite and sternite of the male genital segment, aedeagus of *M. leonensis* n. sp. (Figs. 1154–1156), tergite and sternite of the male genital segment, aedeagus of *M. kiymbi* n. sp. (Figs. 1157–1159), tergite and sternite of the male genital segment, aedeagus of *M. denkalensis* n. sp. (Figs. 1160–1162) (bar scale: 0.1 mm).



Figs 1163–1171. Tergite and sternite of the male genital segment, aedeagus of *Metocinus gambicus* n. sp. (Figs. 1163–1165), tergite and sternite of the male genital segment, aedeagus of *M. fulvus* n. sp. (Figs. 1166–1168), tergite and sternite of the male genital segment, aedeagus of *M. kolwezi* n. sp. (Figs. 1169–1171) (bar scale: 0.1 mm).



Figures 1172–1178. Tergite and sternite of the male genital segment, aedeagus of *Metocinus angolanus* n. sp. (Figs. 1172–1174) and *M. visiki* n. sp. (Figs. 1175–1177) (bar scale: 0.1 mm). Fig. 1178: distribution of the genus *Metocinus* in Burundi: *M. meridionalis* sub-group: *M. rwandensis* n. sp. (cicle), *M. elegantissimus* n. sp. (square); *M. sabinyo* sub-group: *M. reductus* (triangle); *M. dissimilis* sub-group: *M. sclerophyllicus* n. sp. (rhombus).

21. Genus ***Endymathis*** n. gen. (Figs. 1179–1203, 1722)

TYPE SPECIES. *Endymathis namibiana* n. sp.

DESCRIPTION. Shape of body (Fig. 1179) similar to *Metocinus* from which it is easily distinguishable by the following characters: second antennomere very long (Fig. 1183), gular sutures widely separate (Fig. 1184), upper lateral line of pronotum meeting the lower line, antesternal plate entire, maxillary and labial palpi with the last segments subulate (Figs. 1180, 1181), labrum with a small incision in the middle (Fig, 1182); eyes flat, medium-sized or large and displaced toward the middle of head, neck narrow; anterior tarsi dilated (Fig. 1185); aedeagus oval with very slender short parameres and inner sac ribbon-like, sometimes coiled around itself several times (Fig. 1192). Female genital segment as in figure 1186.

ETYMOLOGY. Fictitious name. Gender feminine.

DISTRIBUTION. Ethiopia, Gabon, Congo, Burundi, Tanzania, Namibia (Fig. 1203).

KEY TO THE SPECIES

1. Body larger, 4–4.5 mm long.....2
-. Body less than 4 mm long.....3

2. Head longer, more sub-rectangular, with sub-rectilinear sides; eyes smaller; pronotum and elytra narrower; body about 4.5 mm long. Aedeagus as in figure 1189; inner sac very long and narrow, coiled several times, covered with fine scales. Burundi, Congo, Namibia...1. *E. namibiana* n. sp.
-. Head shorter, oval, with slightly rounded sides; eyes larger; pronotum and elytra wider; body about 4 mm long. Aedeagus as in figure 1192; inner sac wider and shorter, coiled fewer times, covered with denser and larger scales. Ethiopia.....2. *E. aethiopica* n. sp.

3. Body 3.2 mm long.....4
-. Body less than 3 mm long.....5

4. Head subquadrate, shorter, with narrowly rounded posterior angles; eyes larger; pronotum shorter, with more oblique anterior margins; elytra a little wider; body yellowish, 3.2 mm long. Aedeagus small, narrow and long (Fig. 1195); inner sac not visible. Gabon.....3. *E. belingana* n. sp.
-. Head sub-rectangular, longer; eyes smaller; pronotum longer, with less oblique anterior margins; elytra narrower, longer, sub-rectangular; body reddish brown with black head, 3.2 mm long. Aedeagus sub-spherical, larger (Fig. 1198); inner sac round, with proximal margin covered with dense scales. Congo.....4. *E. arenicola* n. sp.
-. Head oblong; eyes small, a little protruberent; pronotum long, a little narrower than head, with sinuate sides; elytra shorter, as long as pronotum; body brown, 3 mm long. Aedeagus very small, oblong, with longer parameres (Fig. 1201); inner sac tubular, short, narrow, with some scales in the proximal portion. Congo.....5. *E. tenuis*

5. Body 2.7 mm long, yellowish; head narrower anteriorly; eyes smaller; pronotum as long as head. Male unknown. Swaziland.....6. *E. minuta* n. sp.
-. Body 2.4 mm long, reddish brown with lighter elytra; head less narrowed anteriorly, subquadrate; eyes larger; pronotum longer than head. Aedeagus proportionately large, oval, with very slender parameres (Fig. 1202); inner sac not visible. Gabon.....7. *E. gabonica*

1. ***Endymathis namibiana*** n. sp.

EXAMINED MATERIAL. Holotype male: Namibia, E Caprivi, Katima Mulilo, 17.29S, 24.17E, M. Uhlig, 3–8.III.1992 (MNB); paratypes: same data, 2 females (MNB), 1 male (cB); same data, Kavango, Buffalo Camp, Kavango-Ufervegetation gesiebt, 18.09S, 21.42E, M. Uhlig, 28.II.1992, 2 females (MNB), 2 males (cB); same data, Popa Falls N. P., banks of Okavango, 18° 17' 16"S, 21° 34' 5"E, M. and B. Uhlig, 30.III.1999, 1 male (MNB), 1 male (cB); Burundi, Bujambura, H. Mühle, 3.V.1985, 2 males, 1 female (MNB), 1 male, 1 female (cB); Congo, Kivu, Terr. Uvira, Mulenge, 1650 m, N. Leleup, V.1951, 1 male (MRAC); same data, Uvira, 800 m, N. Leleup, V.1951, 1 male (cB); Zambia, Musosa, 980 m, H. Bomans, XI.1953, 1 male (MRAC), 1 male (cB); Zimbabwe, Victoria Falls, Zambezi N. P., 17.53S, 25.49E, M. Uhlig, 11–12.XII.1993, 1 ex. (MNB), 1 ex. (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.2 mm; from anterior margin of head to posterior margin of elytra: 2.3 mm. Light reddish brown. Fully winged, shiny. Head sub-rectangular, a little dilated anteriorly, with scarcely rounded sides. Eyes large but not protruberent. Surface of head with traces of transverse micro-striation and large, deep and sparse punctures. Pronotum longer than and as wide as head, a little dilated anteriorly, with very oblique anterior margins, scarcely rounded anterior angles; dorsal series of 10, 11 punctures and lateral series of 6, 7 punctures, all the punctures large, evident. Elytra large, much longer and wider than pronotum, with marked humeral angles. Surface with fine, dense punctures arranged in numerous series. Tergite and sternite of the male genital segment as in figures 1187, 1188. Aedeagus small (Figs. 1189, 1775), 0.7 mm long, oval, with short slender parameres; inner sac ribbon-like, coiled many times, covered with triangular scales and with a distal series of small fine spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described. Length of body: 4–4.5 mm; from anterior margin of head to posterior margin of elytra: 2–2.5 mm.

ETYMOLOGY. The specific epithet refers to Namibia.

DISTRIBUTION. Congo, Burundi, Zambia, Zimbabwe, Namibia (Fig. 1203).

BIONOMICS. Specimens were collected in "humus *vest. for. scleroph.*" and "*à la lumière*".

2. ***Endymathis aethiopica*** n. sp.

EXAMINED MATERIAL. Holotype male: Ethiopia, Gojeb, 65 km SW Jimma, 1450 m, R. Clarke, 17.VII.1971 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4 mm; from anterior margin of head to posterior margin of elytra: 1.9 mm. Dark reddish brown with head almost black; antennae and legs yellowish. Fully winged. Head and pronotum with traces of more or less transverse micro-striation. Head sub-rectangular, with scarcely rounded sides and narrowly rounded posterior angles. Eyes medium-sized, not protruberent. Surface of head with fine, not sparse punctures, except on a median band. Pronotum a little longer than head, dilated anteriorly where it is as wide as head; dorsal series of 10, 11 punctures and lateral series of 5, 6 punctures, with other punctures between the two series. Elytra long, sub-rectangular, longer and wider than pronotum, with rounded humeral angles. Surface with fine and dense punctures arranged in numerous series. Tergite and sternite of the male genital segment as in figures 1190, 1191. Aedeagus small (Fig. 1192), 0.55 mm long, oval, with a narrow, sub-parallel distal structure on which are inserted the short slender parameres; inner sac ribbon-like, coiled many times, covered with scales and with two distal series of fine small spines.

ETYMOLOGY. The specific epithet refers to Ethiopia.

DISTRIBUTION. Ethiopia (Fig. 1203).

REMARKS. Female unknown.

3. ***Endymathis belingana*** n. sp.

EXAMINED MATERIAL. Holotype male: Gabon, Belinga, H. Coiffait, 5.III.1963 (IRSNB); paratypes: same data, 3 females (IRSNB), 2 females (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 3.2 mm; from anterior margin of head to posterior margin of elytra: 1.6 mm. Fully winged. Body entirely yellowish. Similar to *E. gabonica* but larger and paler. Eyes a little protruberent. Tergite and sternite of the male genital segment (partially damaged) as in figures 1193, 1194. Aedeagus very small (Fig. 1195), 0.37 mm long, narrow and long, with short parameres, wider in the proximal portion; inner sac not visible.

ETYMOLOGY. The specific epithet refers to the type locality in Gabon.

DISTRIBUTION. The species is only known from the type locality in Gabon.

REMARKS. Female unknown. These specimens were probably confused by Coiffait with his "*Leptacinus*" *gabonicus* from the same locality and sent as a gift to the IRSNB.

4. ***Endymathis arenicola*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Brazzaville, riverside of Congo, 20 km W Brazzaville, S. Endrödy-Younga, 30.XII.1963 (MTM); paratypes: same data, 62 exx. (MTM), 29 exx. (cB); same data, 25 km W Brazzaville, S. Endrödy-Younga, 25.XII.1963, 2 exx. (MTM), 2 exx. (cB).

Description of Holotype. Male. Length of body: 3.2 mm; from anterior margin of head to posterior margin of elytra: 1.8 mm. Fully winged. Body narrow and slender, uniformly light brown. Head sub-rectangular, with sub-rectilinear sides and narrowly rounded posterior angles. Eyes large but not protruberent. Surface of head with traces of transverse micro-striation and fine, sparse punctures, also on the disc. Pronotum longer than head, slightly dilated anteriorly where it is as wide as head, with very oblique anterior margins, narrowly rounded anterior angles and rectilinear sides. Surface with more or less evident transverse micro-striation; dorsal series of 11, 12 closely spaced punctures and lateral, oblique series of 8–10 irregular punctures. Elytra sub-rectangular, very long, much longer and a little wider than pronotum, not dilated posteriad, with very marked humeral angles and rectilinear and parallel sides. Surface with fine and sparse punctures arranged in several series. Abdomen with traces of transverse micro-striation and very fine and sparse punctures. Tergite and sternite of the male genital segment as in figures 1196, 1197. Aedeagus very small (Fig. 1198), 0.33 mm long, sub-rectangular, with elongate, large distal portion; parameres very narrow; inner sac sub-spherical, with very small scales and a large, sub-circular brown spine.

Variability. The paratypes have no substantial morphological differences with the holotype described.

Etymology. The specific epithet is the Latin *arenicolus -a -um* (living on sand), in reference to the habitat in which it was collected.

Distribution. The species is only known from the Congo River near Brazzaville, Rep. Congo (Fig. 1203).

Bionomics. The specimens were collected in "*shore sand*".

5. ***Endymathis tenuis*** (Cameron, 1935) comb. n.

Leptacinus tenuis - Cameron, 1935: 373; Herman, 2001a: 3686

Type Material. The British Museum of Natural History of London preserves 1 specimens labelled "*Stanleyville / 14.XII.1929 / A. Collart*", "*Paratype*" (on round label with yellow edge), "Leptacinus / tenuis *Cam. / paratype*" (handwritten by Cameron). It is a male that I choose as lectotype. This specimen have the labels "*Lectotypus* Leptacinus tenuis *Cam., Bordoni des. 2011*" and "Endymathis tenuis *(Cam.), Bordoni det. 2011*".

Description. Length of body: 3 mm; from anterior margin of head to posterior margin of elytra: 1.2 mm. Fully winged, shiny. Body brown, slender. Head oblong, scarcely widened behind. Eyes large and protruberent. Surface with sparse minute punctures, except for on a median band. Pronotum elongate, scarcely narrower than head, with sinuate sides. Surface with dorsal series of 9, 10 punctures and lateral series of 5, 6 irregular punctures, surrounded by numerous other punctures. Elytra sub-rectangular, as long as pronotum, with small shallow punctures arranged in 6, 7 series. Tergite and sternite of the male genital segment as in figures 1199, 1200. Aedeagus very small (Fig. 1201), 0.3 mm long, oval, with elongate distal portion; parameres narrow and long; inner sac short and narrow, covered with fine and sparse scales and with small proximal spinules.

Distribution. Congo (Fig. 1203).

Remarks. Another specimen with the date "*4.VII.1929*" should be in the MNHNP but I did not find it. Female unknown.

6. ***Endymathis minuta*** n. sp.

Examined Material. Holotype female: Swaziland, Ingwavuma, River vallée, N. Leleup, X.1961 (MRAC); paratypes: same data, 3 females (MRAC), 2 females (cB).

Description of Holotype. Female. Length of body: 2.7 mm; from anterior margin of head to posterior margin of elytra: 1.4 mm. Fully winged. Body small, entirely yellow. Head sub-rectangular but scarcely longer than wide, dilated posteriad, with broadly rounded posterior angles. Eyes small, not protruberent. Lateral margin of the head entirely visible. Surface of head with more or less polygonal micro-reticulation and very fine and sparse punctures. Epistoma particularly evident, slightly protruberent. Pronotum as long as and anteriorly, where is a little dilated, as wide as head, with oblique anterior margins and broadly rounded anterior angles. Surface with superficial, transverse micro-striation and fine but evident punctures, except from on a wide median band. Elytra sub-rectangular, not dilated posteriad, with sub-rectilinear and sub-

parallel sides and not very pronounced humeral angles. Surface with very fine and sparse punctures arranged in several widely spaced series. Abdomen with transverse micro-striation and fine, sparse punctation.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described. Male unknown.

ETYMOLOGY. The specific epithet is the Latin adjective *minutus -a -um* (small).

DISTRIBUTION. The species is only known from the type locality in Swaziland (Fig. 1203).

REMARKS. The species differs from *E. namibiana* n. sp. in size, colouration and shape of the body.

7. ***Endymathis gabonica*** (Coiffait, 1968) comb. n.

Leptacinus gabonicus - Coiffait, 1968: 133; Herman, 2001: 3674

TYPE MATERIAL. The Muséum national d'Histoire naturelle in Paris preserves 12 specimens including a male labelled "*Holotype*" (red label), "*Gabon, Belinga / H. Coiffait 1963*", "Leptacinus / gabonicus *n. sp. / H. Coiffait det. 1967*"; the others are females with the same labels (with different date: 6.II.1963 to 26.III.1963) with the red label "*Paratype*".

DESCRIPTION. Length of body: 2.4 mm; from anterior margin of head to posterior margin of elytra: 1.5 mm. Fully winged. Head and pronotum with traces of transverse micro-striation. Body very small. Reddish brown with paler elytra. Head subquadrate, with scarcely rounded sides and narrowly rounded posterior angles. Eyes medium-sized, not protruberent. Surface of head with visible and very sparse punctures. Pronotum a little longer than head, dilated anteriorly where it is as wide as head, with oblique anterior margins and rounded anterior angles. Surface with fine and dense punctures except from on a median band. Elytra long, sub-rectangular, much longer and wider than pronotum, with marked humeral angles. Surface with visible, dense punctures arranged in several series. Tergite and sternite of the male genital segment missing. Aedeagus (Fig. 1202) very small, 0.37 mm long, narrowly oval, with characteristically short and slender parameres; inner sac not visible.

DISTRIBUTION. Gabon (Fig. 1203).

REMARKS. Six specimens were erroneously labelled "Leptacinus delicatulus *Coiff.*". Coiffait (1968) cite the species also from the locality "*Makokou*", but I have not seen specimens from this locality.

22. Genus ***Achmonia*** Bordoni, 2004 (Figs. 1204–1240, 1725–1734)

Achmonia - Bordoni, 2004a: 57; 2012: 107; 2013: 218; Janak & Bordoni, 2014: 259
Daolus - Bordoni, 2004b: 84; 2008: 60; 2009: 1867; 2010: 57; 2012: 107 (synonym of *Achmonia*)

TYPE SPECIES. *Achmonia doloc* Bordoni, 2004

DESCRIPTION. Form elongate, stout, of little or large size (Fig. 1204). Head scarcely punctate, without or with coalescent grooves; frontal grooves short or moderately long, more or less convergent posteromedially, ocular grooves very superficial. Anterior margin of frons between antennal insertion extended into short and very wide, apically truncate process, limited on each side by rounded emargination, and convex or slightly impressed dorsally. Eyes small, temples considerably longer than length of eyes seen above, evenly rounded, posterior angles rounded or acute. Antennae geniculate, moderately short, antennal insertions separated from each other by distance about equal to distance separating each insertion from anteromedian margin of eye; first segment long, thickened towards apex, equal in length to at least four following segments combined; second segment shorter than third, outer segments more or less transverse. Labrum short, transverse, more or less distinctly quadrilobate, with long and strong apical setae. Mandible strong, lateral furrow reduced to vague impression at base. Maxillary palpi moderately long, segment 3 shorter than segment 2, segment 4 longer and somewhat narrower than segment 3, subacute apically. Labial palpi moderately long, last segment at least as long as segment 2. Mentum short, transverse, pentagonal. Gula very short, gular sutures contiguous. Pronotum without dorsal rows of punctures; lateral puncture situated far from lateral margin; upper line of pronotal hypomera not turning downwards until close to anterior angle and not joining lower line. Prosternum elevated medially, with or without short median carina posteriorly, inter-

coxal process minute and short, triangular; epimera present. Mesosternum very short, transverse, widely separating middle coxae. Metasternum very long. Elytra overlapping at suture. Legs moderately long; protarsus simple (not dilated) in either sex, first four segments gradually becoming shorter, last segment about as long as three preceding segments combined; protibia with numerous strong spines on outer margin; mesotibia strongly spinose, with apical and subapical ctenidium; first segment of mesotarsus and metatarsus about equally long as second, last segment about as long as three preceeding segments combined; metatibia spinose on outer margin, with apical and subapical ctenidium. For all these characters cf. Janak & Bordoni (2014). Tergite and sternite of the male genital segment as in figures 1221, 1222. Aedeagus with symetrical parameres (Figs. 1208, 1240).

Distribution. This genus was confused with *Thyreocephalus* and occurs in some regions mixed with it. *Achmonia* has been hitherto represented by eight following species occuring in China, Oriental, and Australian regions: *A. sondaica* (Bernhauer, 1915) (Malaysia, Java) (= *A. doloc* Bordoni, 2004); *A. eppelsheimi* (Bernhauer & Schubert, 1914) (NE India, Nepal, Sikkim, Bhutan) (= *A. hromadkai* Bordoni, 2004); *A. gestroi* (Fauvel, 1895) (Burma, Thailand); *A. solodovnikovi* Bordoni, 2012 (Laos); *A. nigra* Bordoni, 2009 (China: Zhejiang); *A. shibatai* Bordoni, 2010 (Taiwan); *A. wogwog* Bordoni, 2005 (Australia); *A. cyanoptera* (Erichson, 1839) (Australia) (Bordoni, 2012). In Africa this genus occurs in central and southern regions (Figs. 1238, 1239).

In Africa the genus can be divided in two distinct species groups, the first composed by species having the head with setiferous postocular punctures (*A. flavomarginata* group) and the second composed by species lacking postocular punctures (*A. amabilis* group). Both these groups can be distinguished from other species of the genus by not carinate prosternum.

KEY TO THE SPECIES GROUPS

1. Head with setiferous postocular punctures..... .....1. *A. flavomarginata* group
- Head without setiferous postocular punctures .....2. *A. amabilis* group

1. *Achmonia flavomarginata* group

Medium size species (total length 9.5–14 mm, length of forebody < 7.5 mm), head with setiferous postocular punctures, labrum with moderately prominent internal lobes, aedeagus with smaller parameres, less than half as long as median lobe, male visible sternite 6 with transverse delimited proximal area.

KEY TO THE SPECIES

1. Head and pronotum with distinct microstriation. 12.5 mm. Aedeagus (Fig. 1208). Eritrea.....1. *A. knirschi*
- Head and pronotum without microstriation.....2

2. Temples with deep grove extended from tooth in posterior angle near to eye and similar wider groove above it. Congo.....2. *A. carinata*
- Temples without distinct groove..... 3

4. Apical part of aedeagus truncate (Fig. 1218). Temples outwards of postocular punctures rather densely and finely punctured (Fig. 1214). D. R. Congo.....3. *A. kapangana*
- Apical part of aedeagus pointed (Figures 1228). Temples outwards of postocular punctures smooth or at most with a few punctures (Figs. 1224–1234).....4

4. Surface among setiferous postocular punctures with fine punctures (Fig. 1219). Apical part of aedeagus short and wide (Fig. 1223). D.R. Congo.....4. *A. flavomarginata*
- Surface among setiferous postocular punctures without punctures (Fig. 1224). Apical part of aedeagus long and narrow (Fig. 1228). West, Central and Southern Africa.....5. *A. simulatrix*

1. ***Achmonia knirschi*** Janak et Bordoni, 2014

Achmonia knirschi Janak & Bordoni, 2014: 263.

Type Material. The Field Museum of Natural History of Chicago preserves 1 male labelled: "*Erythraea / CNHM 1955, Karl Brancsik*".

Description. Body 12.5 mm long; length from anterior margin of head to the posterior margin of elytra: 6.5 mm. Black with red elytra, scutellum black, abdomen brownish black; antennae and legs

dark brown. Labrum as in figure 1205. Head and pronotum with transverse micro-striation and micro-punctation. Head and related punctation as in figure 1204. Scutellum very large, with deep punctation. Elytra with fine punctation, arranged in three series, one near the suture, one median and one lateral. Tergite and sternite of the male genital segment as in figures 1206, 1207. Aedeagus 1.3 mm long with apical part shaped spearhead (Fig. 1208); paramere long and narrow; inner sac more or less visible and narrow, covered with fine scales. Female unknown.

DISTRIBUTION. The species is recorded only from unspecified locality in Eritrea (Fig. 1238).

REMARKS. *Achmonia knirschi* differs from other Afrotropical species of the genus by transverse microstriation of head and pronotum and by the shape of aedeagus.

2. ***Achmonia carinata*** Janak et Bordoni, 2014 (Figs. 60–61, 69, 1725–1727)

Achmonia carinata - Janak & Bordoni, 2014: 265

TYPE MATERIAL. The Muséum Royal de l'Afrique Central of Tervuren preserves 1 male labelled "*Congo Belge, Libenge, 8.I.1948, R. Cremer-M. Neuman / R. I. Sc. Nat. Belg. I. G. 16.655*" and the paratype female labelled "*Musée du Congo, Haut-Uelé: Moto - 1923, L. Burgeon*".

DESCRIPTION. Body 10.5–11.5 mm long; length from the anterior margin of the head to the posterior margin of elytra: 5.5 mm. Brown, elytra yellowish along the suture. Head and pronotum with fine micro-punctation. Labrum as in figure 1210. Head and pronotum and related punctation as in figure 1209. Temples with deep grove extended from tooth in posterior angle near to eye and similar deep, but wider groove above it. Elytra longer than pronotum, slightly dilated posteriad and there wider than pronotum, with largely rounded humeral angles. Surface with fine and very sparse punctation, most punctures arranged in three series, one near the suture, one median and one lateral. Abdomen with transverse micro-striation and fine, not sparse punctation. Tergite and sternite of the male genital segment as in figures 1211, 1212. Aedeagus (Fig. 1213) 1.53 mm long with apical part short and wide, paramere slender; inner sac more or less visible and narrow, covered with fine scales.

DISTRIBUTION. The species is recorded from two localities in Congo (Fig. 1238).

REMARKS. *Achmonia carinata* was collected in Libenge together with externally very similar *Thyreocephalus collarti*. *Achmonia carinata* differs from other Afrotropical species of the genus by the temples with a deep grove extended from tooth in posterior angle near to the eye and by the shape of aedeagus.

3. ***Achmonia kapangana*** Janak et Bordoni, 2014

Achmonia kapangana - Janak & Bordoni, 2014: 265

TYPE MATERIAL. The Muséum Royal de l'Afrique Central of Tervuren preserves 1 male labelled "*Musée du Congo, Lulua: Kapanga, V-1934, G. Overlaet*", and 2 females paratypes labelled "*Musée du Congo, Lulua: Kapanga, I-1933, G. Overlaet*".

DESCRIPTION. Body 9.5–13 mm long; length from the anterior margin of the head to the posterior margin of elytra: 6, 7 mm. Head and pronotum black, scutellum brown, elytra yellowish to light brown, abdomen brown, antenna and legs reddish brown or brown. Head and pronotum very shiny, with micro-punctation. Labrum as in figure 1215. Head and related punctation as in figure 1214. Elytra as long as pronotum, slightly dilated posteriad and there a little wider than pronotum, with largely rounded humeral angles. Surface with fine and very sparse punctation, arranged in three series, one near the suture, one median and one lateral. Abdomen with transverse micro-striation and fine, not sparse punctation. Tergite and sternite of the male genital segment similar as in figures 1216, 1217. Aedeagus 1.3 mm long (Fig. 1218) with apical part long and narrow, truncate; inner sac more or less visible and narrow, covered with fine scales.

DISTRIBUTION. The species has been recorded only from Congo (Fig. 1238).

4. ***Achmonia flavomarginata*** (Bernhauer, 1929)

Eulissus flavomarginatus - Bernhauer, 1929: 121; Scheerpeltz, 1933: 1317; Bernhauer, 1942: 361; Cameron, 1952: 831; Herman, 2001a: 3627

A*chmonia flavomarginata* (Bernhauer) - Janak & Bordoni, 2014: 267

Type Material. The Muséum Royal de l'Afrique Central of Tervuren preserves 1 male labelled "*Type*" (orange, printed), "*Musée du Congo, Watsa à Niangara, VII–1920, L. Burgeon / R. DÉT. K 878*", and "*Lectotypus* Eulissus flavomarginatus *Bernh., Janák & Bordoni des. 2014*".

Examined Material. Congo, "*Type*" (orange, printed), "*Musée du Congo, Manyema 1918, Katanga r. Kasa, Dr. Gérard* // *R. DÉT. K 878* // Eulissus flavomarginatus *Brh., type*", 1 female (MRAC). As the locality did not correspond to the original description, the label "*nec type, J. Janák vid. 2004*" was attached to this specimen.

Cited material (not examined). Congo, Haut Uele: Watsa, Nyaouyaga; Dahomey [= Benin]: Koussokingau, Atakora, 600–700 m (Cameron, 1952, sub *Thyreocephalus*).

Description. Body 10.5–12 mm long; length from the anterior margin of the head to the posterior margin of elytra: 5.5–6 mm. Head and pronotum black, elytra yellowish or brown, scutellum and abdomen brown. Head and pronotum very shiny, with micro-punctation. Labrum as in figure 1220. Head and related punctation as in figure 1219. Elytra as long as pronotum, slightly dilated posteriad and there a little wider than pronotum, with largely rounded humeral angles. Surface with fine and very sparse punctation, arranged in three series, one near the suture, one median and one lateral. Abdomen with transverse micro-striation and fine, not sparse punctation on the sides. Tergite and sternite of the male genital segment as in figures 1221, 1222. Aedeagus 1.4 mm long (Fig. 1223) with short and large, pointed apical part; paramere long and narrow; inner sac more or less visible and narrow, covered with fine scales.

Distribution. The species is distributed in Congo (Fig. 1238).

5. ***Achmonia simulatrix*** Janak et Bordoni, 2014 (Figs. 64, 65, 1728, 1729)

Achmonia simulator - Janak & Bordoni, 2014: 267

Type Material. The Muséum Royal de l'Afrique Central of Tervuren preserves the holotype male, labelled "*Musée du Congo, Uele-Itimbiri Dingila, 6-X-1932, J. Vrydagh*". The paratypes are preserved in the following collections: Kamerun, Joko, L. Colin, VIII.1911, 1 male (cJ); Joko, Kamerun, Heyne, Berlin W, 1 female (MNB); Kamerun, Joko, 1 female (MFNB); Cameroon, Jacum, L. Colin, VI.1911, 1 female (MNB); Cameroon, Umg Jos/Vos, V. Assing, 5.XI–2.XII.1984, 1 male, 1 female (cA), 1 female (cB); Central African Republic, Uamgebiet, Bosum [= Bozoum], S. Tessmann, 1–10.IV.1914, 1 male (cB); Guinea-Bissau, Bolama, L. Fea, VI–XII.1899, 1 male (cB); Zambia NC, Mkushi env. E, Snížek and Tichý, 16-18.XII.2004, 1 female (cJ); Zambia NW, 27 km N Kasempa, Snížek and Tichý, 10.XII.2004, 1 female (cJ), Zambia, Central. prov., 30 km S Kapiri Mposhi, 1150 m, M. Bednařík, 6.XII.2009, 1 male (cJ).

Description. Body 10.5–14 mm long; length from anterior margin of head to the posterior margin of elytra: 5.5–7.5 mm. Black, elytra brownish with yellowish spots near humeral angles and posterior margin; abdomen brownish black with genital segment yellow; antennae and legs brown. Head and pronotum with micro-punctation. Labrum as in figure 1225. Head slightly to distinctly widened posteriad, related punctation as in figure 1224. Elytra as long as pronotum, posteriad dilated and there wider than pronotum. Surface with fine punctation, arranged in three series, one near the suture, one median and one lateral; some punctures with long and light setae. Abdomen with transverse micro-striation and fine, not sparse punctation on the sides. Tergite and sternite of the male genital segment as in figures 1226, 1227. Aedeagus 1.05–1.15 mm long (Fig. 1228) with apical part long and narrow, pointed; paramere long and slender; inner sac very narrow, covered with fine and sparse scales.

Distribution. The new species is recorded from Congo, Cameroon, Central African Republic, Guinea Bissau and Zambia (Fig. 1238).

2. *Achmonia amabilis* group

Large species (total length 12–20 mm, forebody length > 7 mm), head lacking setiferous postocular punctures, labrum with only slightly prominent internal lobes, aedeagus with large parameres, more than half as long as median lobe, male visible sternite 6 with elongate markedly delimited apical area.

KEY TO THE SPECIES

1. Body 12–20 mm long; Head and pronotum black, scutellum elytra yellowish, abdomen yellowish, with tergites 3–5 in middle with bronze sheeny, dark brown coloured spot. Labrum as in figure 1230. Aedeagus as in figure 1233. Congo, Kenya, Malawi, Mali and South Africa.....1. *A. amabilis*
-. Body 13–19 mm long; Head and pronotum black, elytra yellowish, scutellum and abdomen brown with slight bronze shine, paratergites, sternites 3–5 and apical half of genital segment yellowish. Labrum as in figure 1235. Aedeagus as in figure 1240. Ethiopia, Burkina Faso, Côte d'Ivoire, Ghana, Guinea, Togo, Congo..... .....2. *A. congoensis*

1. ***Achmonia amabilis*** (Boheman, 1848) (Figs. 64, 65, 68, 1730, 1731)

Xantholinus amabilis - Boheman, 1848: 274; Bernhauer & Schubert, 1914: 300
Eulissus amabilis - Scheerpeltz, 1933: 1316; Tottenham, 1956: 255; Herman, 2001a: 3625
Eulissus semiflavus - Bernhauer, 1913: 231; Bernhauer & Schubert, 1914: 311; Tottenham, 1956: 255; Herman, 2001a: 3629; *Thyreocephalus semiflavus*; Cameron, 1950g: 33; Janak & Bordoni, 2014: 269 (syn. of *A. amabilis)*
Eulissus gerardi - Bernhauer, 1929: 121; Scheerpeltz, 1933: 1317; Tottenham, 1956: 255; Herman, 2001a: 3627; Janak & Bordoni, 2014: 269 (syn. of *A. amabilis*)
Achmonia amabilis - Janak & Bordoni, 2014: 269

TYPE MATERIAL. The SMNH preserves 1 male labelled "*I. Walb*", "*Caffra / ria*", "*Type*" (white label, printed), "amabilis *Boh*.", "*Typus*" (red label, printed), and "*Lectotypus male* Xantholinus amabilis *Boh., J. Janak des. 2004*" and 1 ex. with the same data, labelled "*Paralectotypus* Xantholinus amabilis *Boh., J. Janák des. 2004*".

The Field Museum of Natural History of Chicago preserves 1 female labelled "*Zentralafrika / Kongo gebiet / v. Bang-Haas*", "semiflavus *Fvl. / Congo*", "semiflavus / *Bernh. Typus*", and "*Lectotypus* Eulissus semiflavus *Bernh., Janák & Bordoni des. 2014*" and "Achmonia amabilis *(Boh.) Janák & Bordoni, 2014*".

The same Museum preserves 1 female labelled "*Musée du Congo / Manyema 1913*", "*r. Kasa Niemba / Dr. Gérard", "Gerardi Brh. / Typ.*", "Eulissus / Gerardi / *Brnh. Typus*", and "*Lectotypus* Eulissus gerardi *Bernh., Janák & Bordoni des. 2014*", "Achmonia amabilis *(Boh.), Janák & Bordoni det. 2014*".

EXAMINED MATERIAL. Congo, Kikondja, Bequaert, 18.X.1911, 1 male (MRAC); Lulua, Kapanga, X.1932 and I.1933, G. Overlaet, 2 females (MRAC); Katanda, 950 m, 1, G. de Witte, 3–19.X.1933, 1 male (MRAC); P.N.U., Mabwe, 585 m, G. de Witte, 8–20.I.1949, 1 male, 1 female (MRAC, cJ); P.N.U., Kankunda, 1.300 m, G. F. de Witte, 14–28.XI.1947, 1 female (MRAC); Stanley Pool, 2 females (IRSNB).

Kenya, Amboseli, T. Palm, 11.III.1970, 1 female (ZML).

Malawi, Nyassa, 44.50, 1 female (FMNH).

Mali, Ht Sénegal, Kayes, 1 male (IRSNB).

Zululand, Hluhluwe, van Son 1960, 1 male (TMSA).

South Africa, Natal, Ithala Game res., M. Snížek, 6.II.2003, 2 females (cJ); (Port Natal) Durban, Natal, 1 ex. (ZMUC); Hluhluwe Imfolozi Park, M. Klícha, 18.I.2007, 1 female (cJ); Hluhluwe Game Res., 28.05S, 32.04E, Endrödy-Younga, 19.XI.1992, 1 female (cJ); KwaZulu-Natal Province, Natal, Boh., 1 ex. (MNB); Mpumalanga Province: Transvaal, 20 km S Sabie, 1 female (TMSA); Pretorius Kop, B. Preez, 16.IV.1981, 1 male (cB); Kruger NP, Skukuza, C. Paetel, 31.XII.1998, 2 exx. (MNB), 1 ex. (cB); Kruger NP, Lower Sabie, 25.08S, 31.58E, Endrödy-Younga, 10.III.1996, elephant dung, 1 male (cJ); Kruger NP, Punda Maria, 22.41S, 31.01E, Endrödy-Younga, 7.II.1994, 1 male (TMSA); Kruger NP, Nyandu sands, 22.38S, 31.23E, Endrödy-Younga, 9.II.1994, 1 female (cJ).

DESCRIPTION. Body 12–20 mm long; length from anterior margin of head to the posterior margin of elytra: 7–11 mm. Head and pronotum black, scutellum elytra yellowish, abdomen yellowish, with tergites 3–5 in middle with bronze sheeny, dark brown coloured spot; antennae and anterior tarsi and tibiae dark reddish brown, middle and posterior tarsi and tibiae yellowish. Labrum as in figure 1230. Head and pronotum with micro-punctation. Head and related punctation as in figure 1229. Protrusion

near the posterior angles of head distinct. Elytra as long as pronotum, posteriad slightly dilated and there slightly wider than pronotum, with rounded humeral angles. Surface with fine and sparse punctation, arranged in three series, one near the suture, one median and one lateral; some other punctures near the posterior margin and some with very long light setae. Abdomen with very fine and dense, transverse micro-waves and fine and not sparse punctation. Protrusion near the posterior angles of head distinct, in some males similar as in female, in others markedly more extended outwards. Temples more or less densely punctured. Tergite and sternite of male genital segment as in figures 1231, 1232. Aedeagus about 1.7–1.8 mm long (Fig. 1233) with apical part median lobe very long, with enlarged apex; parameres very large; inner sac very narrow, covered with very fine and sparse scales. Female. Temples smooth or at most with a few (about 5) fine punctures.

DISTRIBUTION. The species is distributed in Congo, Kenya, Malawi, Mali and South Africa (Fig. 1239).

BIONOMICS. Some specimens were collected in elephant and rhino dung.

2. ***Achmonia congoensis*** (Bernhauer, 1932) (Figs. 66, 67, 1733, 1734)

Eulissus congoensis - Bernhauer, 1932: 144; Scheerpeltz, 1933: 1317; Herman, 2001a: 3627
Achmonia congoensis - Janak & Bordoni, 2014: 271

TYPE MATERIAL. The Muséum Royal de l'Afrique Central of Tervuren preserves 1 female labelled "*Musée du Congo / Haut-Uele: Yebo Moto / VII.1926 / L. Burgeon*", "*R. DET./ 1664*", "Eulissus / congoensis / *Bernh.*" (hand of Bernhauer), and "*Lectotypus* Eulissus congoensis *Bernh., Janák & Bordoni des. 2014*", "Achmonia congoensis *(Bernh.), Janák & Bordoni det. 2014*".

EXAMINED MATERIAL. Ethiopia, N.O. Africa, Süd. Aethiop., Malo Fl., O. Neumann S.V., 1 male (cJ).

Burkina Faso, Haute Volta, Bobo-Dloulasso, R. Siffointe, VII-VIII.1964, 1 male (MRAC).

Ivory Coast, Bingerville, J. Decelle, VII.1962, 1 male (MRAC).

Ghana, Northern Prov., Mole N. P., S. Pokorný, 18.VI.2006, 1 male (cJ).

Guinea: Guinée, coll. Fauvel, 1 male (IRSNB).

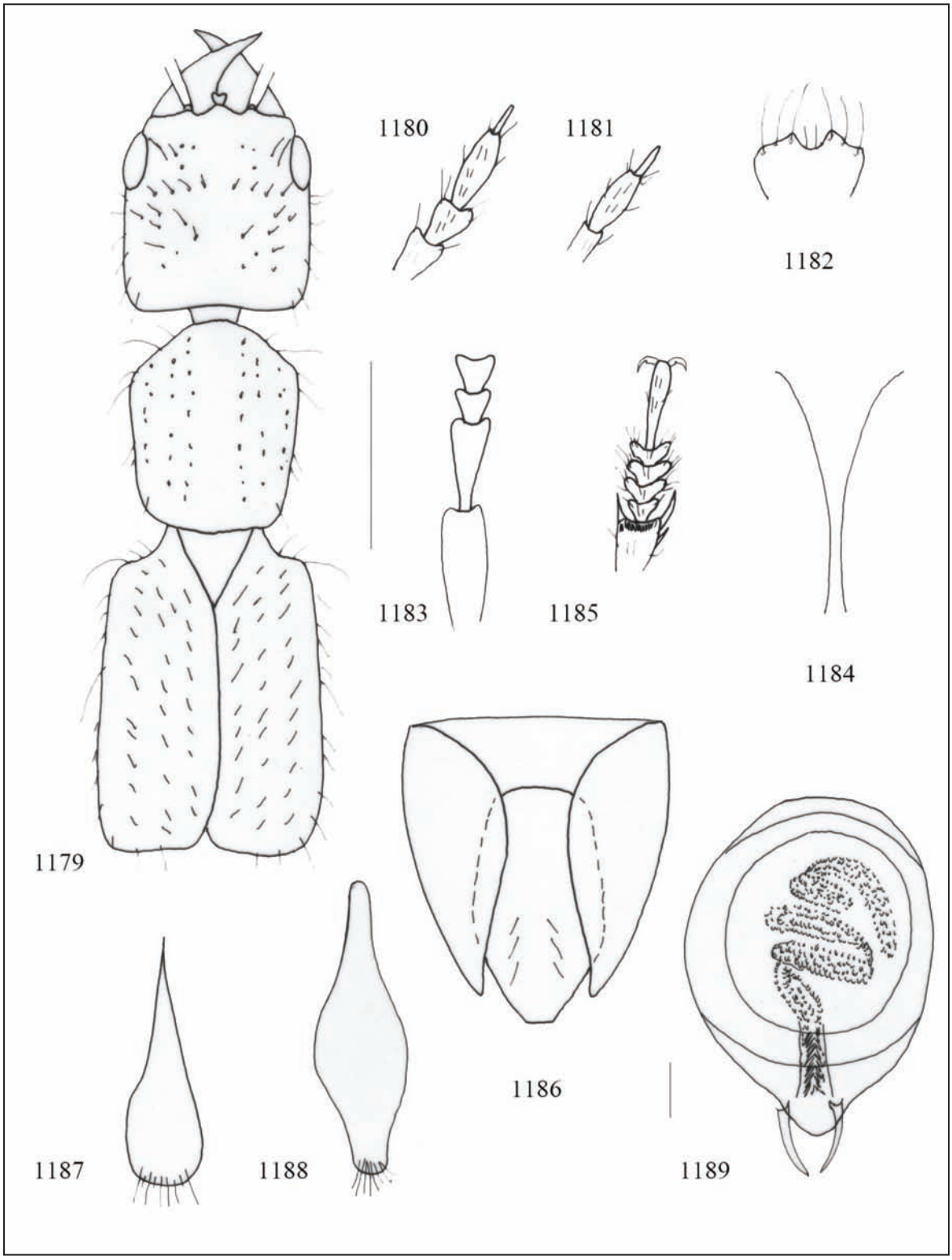
Togo, Bismarkburg, L. Conradt S., 1 female (MFNB).

Congo, Lac Albert, Kasenyi, H. J. Brédo 15.V.1935, 1 male (MRAC); Lac Albert, Kasenyi, H. J. Brédo, 1.V.1935, 1 female (MRAC); Kasenyi, P. Lefèvre, I.1939, 1 female (MRAC); P. N. G., Miss. H. De Saeger, II/ec/4, Réc. H. De Saeger, 5.III.1951, 1 male, 1 female (cJ, MRAC); P. N. G., Miss. H. De Saeger, II/me/4, Réc. J. Verschuren, 9.II.1951, 1 male (MRAC).

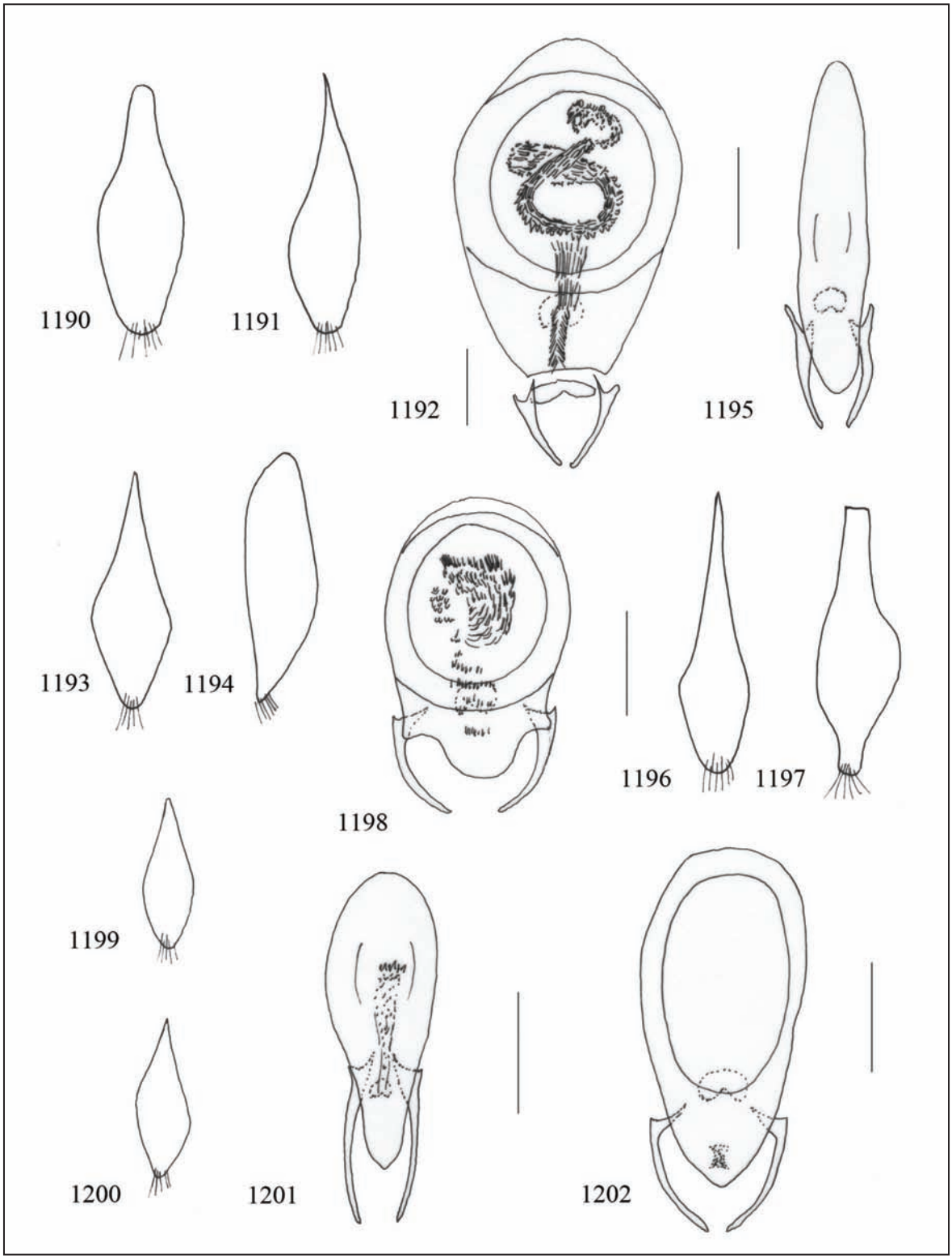
DESCRIPTION. Body 13–19 mm long; length from anterior margin of head to the posterior margin of elytra: 8–10 mm. Head and pronotum black, elytra yellowish, scutellum and abdomen brown with slight bronze shine, paratergites, sternites 3–5 and apical half of genital segment yellowish; antennae and anterior tarsi and tibiae reddish brown, middle and posterior tarsi and tibiae yellowish. Labrum as in figure 1235. Head and pronotum with very fine micropunctation. Head and related punctation as in figure 1234. Protrusion near the posterior angles of head distinct. Temples with variable numer of fine punctures - from almost impunctate up to about 30 punctures. Elytra as long as pronotum, posteriad slightly dilated and there slightly wider than pronotum, with rounded humeral angles. Surface with fine and sparce punctation, arranged in three series, one near the suture, one median and one lateral; some other punctures near the posterior margin and some with very long light setae. Abdomen with very fine and dense, transverse micro-waves and fine and not sparse punctation. Temples sparsely to densely punctured in the male (from about 5 to 30 fine punctures). Tergite and sternite of the male genital segment as in figures 1236, 1237. Aedeagus about 1.60–1.85 mm long (Fig. 1240) with apical part median lobe very long, with enlarged apex; parameres very large; inner sac very narrow, covered with very fine and sparse scales. Female. Temples smooth or at most sparsely punctured.

DISTRIBUTION. The species is distributed in Ethiopia, Burkina Faso, Côte d'Ivoire, Ghana, Guinea, Togo, Congo (Fig. 1239).

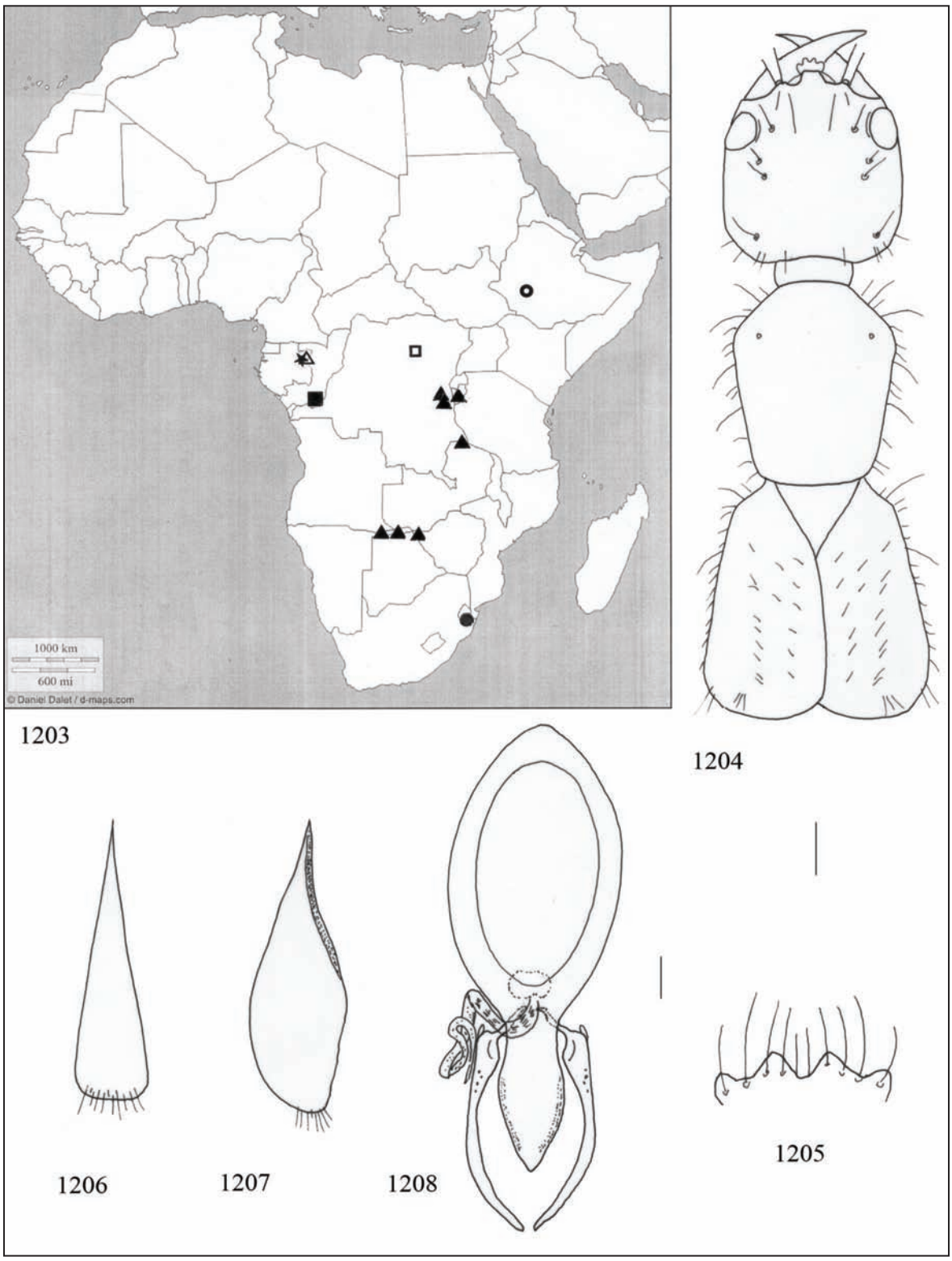
REMARKS. Bernhauer (1932) mentioned in the description type localities: Haut-Uele: Yebo Moto, Tora. No specimens from Tora was available for study.



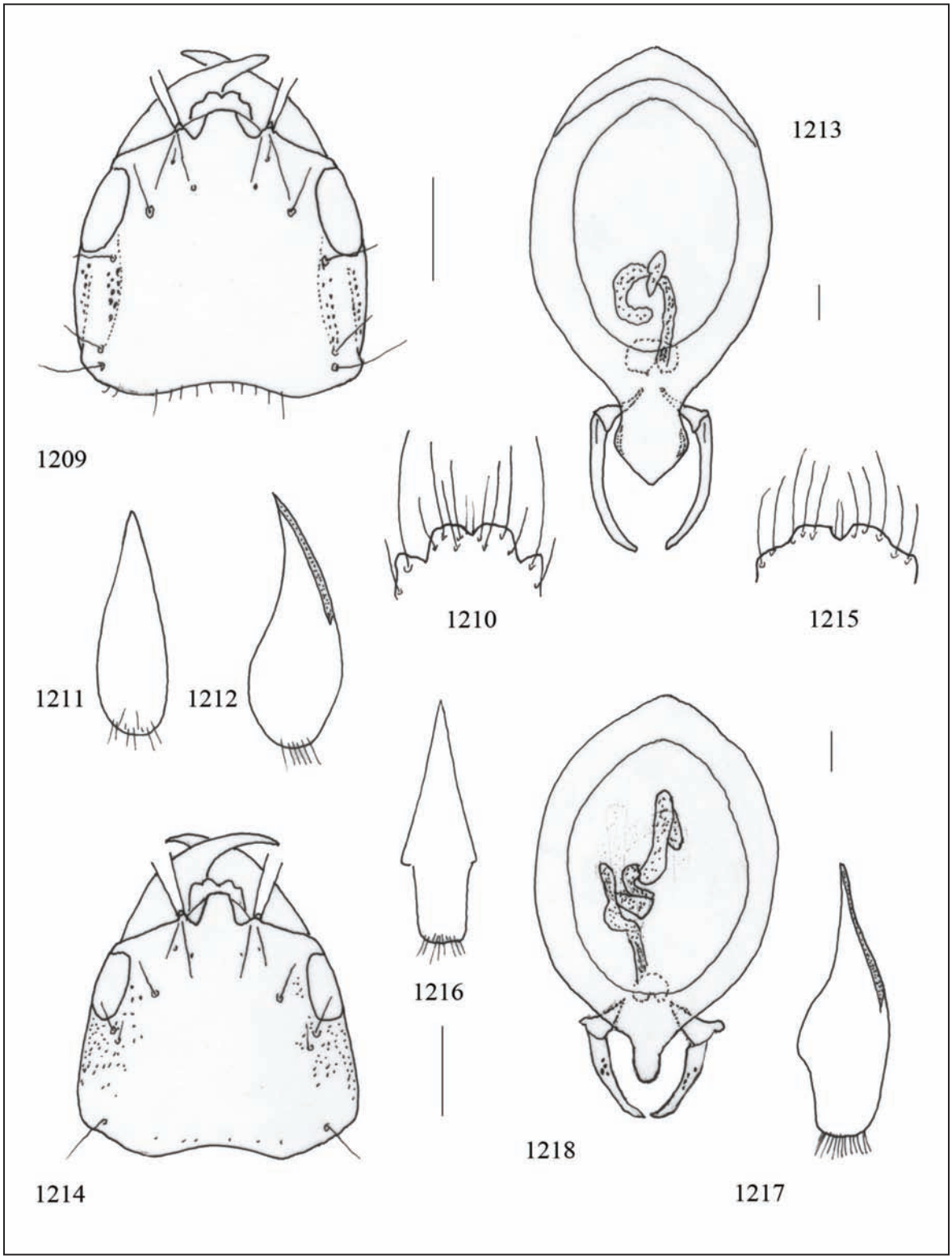
Figures 1179–1189. *Endymathis namibiana* n. sp.: fore-body (bar scale: 0.5 mm) (Fig. 1179), maxillary and labial palpi (Figs. 1180, 1181), labrum (Fig. 1182), first antennomeres (Fig. 1183), gular sutures (Fig. 1184), anterior tarsus (Fig. 1185), female genital segment (Fig. 1186), tergite and sternite of the male genital segment, aedeagus (Figs. 1187–1189) (bar scale: 0.1 mm).



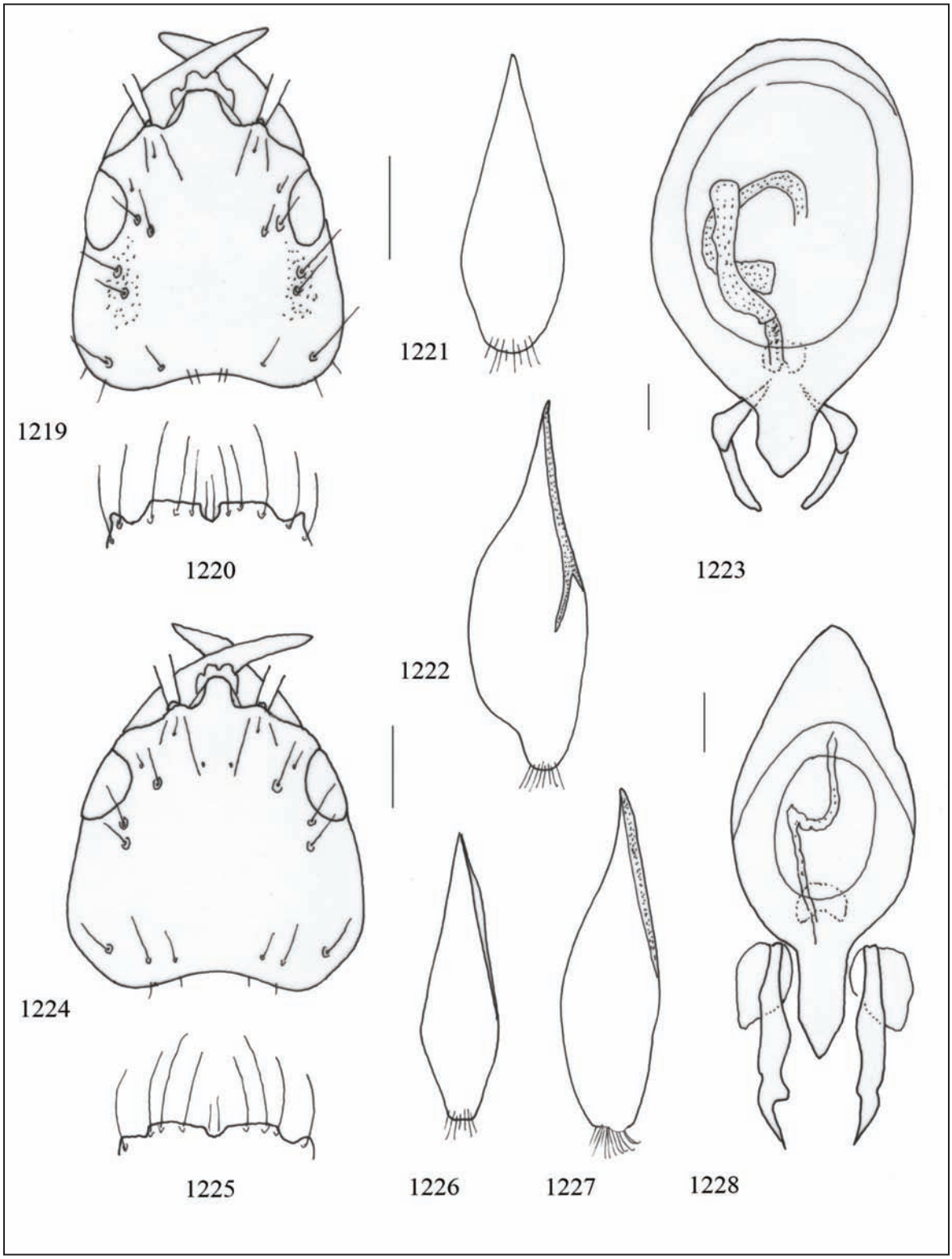
Figures 1190–1202. Tergite and sternite of the male genital segment, aedeagus of *Endymathis aethiopica* n. sp. (Figs. 1190–1192), *E. belingana* n. sp. (Figs. 1193–1195), *E. arenicola* n. sp. (Figs. 1196–1198), and *E. tenuis* (Figs. 1199–1201). *Endymathis gabonica*: aedeagus (Fig. 1202) (bar scale: 0.1 mm).



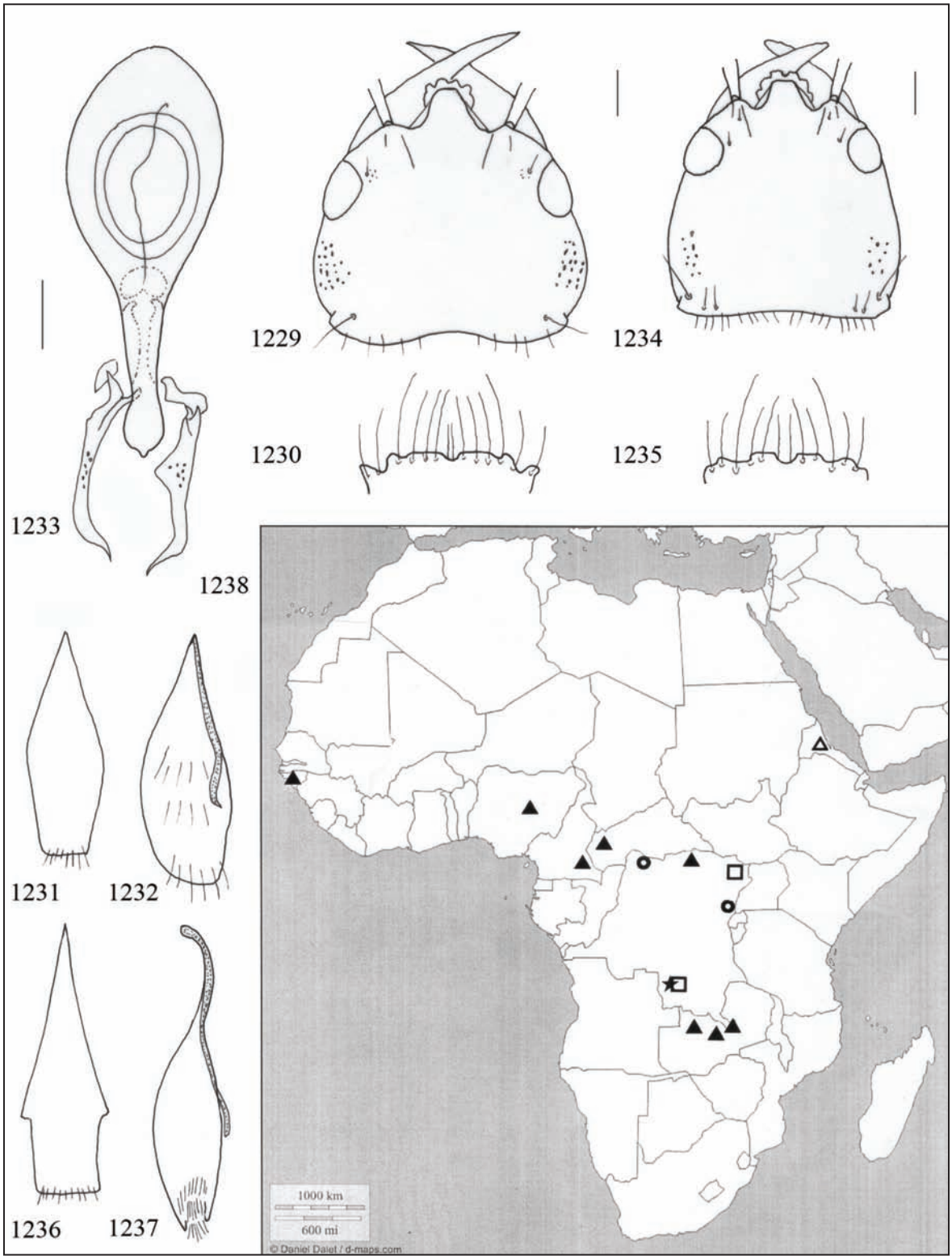
Figures 1203–1208. Fig. 1203: distribution of the genus *Endymathis*: *namibiana* n. sp. (filled triangle), *E. aethiopica* n. sp. (open circle), *E. belingana* n. sp. (star), *E. arenicola* (filled square), *E. tenuis* (open square), *E. minuta* n. sp. (filled circle), *E. gabonica* (open triangle). Figs. 1204–1208. *Achmonia knirschi*: fore-body (bar scale: 0.5 mm) (Fig. 1204), labrum (Fig. 1205), tergite and sternite of the male genital segment, aedeagus (Figs. 1206–1208) (bar scale: 0.1 mm).



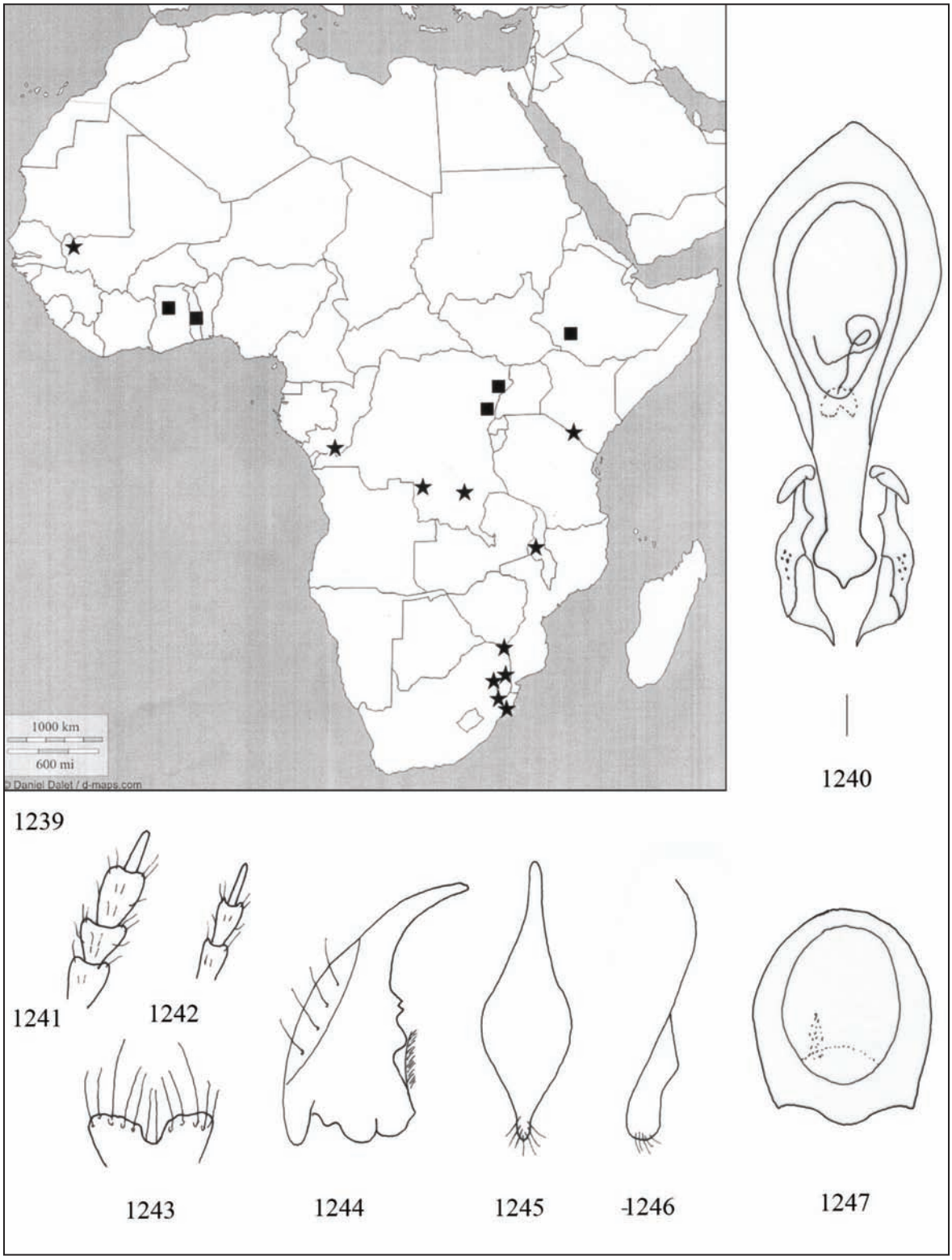
Figures 1209–1218. Head (bar scale: 0.5 mm) (Fig. 1209), labrum (Fig. 1210), tergite and sternite of the male genital segment, aedeagus (bar scale: 0.1 mm) of *Achmonia carinata* (Figs. 1211–1213), and head (bar scale: 0.5 mm), labrum, tergite and sternite of the male genital segment, aedeagus (bar scale: 0.1 mm) of *A. kapangana* (Figs. 1214–1218).



Figures 1219–1228. Head (bar scale: 0.5 mm) (Fig. 1219), labrum (Fig. 1220), tergite and sternite of the male genital segment, aedeagus (bar scale: 0.1 mm) of *Achmonia flavomarginata* (Figs. 1221–1223), and head (bar scale: 0.5 mm), labrum, tergite and sternite of the male genital segment, aedeagus (bar scale: 0.1 mm) of *A. simulatrix* (Figs. 1224–1228).



Figures 1229–1238. Head (bar scale: 0.5 mm) (Fig. 1229), labrum (Fig. 1230), tergite and sternite of the male genital segment, aedeagus (bar scale: 0.1 mm) of *Achmonia amabilis* (Figs. 1231-1233). Head (bar scale: 0.5 mm) (Fig. 1234), labrum (Fig. 1235), tergite and sternite of the male genital segment of *A. congoensis* (Figs. 1236-1237). Fig. 1238: distribution of the genus *Achmonia*: *A. knirschi* (open triangle), *A. carinata* (circle), *A. kapangana* (star), *A. flavomarginata* (square), *A. simulatrix* (filled triangle).



Figures 1239–1247. Fig. 1239: distribution of the genus *Achmonia*: *amabilis* (star), *congoensis* (square). Figs. 1240–1247. *Achmonia congoensis*: aedeagus (Fig. 1240) (bar scale: 0.1 mm). *Phacophallus* sp.: maxillary and labial palpi (Figs. 1241, 1242), labrum (Fig. 1243), mandible (Fig. 1244). *Phacophallus uhligi* n. sp.: tergite and sternite of the male genital segment, aedeagus (Figs. 1245–1247) (bar scale: 0.1 mm).

23. Genus ***Phacophallus*** Coiffait, 1956 (Figs. 1241–1301)

Phacophallus - Coiffait, 1956: 50; 1968: 128 and 144; 1972: 160; Smetana, 1958: 87; 1967: 196; 1982: 106; Lohse, 1961: 184; 1964: 160; Szujecki, 1976: 15; Bordoni, 1982: 194; Hammond, 1982: 231; Shibata, 1983: 74; Toth, 1989: 9; Downie & Arnett, 1996: 399; Herman, 2001a: 3736; Bordoni, 2002: 531

Leptacinus - Casey, 1906: 368; Bradley, 1930: 77 (nec Erichson, 1839)

TYPE SPECIES of *Phacophallus*: *Staphylinus parumpunctatus* Gyllenhal, 1827, by Coiffait's original designation (1956).

DESCRIPTION. Body (Fig. 1248) small to medium sized (4–6 mm). Fully winged species. Head with frontal and ocular grooves very obvious, deep, much deeper than in *Leptacinus* and related genera; folded part of the temples sub-depressed, delimited ventrally by a longitudinal carina followed by a groove. Mandibles with a long and broad lateral groove, the prostheca more or less as in *Leptacinus* (Fig. 1244). Epistoma prominent between the antennae, with a narrow rounded dorsum, the anterior margin more or less rounded. Antennae relatively short, with the scape about as long as the 4 following segments combined, the 2nd segment larger and longer than the 3rd. Maxillary palpi with last segment about as long as and narrower than the preceding one (Fig. 1241). Last segment of labial palpi (Fig. 1242) much narrower than the preceding one; ligula undivided. Labrum bilobed, with a short median emargination (Fig. 1243). Neck wide, about 1/3rd the breadth of head. Gular sutures juxtaposed over a half their length. Pronotum with some dorsal and lateral series of 5, 6 punctures. Antesternal plate with a suture. Upper epipleural line of the pronotum bent towards the prosternum a little before the anterior angles and not meeting the lower line. Elytra a little dilated posteriorly where they are semi-transparent, very weakly sclerotized, with several series of sparse very small punctures. Mesosternum broad and almost flat; metasternum quite long and a little salient. Legs with anterior tarsi not dilated, even if slightly more dilated than the middle and posterior ones in which the segments are of decreasing in width and length, the last segment almost as long as the preceding 4 combined; tibiae with large spines; metatibiae only with an apical ctenidium. Male sixth visible sternite not prolonged on its posterior margin into a very peculiar sub-rectangular median apophysis with sub-rectilinear margins, as in Plaearctic species, but modified, asymmetrical, more or less as in *Leptacinus* (Figs. 1268, 1290). Aedeagus totally devoid of parameres, of an almost spherical shape, swollen, with the introflected plate subcircular and the internal sack ribbon-shaped, folded more or less regularly on itself and covered with scales and spines (Figs. 1269, 1291), sometimes almost invisible, with few scales only (Fig. 1247). Female genital segment cf. Bordoni (2002: figure 82).

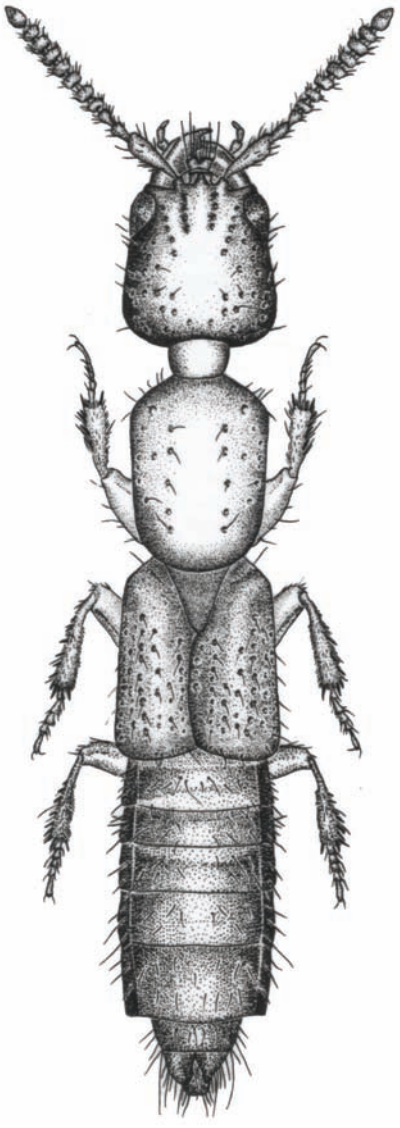


Figure 1248. Habitus of *Phacophallus* sp. (ex Bordoni, 2002).

DISTRIBUTION. This genus is present in the Palaearctic Region with three species, two of which have been also found in the Nearctic Region, where they were certainly introduced. This genus is widespread in the Oriental Region (from Sri Lanka and India to Lombok and Sumbawa) (Bordoni, 2002), and in Australia with three species (Bordoni, 2005). In Africa the genus occurs in almost all the regions (Figs. 1279, 1320).

BIONOMICS. Judging by the abundant collecting data, it is clear that these species live in rotting plant debris, dung, often close to human dwellings, and are therefore synanthropic and photophilous. Pre-imaginal stages: some authors have studied the biology of the Palaearctic species *P. parumpunctatus* (e.g. Rey, 1887); the only larva known from the Oriental Region is that of *P. pallidipennis* described by Bordoni (2002).

REMARKS. The study of the species belonging to this genus is more difficult than what it first appears, because the species are very similar in external morphological characters, which moreover are variable, and because the internal sac of the aedeagus is coiled several times and furnished with very close spines and scales which without a careful examination might appear to be the same. In order to clear all doubt it is useful to extract the internal sac from the bulb and examine it uncoiled, prepared on a microscope slide. This procedure more clearly shows the differences between taxa. The following descriptions often refer for comparison to the commonest species in Africa, *P. politus*.

The African species can be divided in several groups based on the structure of the inner sac of the aedeagus:

Phacophallus tuniseus group: inner sac broad, mostly short, furnished only with scales, without spines; it includes *P. tuniseus* and *P. erythraeus* n. sp.

Phacophallus afrus group: inner sac long and narrow, with more or less large scales and areas covered with dark and dense spinules, without spines; it in-cludes *P. afrus* n. sp., *P. cogoensis* n. sp., *P. elephantorum* n. sp., *P. capensis* n. sp. (the only species of this group with short and very thin inner sac), *P. insularis* n. sp., *P. elaeis* n. sp. and *P. pallidipennis.*

Phacophallus unispinosus group: inner sac long and narrow, with one spine in the proximal portion; it includes *P. politus*, *P. unispinosus* n. sp. and *P. bangoranus* n. sp.

Phacophallus senegalensis group: inner sac long and narrow, with more than one spine; it includes *P. sahariensis*, *P. sudanensis* n. sp., *P. ghanensis* n. sp., *P. nigerianus* n. sp. and *P. mirus* n. sp.

Phacophallus uhligi group: inner sac very short, totally transparent, with few, sparse and minute scales; it includes only one species, *P. uhligi* n. sp.

KEY TO THE SPECIES-GROUPS

1. Aedeagus with clearly visible inner sac.....2
-. Aedeagus with without a well visible inner sac.....1. *P. uhligi* group

2. Aedeagus with inner sac covered only with scales, without spines.....3
-. Aedeagus with inner sac covered with scales and spines.....4

3. Inner sac broad, mostly short, covered with scales.....2. *P. tuniseus* group
-. Inner sac long and narrow, with more or less large scales and areas covered with dark and dense spinules.....3. *P. afrus* group

4. Aedeagus with nner sac long and narrow, with one spine in the proximal or in the distal part.....4. *P. unispinosus* group
-. Aedeagus with inner sac long and narrow, with more than one spine.....5. *P. senegalensis* group

1. *Phacophallus uhligi* group

1. ***Phacophallus uhligi*** n. sp.

EXAMINED MATERIAL. Holotype male: Namibia, Kavango, Mahango Elephantenment, 18.17S, 21.43E, M. Uhlig, 28.II.1992 (MNB); paratypes: same data, Mahango, Game Res., 18.14S, 21.43E, B. and M. Uhlig, 17.IV.1993, 4 males, 7 females (MNB), 4 males (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.5 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Fully winged; body with traces of transverse micro-striation. Head black, pronotum reddish brown, elytra yellowish, infuscate around scutellum; abdomen brown; antennae and legs pale testaceous. Head subquadrate, elongate, slightly narrowed anteriorly, with sub-rectlinear

sides and broadly rounded posterior angles. Surface with evident, deep and dense punctures, apart from on a median band. Eyes medium-sized and slightly protruberent. Pronotum massive, a little longer than head, dilated anteriorly where it is as wide as head; dorsal series of 8 irregular punctures and lateral series of 4 punctures. Elytra longer and wider than pronotum, dilated posteriad, with very marked humeral angles and very fine widely spaced punctures arranged in 5, 6 series. Tergite and sternite of the male genital segment as in figures 1245, 1246. Aedeagus very small (Fig. 1247), 0.26 mm long, inner sac very short, totally transparent, with a few sparse, minute spinules only visible at high magnification.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. Patronymic. Dedicated to my friend and colleague Manfred Uhlig, curator of the Naturhistorisches Museum in Berlin who has conducted research in South Africa.

DISTRIBUTION. The species is only known from Namibia (Fig. 1279).

BIONOMICS. The specimens were collected in "*elephant dung*".

2. *Phacophallus tuniseus* group

KEY TO THE SPECIES

1. Body larger, 5.2 mm long, reddish brown, with black head and more or less yellowish elytra; head more narrowed anteriorly, with narrowly rounded posterior angles, and punctures on the sides only. Aedeagus as in figure 1251; inner sac short, dilated like an ampoule only in the proximal portion and covered with very fine, dense scales. Tunisie, Kenya.....1. *P. tuniseus*
-. Body smaller, 5 mm long, reddish with slightly darker head and faintly yellowish elytra; head less narrowed antriorly, with broadly rounded posterior angles, and more copious and dense punctures. Aedeagus as in figure 1254; inner sac short, sub-rectangular, narrow in the distal portion and dilated in the proximal portion, covered with finer and denser scales. Eritrea.....2. *P. erythraeus* n. sp.

1. ***Phacophallus tuniseus*** Bordoni, 2007

Phacophallus tuniseus - Bordoni, 2007a: 60

TYPE MATERIAL. The holotype male, labelled "*Tunisia, Sousse. T. Palm 17-29.V.1969*", is preserved in the MZL with some paratypes; other paratypes from the same locality and from Hammamet are preserved in the MZL and in cB.

EXAMINED MATERIAL. Kenya, Malindi dint., L. Bartolozzi, 30.IX.1992, 1 male (MZF), 1 male (cB); Amboseli, T. Palm, 11.III.1970, 1 male (ZML); Lamu, Manda Isl., N. Sanfilippo, 29.IX–2.X.1976, 8 exx. (MCSNG), 3 exx. (cB)

DESCRIPTION. Length of body: 5.2 mm; from anterior margin of head to posterior margin of elytra: 2.7 mm. Fully winged; body shiny. Similar to *P. politus*. Head black, pronotum darker than that of *P. politus*, elytra yellowish, infuscate around the scutellum. Head elongate and narrowed anteriorly. Eyes small. Surface of head with sparser punctation than in *P. politus*. Elytra a little longer, with punctures arranged in three series, one juxtasutural, one median and one lateral. Tergite and sternite of the male genital segment as in figures 1249, 1250. Aedeagus 1.2 mm long (Fig. 1251), with inner sac short and gradually broadened, covered with fine spinules and small scales.

DISTRIBUTION. The species is at present only known from Tunisia and Kenya. It may have been introduced to Kenya (Fig. 1279).

2. ***Phacophallus erythraeus*** n. sp.

EXAMINED MATERIAL. Holotype male: Eritrea, Ghinda, D. Figini, III.1906 (MCSNG); paratypes: same data, 1 female (MCSNG), 1 male (cB); same data, Satit, El Eghin, D. Figini, II.1906, 1 female; Eritrea, Bell, 20.VI.1900, 1 male (MCSNG).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Fully winged; body shiny. Head black, pronotum dark reddish brown, elytra yellowish, infuscate around the scutellum; abdomen reddish brown. Antennae and legs testaceous. Similar to small specimens of *P. politus*, but of different colouration; head a little shorter, eyes larger, punctation sparser than that of *P. politus*. Pronotum with dorsal series of 5 punctures and lat-

eral series of 4 punctures. Elytra longer, with very fine punctures arranged in three series, one juxtasutural, one median and one lateral. Tergite and sternite of the male genital segment as in figures 1252, 1253. Aedeagus 1.1 mm long (Fig. 1254), with inner sac very short and wide, covered with fine scales.

ETYMOLOGY. The specific epithet refers to Eritrea.

DISTRIBUTION. The species is so far only known from Eritrea (Fig. 1279).

3. *Phacophallus afrus* group

KEY TO THE SPECIES

1. Body larger, 6-6.5 mm long.....2
-. Body less than 6 mm long.....3

2. Body 6.5 mm long, dark reddish brown with almost black head and reddish brown pronotum; head larger and wider, more dilated posteriad, with denser punctation on the sides; pronotum more dilated anteriorly; elytra broader. Aedeagus as in figure 1257); inner sac very narrow, covered with fine scales, more dense in the distal portion, followed by a series of very small sub-triangular scales. Congo: Kivu .....1. *P. elaeis* n. sp.
-. Body about 6 mm long, with colouration similar to that *P. elaeis* n. sp.; head smaller and narrower, less dilated posteriad, with sparse punctation on the sides; pronotum less dilated anteriorly; elytra narrower. Aedeagus smaller (Fig. 1260); inner sac shorter, a little wider, translucent, covered with very fine, pale scales. South Africa: Cape Province..... .....2. *P. elephantorum* n. sp.
-. Body about 6 mm long; head black, pronotum reddish orange, elytra yellowish, infuscate near the suture, abdomen brown; head very narrower forward, with dense punctation, apart a wide median surface. Aedeagus as in figure 1263; inner sac wide, covered with scales. Oriental Region; Europe, North America, Australia (introduced); South Africa: Zululand (introduced).....3. *P. pallidipennis*

3. Body 5.3-5.5 mm long.....4
-. Body 4.6 mm long, dark reddish brown with black head. Aedeagus as in figure 1266; inner sac narrow, with some series of closed spinules on part of margins, forming small, sub-triangular areas. Rep. Congo.....4. *P. congoensis* n. sp.

4. Body broader, 5.5 mm long, reddish brown with darker head and lighter elytra; head quadrate, broad, dilated posteriad; eyes larger; pronotum larger, more massive and more dilated anteriorly. Aedeagus as in figure 1279; inner sac covered with sparse, very minute scales; a series of sub-triangular scales on the median portion. Fernando Poo Isl.....5. *P. insularis* n. sp.
-. Body narrower, 5.3 mm long, reddish brown with black head; head sub-rectangular, narrow and longer, not dilated posteriad; eyes smaller; pronotum narrower, less dilated anteriorly. Aedeagus as in figure 1272; inner sac with a single small triangular scale, followed by a series of small sub-triangular scales in the distal portion and a series of close, sub-oval scales in the proximal portion. Zimbabwe.....6. *P. afrus* n. sp.

1. ***Phacophallus elaeis*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu Terr., Beni, Mt Bau, 1200 m, R.P.M.J. Celis, 13.V.1953 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.5 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Fully winged, shiny. Body reddish brown with head darker. Characterized by pronotum with dorsal series of 8, 9 punctures and lateral oblique series of 4 punctures. Head sub-rectangular, but strongly dilated posteriad, with subrectilinear sides. Surface with large punctures. Eyes medium-sized and scarcely protruberent. Pronotum a little wider than head, dilated anterioly where it is as wide as head, with very slightly oblique anterior margins, narrowly rounded anterior angles and strongly sinuate sides. Elytra large, much longer and wider than pronotum, dilated posteriad, with marked humeral angles, and fine, widely spaced punctures arranged in a few series. Tergite and sternite of the male genital segment as in figures 1255, 1256. Aedeagus 0.96 mm long (Fig. 1257), with inner sac narrow, with a median area of very fine spinules followed by a long series of evident scales.

ETYMOLOGY. The specific epithet refers to habitat in which it was found, as a noun in apposition.

DISTRIBUTION. The species is known actually only for the type locality, in Congo (Fig. 1279).

BIONOMICS. The specimen was collected in "*fleur male de* Elaeis".

REMARKS. Female unknown. The specimen is in very poor conditions. *Elaeis guineensis* Jacq. is a palm tree that grows at the edge of the rainforest and along waterways and has 30 cm long inflorescences. I think the occurrence of a single specimen in this flowere is probably fortuitous, but I recall the occurrence of *Odontolinus*, *Belonuchus* and *Platydracus* in a similar habitat recorded in Frank & Moron (2012). In the Neotropics adult Staphylinids have been recorded as attacking mosquito larvae and pupae in *Heliconia* flower bracts.

2. ***Phacophallus elephantorum*** n. sp.

EXAMINED MATERIAL. Holotype male: South Africa, Cape, Addo Elephant N. P., Arndt, 25.III.1993 (NME); paratypes: same data, 6 exx. (NME), 5 exx. (cB); same data, 33.24S, 25.45E, M. Uhlig 24.XI.1996, 1 ex. (NMB); South Africa, SW Cape Prov., Bushy Park farm, 34.41S, 20.07E, Endrödy-Younga, 28.VIII.1983, 1 male (TMSA).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.3 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Fully winged; body shiny. Head black; pronotum, elytra and abdomen dark reddish brown; antennae and legs reddish brown. Similar to *P. politus*, but more slender, with unicolorous elytra. Head smaller and narrower than that of *P. politus*. Eyes smaller. Pronotum smaller, with dorsal series of 5 coarser and more widely spaced punctures. Elytra larger, longer and wider than in *P. politus*. Tergite and sternite of the male genital segment as in figures 1258, 1259. Aedeagus small (Fig. 1260), 0.6 mm long, with inner sac translucent, narrow, dilated in the proximal portion, covered with very fine scales only.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described. Length of body: 6–6.5 mm; from anterior margin of head to posterior margin of elytra: 3 mm.

ETYMOLOGY. The specific epithet is the Latin *elephas -antis* (elephant).

DISTRIBUTION. The species is only known from Cape Province, South Africa (Fig. 1279).

BIONOMICS. The specimens were collected in "*Elephant dung*".

3. ***Phacophallus pallidipennis*** (Motschulsky, 1858)

Leptacinus pallidipennis - Motschulsky, 1858: 205
Leptacinus tricolor - Kraatz, 1895: 110; Bordoni 2002: 534 (syn. of *P. pallidipennis*)
Phacophallus pallidipennis - Herman, 2001a: 3741 (as syn. of *P. parumpunctatus*); Bordoni, 2002: 534; 2005: 555

EXAMINED MATERIAL. South Africa, Zululand, Mtubatuba, Dukuduku, 28.22S, 32.19E, Endrödy-Younga, 4.IV.1974, 1 male (MTSA).

DESCRIPTION. Body 5.5–6 mm long. Length from the anterior margin of the head to the posterior margin of elytra: 3.3–3.5 mm. Head black, pronotum red, elytra yellowish, darkened in front, abdomen reddish brown. Mouthparts, antennae and legs brown. Head oblong, a little tapered forward, with sides sub-rectilinear and posterior angles well marked. Diameter of eyes a little greater than the length of antennomeres 2, 3 combined. Surface of head with traces of more or less polygonal micro-reticulation and deep, oval, umbilicate punctures forming oblique grooves concentrated laterally between the eyes and the posterior margin of the head. Pronotum much longer and a little dilated anteriorly where it is as wide as head. Surface shiny with dorsal series of 5, 6 large punctures and lateral oblique series of 3, 4 punctures. Elytra longer and wider than the pronotum, dilated posteriorly; surface shiny, with some widely spaced series of small punctures. Abdomen micro-reticulate in a more or less polygonal mesh, with small and sparse punctures only on the sides. Tergite and sternite of the male genital segment as in figures 1261, 1262. Aedeagus lenticular (Fig. 1263), 0.8 mm long, with the internal sac ribbon-like, increasingly wider, entirely covered with very small and very dense spinules, sparser in the proximal part.

DISTRIBUTION. This species is known from Sri Lanka, India, Bhutan, Thailand, Philippines, South China (Bordoni, 2002), where it is synanthropic and frequent in rotting substances. It has been very likely imported through human activity into Australia, as well as into Europe and North America (Bordoni, 2002). Its presence in South Africa is surely due to such introduction (Fig. 1279).

4. ***Phacophallus congoensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, reserve de Tchimpounga, nr. Pointe Noire, L. Bartolozzi and A. Sforzi, 19.IV–4.V.2006 (MZF).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.3 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Fully winged; body shiny. Similar to *P. politus*, but smaller, with paler colouration. Head black, pronotum, elytra and abdomen dark reddish brown. Head smaller than that of *P. politus*, more narrowed anteriorly. Eyes smaller and more protruberent. Surface with finer and sparser punctures. Pronotum shorter than that of *P. politus*, more dilated anteriorly, as long as head. Elytra shorter, with more rounded humeral angles. Tergite and sternite of the male genital segment as in figures 1264, 1265. Aedeagus small (Fig. 1266), 0.74 mm long, with inner sac narrow, furnished more or less densely with fine scales, with justaxposed series of fine spinules in the median-proximal portion, forming a long series of subtriangular areas.

ETYMOLOGY. The specific epithet refers to Congo (Fig. 1279).

DISTRIBUTION. The species is only known actually from the type locality in Rep. Congo.

REMARKS. Female unknown.

5. ***Phacophallus insularis*** n. sp.

EXAMINED MATERIAL. Holotype male: Fernando Poo Isl., L. Conradt, VI.1900 (MNB); paratypes: same data, 1 female (MNB), 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.5 mm; from anterior margin of head to posterior margin of elytra: 2.7 mm. Fully winged. Body shiny, dark reddish brown. Head quadrate, dilated posteriad, with sub-rectilinear sides and narrowly rounded posterior angles. Eyes large and protruberent. Surface of head with large, deep punctures only on the sides. Pronotum massive, longer than head, dilated anteriorly where it is as wide as head, with oblique anterior margins, broadly rounded anterior angles; dorsal series of 2 anterior and 3 posterior punctures and lateral series of 4 punctures. Elytra large, as long as and wider than pronotum, dilated posteriad, with marked humeral angles. Surface with large shallow punctures arranged in two series near the suture, one median and one lateral. Abdomen with fine and sparse punctation. Tergite and sternite of the male genital segment as in figures 1267, 1268. Aedeagus 0.74 mm long (Fig. 1269), with inner sac not narrow, but dilated in the proximal portion, covered with sparse and fine scales, with a median series of evident scales; proximal portion with more or less fine spinules.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is the Latin *insularis -e* (insular), in reference to the type locality.

DISTRIBUTION. The species only known from the type locality in Equatorial Guinea: Fernando Poo Isl. (Fig. 1279).

6. ***Phacophallus afrus*** n. sp.

EXAMINED MATERIAL. Holotype male: Zimbabwe, Victoria Falls, Zambesi N. P., 17.53S, 25.49 E, U. Uhlig, 11–12.XII.1993 (MNB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.3 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Fully winged. Body shiny. Similar to *P. politus*, but smaller, narrower and with darker colouration. Head narrower than that of *P. politus*, much less dilated posteriad. Eyes similar to those of parumpunctatus. Pronotum narrower, less dilated anteriorly, with dorsal series of 2 anterior and 3 posterior punctures and lateral series of 5, 6 punctures. Elytra shorter than in *P. politus*, with less marked humeral angles. Tergite and sternite of the male genital segment as in figures 1270, 1271. Aedeagus small (Fig. 1272), 0.74 mm long, with inner sac narrow, with a long series of large scales, closely convergent in the proximal part, between fine spinules.

ETYMOLOGY. The specific epithet is the Latin *afrus -a -um* (African).

DISTRIBUTION. The species is only known from the type locality in Zimbabwe (Fig. 1279).

REMARKS. Female unknown.

4. *Phacophallus unispinosus* group

KEY TO THE SPECIES

1. Body larger, 6–8 mm long.....2
-. Body 5.3–5.7 mm long, reddish brown with

darker head; head with more or less sparse punctation; pronotum relatively short. Aedeagus as in figure 1275; inner sac very long, with distal portion covered with dense, evident, fine scales, sometimes forming parallel series, followed by a large spine and by a very long series of short spines and large scales. Guinea, Central African Rep., Ivory Coast.....1. *P. bangoranus* n. sp.

2. Body 6.5–8 mm, of variable colouration, brownish black to reddish brown, sometimes with black head and reddish or partially yellowish elytra. Aedeagus as in figure 1278; inner sac with distal portion covered with only with very small scales, followed by a series of large scales and a single spine in the proximal portion. Africa: various regions.....2. *P. politus*

-. Body 6.5 mm long, brown with black head; head less dilated posteriad; eyes smaller, elytra shorter. Aedeagus as in figure 1282; inner sac translucent, covered with very pale, minute scales, with a median series of very minute scales, followed by a large, not proximal, spine. Kenya.....3. *P. unispinosus* n. sp.

-. Body 6–6.5 mm long; head black, pronotum and elytra brown; elytra with yellowish posterior half; abdomen brown with the last three segments yellowish red. Aedeagus as in figure 1285; inner sac with distal portion covered with very fine, sparse scales, median portion with a long series of sub-rectangular scales, followed by a large ante-proximal, large spine. Sudan.....4. *P. xanthopygus*

1. ***Phacophallus bangoranus*** n. sp.

Examined Material. Holotype male: Central African Republic, Bangoran, SW Ndele, R. Cailleux, I.1968 (MNHNP); paratypes: same data, 3 males, 12 females (MNHNP), 3 males (cB); male: Guinea, Région Coyah, Cercle de Dubreka, Exped. Mus. G. Frey Guinea 1951, W. Bechyne, 15.IV.1951, 1 male (NMW); (Ivory Coast), Mt Nimba N.E., 500–700 m, A. Villiers, 1–20.IX.1946, 1 male (MNHNP).

Description of Holotype. Male. Length of body: 5.5 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Fully winged. Body shiny, dark reddish brown with darker head and red pronotum. Similar to *P. politus*, but shorter and darker. Head narrower than that of *P. politus*, less dilated posteriad, with more rounded posterior angles, with coarser and sparser punctation. Pronotum of similar shape, with dorsal series of 2 anterior and 3 posterior punctures; lateral oblique series of 4 punctures. Elytra smaller and shorter than in *P. politus*, with more rounded humeral angles and punctures arranged in three series, one juxtasutural, one median and one lateral. Tergite and sternite of the male genital segment as in figures 1273, 1274. Aedeagus about 1 mm long (Fig. 1275), with inner sac more or less narrow, with proximal portion covered with fine scales, partially, followed by a large spine and by a long series of evident scales; distal portion covered with very fine and dense scales.

Variability. The paratypes have no substantial morphological differences with the holotype described. Length of body: 5.3–5.7 mm; from anterior margin of head to posterior margin of elytra: 2.7–2.8 mm.

Etymology. The specific epithet refers to the type locality.

Distribution. This species is known from Guinea, Central African Republic and Ivory Coast (Fig. 1301).

Remarks. This species was identified as a new species with this name by Levasseur "*in litteris*".

The specimen from Ivory Coast, preserved in the MNHNP, bears the following labels: "*IFAN-1946 / Mt Nimba N. E. / 500-700 m / A. Villiers*", "*Foret prim. / 1-20-XI*", "*Dr. M. Cameron 1946 /* Leptacinus / niger *Cam. / TYPE*", but the type of *Leptacinus niger*, preserved in NHML, is a female of *Chaetocinus* (see this species), so I ascribe the specimen to a new species, because Cameron did not realize that it belongs to a different genus.

2. ***Phacophallus politus*** (Cameron, 1951)

Xantholinus politus - Cameron, 1951a: 399; Herman, 2001a: 3817

Type Material. The Natural History Museum in London preserves 1 specimen labelled "*Type*" (printed on round label with red border), "*Lukenia / Jan. 1941*", "Xantholinus / politus / *TYPE Cam.*", "Xantholinus / politus *Cam. / P. M. Hammond / det. 1981/ Holotype male*". It is a male that now bears the determination label "Phacophallus politus *(Cam.), Bordoni det. 2013*".

EXAMINED MATERIAL. Gambia, Sangajor, T. Palm, 24.I.1968, 2 exx. (ZML); Bathurst, T. Palm I.1968, 1 ex. (ZML); Yundum, T. Leiler, 17.I.1968, 3 exx. (cJ), 2 exx. (cB); 6 km N Kartung, 18.30S, 20.00E, Cederholm, Danielsson, Hammarstedt, Hedquist ands Samuelsson, 20.XI.1977, 1 male (MZL), 1 male (cB).

Guinea, Sérédou (x), Zott 7–8.IV.1975, 1 male (cB).

Ghana, Ashanti reg., Kumasi, 330 m, Endrödy-Younga, 13.X.1965, 2 exx. (MTM); Northern reg., Damango game res., 200 m, 9.04N, 1.48W, Endrödy-Younga, 1.VIII.1967, 1 ex. (MTM), 1 ex. (cB).

Nigeria, Jos/Vom, V. Assing, 5.XI–2.XII.1984, 8 exx. (cA), 3 exx. (cB).

Gabon, Makokou, Ipassa, A. Susini, XI.2006, 1 ex. (cB).

Camerun, Joko, L. Kolin, II.1912, 1 ex. (MNB)

(Equatorial Guinea), Fernando Po Isl., L. Conradt, 1 ex. (MNB)

Eritrea, Ghinda, D. Figini, III.1906, 2 exx. (MCSNG).

Uganda, Victoria Nyanza, Arcip. de Sesse, Bugala, E. Bayon, 1908, 5 exx. (MCSNG), 1 ex. (cB).

Burundi, W Rusisi-Delta, F. Arndt, 22.II.1992, 1 ex. (NME).

Kenya, Mt. Kenya, Chogaria, 1520 m, 0.15S, 57.45E, G. Bernon leg., 19.II.1974, 4 exx. (TMSA), 1 ex. (cB); Mugaga, D. and A. Kistner and R. Banfill, 31.VII.1960, 2 exx. (FMNH); same data, 5.VIII.1960, 1 ex. (FMNH); Shimba for., T. Palm, 17.III.1970, 2 exx. (ZML), 1 ex. (cB); Kitale env., Kapenguria, Smrz, 16.XII.1995, 1 ex. (NMW); Dian. Beach, Leisure Lodge, 30 km S Momabasa, G. Benick, 10.X.1973, 1 male (MNB), 1 male (cB).

Tanzania, Ifakara, Kwiro, Kongsbauer, IX.1967, 1 ex. (MNB).

Rep. Congo, Brazzaville, Kindamba, Meya, Louolo river, Balugh and Zicsi, 10.XI.1963, 1 male (MTM), 1 male (cB); Brazzaville, Sibiti IRHO, Endrödy-Younga, 23–29.XI.1963, 3 exx. (MTM); Bangou forest, Balugh and Zicsi, 4.XI.1963, 1 female (MTM).

Congo, Yangambi, D. and A. Kistner and R. Banfill, 4.VII.1960, 2 exx. (FMNH), 1 ex. (cB); Kivu Terr., Kalehe, SO Kahuzi, 2200 m, N. Leleup, 28.VII.1951, 1 male (MRAC); Lodima, Endrödy-Younga, 7.XII.1963, 1 ex. (MTM); (Zaire), Mongo, A. Simonetta, 19-24.III.1975, 1 male (cB); Libenge, R. Cremer and M. Neuman, I.1948, 15 exx. (IRSNB), 7 exx. (cB); Elisabetville (Lubumbashi), C. Seydel, 1.III.1952–30.IX.1953, 1 male (MRAC); Boma Motenge, R. Cremer and M. Neuman, 8.I.1948, 26 exx. (IRSNB), 7 exx. (cB); Massif Ruwenzori, Kalonge, 2210 m, P. Vanschuytbroeck and J. Kekenbosch, 23.VIII.1953, 1 male (MRAC); Massif Ruwenzori, Kalonge, Ruiss. Karambura, affl. Katauleko, 2060 m, P. Vanschuytbroeck and J. Kekenbosch, 30.I–21.II.1953, 1 male, 1 female (MRAC).

Burundi, W Risizi Delta, F. Arndt, 12.II.1992, 1 male, 1 female (NME).

Zambia, Mbala (Abercorn), J. Clover and A. Kistner, 14.V.1970, 1 ex. (FMNH).

Sud Namibia, Rosh-Pinah, 27.53S, 16.50E, Endrödy-Younga leg., 13.IX.1973, 8 exx. (TMSA).

Namibia, Hobatere Lodge, 10.09S, 15.54E, J. Deckert, 17.II.1994, 1 male (MNB), 1 male (cB).

Zimbabwe, Victoria Falls, Zambesi N. P., 17.53S, 25.49E, M. Uhlig, 11–12.XII.1993, 1 ex. (MNB).

(Zimbabwe), Rhodesia, Atlantica Ecol. Res. Station, nr Salisbury, A. Kistner, 26.III.1970, 1 ex. (FMNH).

South Africa, Natal, Hluhluwe G.R., 28.01S, 32.13E, R. Fencl, 1–7.XI.2001, 1 ex. (cJ); Natal, Hluhluwe N. P., 28.02S, 32.05E, M. Uhlig 5.II.1994, 1 ex. (MNB); Transvaal, Umg. Pretoria, Bouaccordou, A. v. Peez, 18.VII.1953, 3 exx. (NMW); Transvaal, 15 km NE Klasarie, Guernsey Farm, P. Peck, 19–26.XII.1985, 1 ex. (FMNH); Zululand, Dukunduku for. St., 28.22E, 32.19E, Endrödy-Younga, 7.IV.1974, 1 ex. (TMSA).

SW Africa, Naukluft, Felseneck farm, 24.27S, 26.04E, Endrödy-Younga, 25.X.1974, 13 exx. (TMSA), 4 exx. (cB); Naukluft, Felsenek farm, 24.21S, 16.04E, Endrödy-Younga, 25.X.1974, 1 male (cB); S Namib, Rosh-Pinah, 27.55S, 16.50E, Endrödy-Younga, 13.IX.1973, 5 exx. (TMSA), 3 exx. (cB).

South Africa, SW Africa, Naukluft, Felseneck farm, 24.21S, 16.04E, Endrödy-Younga, leg., 17 exx. (TMSA); Northern Prov., Zoutspansberg, Medike, J. Deckert, 4.V.2000, 2 exx. (NMB); North West Prov., Potchefstroom, ?, IV.1953, 2 exx. (NMW), 1 ex. (cB); Kapland, 1 ex. (MNB).

CITED MATERIAL (not examined). Benin, Dahomey, Kiussokoingou (Atakura, 600-700 m), 1 ex. (Cameron, 1952, sub *Leptacinus parumpunctatus*).

Gabon, Belinga and Makokou (Coiffait, 1968).

Kenya, v. Ramisel. Br. O.A., Methner leg., XI.1915, 1 ex. (MNB), 1 ex. (cJ) (Janak, 1989, sub *L. parumpunctatus*).

Tanzania, Unyanyembe, leg. ?, VI.1911, 2 exx. (MNB) (Janak, 1989, sub *L. parumpunctatus*).

Tanzania, Unyamesi, leg. ?, VI.1911, 1 ex. (MNB) (Janak, 1989, sub *L. parumpunctatus*).

Congo, Rutshuru, 1285 m, 1 ex. (Cameron, 1950, sub *L. parumpunctatus*).

Congo, Sake, Lac Kivu, 1460 m, 1 ex. (Cameron, 1950, sub *L. parumpunctatus*).

Congo, Kanyabayongo (Kabosha), 1760 m, 1 ex. (Cameron, 1950, sub *L. parumpunctatus*).

South Africa, Natal, Hlunluwe Game Res., 1 female (Scheerpeltz, 1974, sub *L. parumpunctatus*).

South Africa, Basutuland, Mamathes, 5 miles ENE Teyateyaneng, 1 female (Scheerpeltz, 1974, sub *L. parumpunctatus*).

DESCRIPTION. Length of body: 6–8 mm; from anterior margin of head to posterior margin of elytra: 3–4.5 mm. Fully winged. Body shiny, light brown to brown, but sometimes head black; pronotum, elytra and abdomen dark brown; elytra yellowish posteriad, especially on the postero-lateral areas; antennae and legs brown. Head slightly longer than wide, dilated posteriad, with rounded posterior angles. Ocular and frontal grooves evident and deep, with denser, elongated punctures. Pronotum massive, with dorsal and lateral series of 5, 6 punctures. Elytra as long as pronotum, with moderately small punctures arranged in three regular series. Tergite and sternite of the male genital segment as in figures 1276, 1277. Aedeagus 0.70–1 mm long, oval (Fig. 1278); inner sac more or less long, with a series of evident scales, followed by a large proximal spine.

DISTRIBUTION. Africa, from Gambia to South Africa.

BIONOMICS. Some specimens were collected in "*Elephant dung*", "*cattle dung*", "*cow manure*", "*buffalo manure*", "*debris*", "*dead tree* Aloe".

REMARKS. The species, known by large populations in the continent, is very variable in body size, and also partially in colouration, in the size of the basal bulb and disposition of the sclerified structures of the inner sac. It is similar, in the external characters, to *P. parumpunctatus*, but differs in the structure of the male genital segment and inner sac of aedeagus.

3. ***Phacophallus unispinosus*** n. sp.

EXAMINED MATERIAL. Holotype male: Kenya, Escarpement for., T. Palm, 3–4.III.1970 (ZML); paratypes: same data, 1 female (ZML), 1 male (cB); E Transvaal, 15 km NE Klaserie, Gueransey Farm, S. Peck, XII.1985, 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.5 mm; from anterior margin of head to posterior margin of elytra: 3.1 mm. Fully winged. Body shiny. Similar to *P. politus*, but a little smaller; head less dilated posteriad. Eyes smaller. Surface of head broader; pronotum shorter than that of *P. politus*, a little shorter than head, with less oblique anterior margins, more broadly rounded anterior angles. Elytra shorter and more dilated posteriad than in *P. politus*. Tergite and sternite of the male genital segment as in figures 1280, 1281. Aedeagus (Figs. 1282, 1776) 0.8 mm long; inner sac with fine scales in a distal series and with a median spine.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is the Latin *unispinosus -a -um* (with only one spine).

DISTRIBUTION. The species is known at present from Kenya and South Africa: Transvaal (Fig. 1301).

4. ***Phacophallus xanthopygus*** (Scheerpeltz, 1974)

Leptacinus xanthopygus - Scheerpeltz, 1974a: 19
Phacophallus xanthopygus - Janak, 1989: 170; Herman, 2001: 3743

TYPE MATERIAL. The Zoological Museum in Helsinki preserves 3 specimens, two labelled "*Sudan / Erkowit, 18.IV.1964 / M. Meinander*", "*Typus* Leptacinus / xanthopygus / *O. Scheerpeltz*" (on red label) and "*Paratypus*", and one labelled "*Sudan* / *Erkowit, 18.IV.1964 / J. Kaisila*", "*Paratypus*". They are respectively 1 male and 1 female and another male, bearing the label "Phacophallus xanthopygus *(Scheerp.), J. Janak det. 1988*".

The Naturhistorisches Museum, Wien preserves 4 specimens, one labelled "*Typus* / Leptacinus / xanthopygus / *O. Scheerpeltz*" (on red label), "*Sudan / Erkowit*", "*18.4.1964 / M. Meinander*", "Leptacinus

/ xanthopygus / *n. sp. Scheerp.*" (handwritten by Scheerpeltz), "*ex coll. Scheerpeltz*"; the other have the same labels and "*Cotypus* Leptacinus / xanthopygus / *O. Scheerpeltz*" (on red label). These specimens now bear the determination label "Phacophallus xanthopygus *(Scheerp.), Bordoni det. 2011*".

DESCRIPTION. Length of body: 6–6.5 mm; from anterior margin of head to posterior margin of elytra: 2.2–2.5 mm. Fully winged. Body shiny. Head black, pronotum and elytra brown; elytra with yellowish posterior half; abdomen brown with last three segments yellowish red; antennae and legs testaceous. Head sub-rectangular, with rectilinear sides and narrowly rounded posterior angles. Eyes large and a little protruberent. Surface of head with large, deep and dense punctures on the sides. Pronotum longer than head, dilated anteriorly where it is as wide as head; dorsal series of 5 widely spaced punctures and lateral series of 4, 5 punctures. Elytra longer and wider than pronotum, dilated posteriad, with rounded humeral angles. Suface with very fine and sparse punctures arranged in a few series. Tergite and sternite of the male genital segment as in figures 1283, 1284. Aedeagus 1.1 mm long (Fig. 1285); inner sac broad and long, covered with more or less sparse and fine scales and spinules, with a long series of larger sub-triangular scales and one large spine in the proximal portion.

DISTRIBUTION. Sudan (Fig. 1301).

REMARKS. This species differs from *P. sudanensis* n. sp. in colouration, size, and structure of the inner sac of the aedeagus.

5. *Phacophallus senegalensis* group

KEY TO THE SPECIES

1. Body larger, 6.3 mm long, reddish brown, with darker head and posterior margins of elytra yellowish, abdomen dark brown; elytra sub-rectangular, narrow. Aedeagus as in figure 1288; inner sac long, covered with small dark scales; with one distal spine and other, sub-triangular ones in the median portion. Nigeria.....1. *P. nigerianus* n. sp.
-. Body less than 6 mm long.....2
2. Body about 5 mm long.....3
-. Body 4.5 mm long, reddish orange, with yellow elytra; head sub-rectangular, with slightly rounded sides; elytra long. Aedeagus as in figure 1291; inner sac short, with few small scales, a distal spine and a proximal group of 2 large and 3 smaller scales. Sudan.....2. *P. sudanensis* n. sp.

3. Body very narrow, slender, 5–5.5 mm long, dark reddish brown with black head; head long, sub-rectangular, with large eyes. Aedeagus as in figure 1294; inner sac short, with a triangular, distal spine, followed by 4–5 smaller spines and a series of characteristic, sub-rectangular, closely set scales, arranged like the rungs of a ladder. South Africa: Cape Prov., Transvaal.....3. *P. mirus* n. sp.
-. Body of mormal size, not particularly narrow....4

4. Body more robust, darker reddish brown, 4.8 mm long; head sub-rectangular, broad, with very sparse punctation. Aedeagus as in figure 1297; inner sac covered with dense, dark scales and with 3 widely spaced spines. Ghana.....4. *P. ghanensis* n. sp.
-. Body less robust, 4.5–5 mm long, with black head, reddish pronotum and abdomen, yellowish elytra, infuscate near the suture; head narrow, with fine, dense punctation. Aedeagus as in figure 1300; inner sac very short, translucent, covered in minute, pale scales; a distal group of small scales, followed by 2 large, triangular, median spines and by a proximal series of scales, before a large spine. Mauritania, Senegal, Chad, Sudan, Ethiopia, Nigeria, Cameroon.....5. *P. sahariensis*

1. ***Phacophallus nigerianus*** n. sp.

EXAMINED MATERIAL. Holotype male: Nigeria, Plateau State, Kaduna river, W. Rossi, X.1983 (cB).

DESCRIPTION HOLOTYPE. Male. Length of body: 6.3 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Fully winged, shiny. Head black, pronotum reddish brown, elytra brown, partially infuscate posteriad; abdomen dark brown; antennae and legs testaceous. Similar to *P. politus*, but a little larger and darker; head more dilated posteriad. Eyes more protruberent. Surface of head denser on the sides. Pronotum massive, longer than that of *P. politus*, more dilated anteriorly, with coarser

punctation. Elytra shorter and more quadrate than that of *P. politus*, with sub-rectilinear and sub-parallel sides; humeral angles more narrowly rounded, and with coarser and denser punctation. Tergite and sternite of the male genital segment as in figures 1286, 1287. Aedeagus 1 mm long (Fig. 1288), with inner sac very long and narrow, covered with scales and short series of spinules and with 10 triangular spines on the surface.

ETYMOLOGY. The specific epithet refers to Nigeria (Fig. 1301).

DISTRIBUTION. The species is only known from the type locality in Nigeria.

REMARKS. Female unknown.

2. ***Phacophallus sudanensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Sudan, Weisser Nil, Zw., Täufikia Melut, J. Konietzko, 25.XII.1913 (MNB).

DESCRIPTION HOLOTYPE. Male. Length of body: 4.5 mm; from anterior margin of head to posterior margin of elytra: 2.4 mm. Fully winged. Body shiny, reddish brown with yellowish elytra; antennae and legs light brown. Head sub-rectangular, anteriorly narrow, with slightly rounded sides and broadly rounded posterior angles. Eyes large and protruberent. Surface of head with deep, well defined and not sparse punctation apart from on a median band. Pronotum a little longer than head, slightly dilated anteriorly where it is as wide as head, with scarcely oblique anterior margins, broadly rounded anterior angles, and almost rectilinear sides; dorsal series of 10, 11 punctures and lateral series of 6, 7 irregular punctures, with some other surrounding punctures. Elytra broad, longer and wider than pronotum, dilated posteriad, with marked humeral angles and fine, deep punctures arranged in numerous series. Abdomen with fine and sparse punctation. Tergite and sternite of the male genital segment as in figures 1289, 1290. Aedeagus 0.77 mm long (Fig. 1291), with inner sac long and narrow, dilated in the proximal portion, with a distal spine, following by a series of evident scales; the proximal enlarged portion with 2 large spines and 3 small spines.

DISTRIBUTION. The species is known from Sudan (Fig. 1301).

REMARKS. Female unknown.

3. ***Phacophallus mirus*** n. sp.

EXAMINED MATERIAL. Holotype male: South Africa, NE Prov., Tshipise, Honet Nature Reserve, 22.36S, 30.10E, 300 m, M. Hartmann 23–25.XI.1996 (NME); paratypes: same data, 6 exx. (NME), 6 exx. (cB); Transvaal, Tschipise, 22.37S, 30.10E, E. Arndt 24–25.XI.1996 (NMB); Transvaal, Kruger Pk., S Kukuza, S. Peck 12–14.XII.1985, 7 exx. (FMNH), 1 male, 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body; 5.2 mm; from anterior margin of head to posterior margin of elytra: 2.9 mm. Fully winged, body shiny. Head black, pronotum reddish brown, elytra light yellowish brown; antennae and legs reddish brown. Characterized by the long narrow head, which is sub-rectangular, slightly narrowed anteriorly and with sub-rectilinear sides. Eyes large, not protruberent. Surface of head with traces of polygonal micro-reticulation and small, deep, sparse punctures. Pronotum narrow, as long and wide as head, scarcely dilated anteriorly, with broadly rounded anterior angles; dorsal series of 8, 9 punctures and lateral series of 5 punctures; all the punctures shallow and larger than those of head. Elytra very long and narrow, sub-rectangular, longer and wider than pronotum, with less marked humeral angles, and very fine and sparse punctures arranged in several widely spaced series. Abdomen with large, dense and shallow punctation. Tergite and sternite of the male genital segment as in figures 1292, 1293. Aedeagus (Figs. 1294, 1777) 0.66 mm long, small, with inner sac relatively short and broad, covered with fine scales, with a large, median spine, followed by large acute scales and by a proximal series of juxtaposed, parallel, almost rod-shaped spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described. Length of body; 5–5.5 mm; from anterior margin of head to posterior margin of elytra: 2.8–3 mm.

ETYMOLOGY. The specific epithet is the Latin adjective *mirus* (wonderful).

DISTRIBUTION. South Africa: Cape Province, Transvaal (Fig. 1301).

REMARKS. The species is variable in size: the specimens from Transvaal are smaller than those from Cape Province.

4. ***Phacophallus ghanensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Ghana, Accra, W. Rossi, 16–17.VI.1984 (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.8 mm; from anterior margin of head to posterior margin of elytra: 2.3 mm. Fully winged. Body shiny. Similar to *P. politus*, but shorter, with paler colouration. Head dark brown, pronotum reddish brown, elytra and abdomen light brown. Head much smaller and shorter than that of *P. politus*, with finer and sparser punctation, not concentrated on the sides. Pronotum short, a little longer than head, dilated anteriorly where it is as wide as head. Surface with dorsal series of 4 very large but shallow punctures and lateral oblique series of 4 punctures. Elytra shorter than in *P. politus*, with less marked humeral angles and very fine punctation. Tergite and sternite of the male genital segment as in figures 1295, 1296. Aedeagus 0.9 mm long (Fig. 1297), with inner sac long and very narrow, covered with scales and small spinules, and with three spines in the distal, median and proximal portions.

ETYMOLOGY. The specific epithet refers to Ghana.

DISTRIBUTION. The species is only known from the type locality in Ghana (Fig. 1301).

REMARKS. Female unknown.

5. ***Phacophallus sahariensis*** Coiffait, 1968

Phacophallus sahariensis - Coiffait, 1968a: 139; 1972: 164; Janak, 1989: 170; Herman, 2001a: 3741

TYPE MATERIAL. The Muséum national d'Histoire naturelle of Paris preserves 14 specimens labelled "*Ennedi / mare de Damas / J. Mateu 12 Sept. 1958*", one of these, male, have the red label "*Holotype*" (printed); the other have the label "*Paratype*".

EXAMINED MATERIAL. Mauritanie, Rosso, Amiet, 12.IV.1964, 1 male (MNHNP).

Mali, Mopti, Y. Hama, 9.VII.1997 (cH).

Senegal, Niokolo Kola, Sirnent (?), H. Coiffait XII.1974, 1 male (cB); Umar, D. Joudj, 1998, 1 male (cJ); Richard-Toll, (Dagana Dept.), leg. ?, XI.1967, 2 males (MNHNP), 1 male (cB).

Chad, Fort Lamy, Tschadgebiet AEF, H. Franz, 1 female (cB).

Sudan. Kartoum. Eve, 2.IX.1954, 1 male (MM); Wad Medani, a. Bl. Nil., F. Hieke leg., 8–22.X.1979, 12 exx. (MNB), 10 exx. (cB); Nilufer, Wad Medani, F. Hieke leg., 12.X.1979, 6 exx. (MNB), 1 ex. (cB); Senaar, F. Hieke leg., 12.X.1979, 1 ex. (MNB), 1 ex. (cB); Senaar, coll. Levasseur, 1 female (MNHNP).

Ethiopia, Eritrea, Setit Humera, R. Clarke, 14.X.1973, 1 male (MRAC).

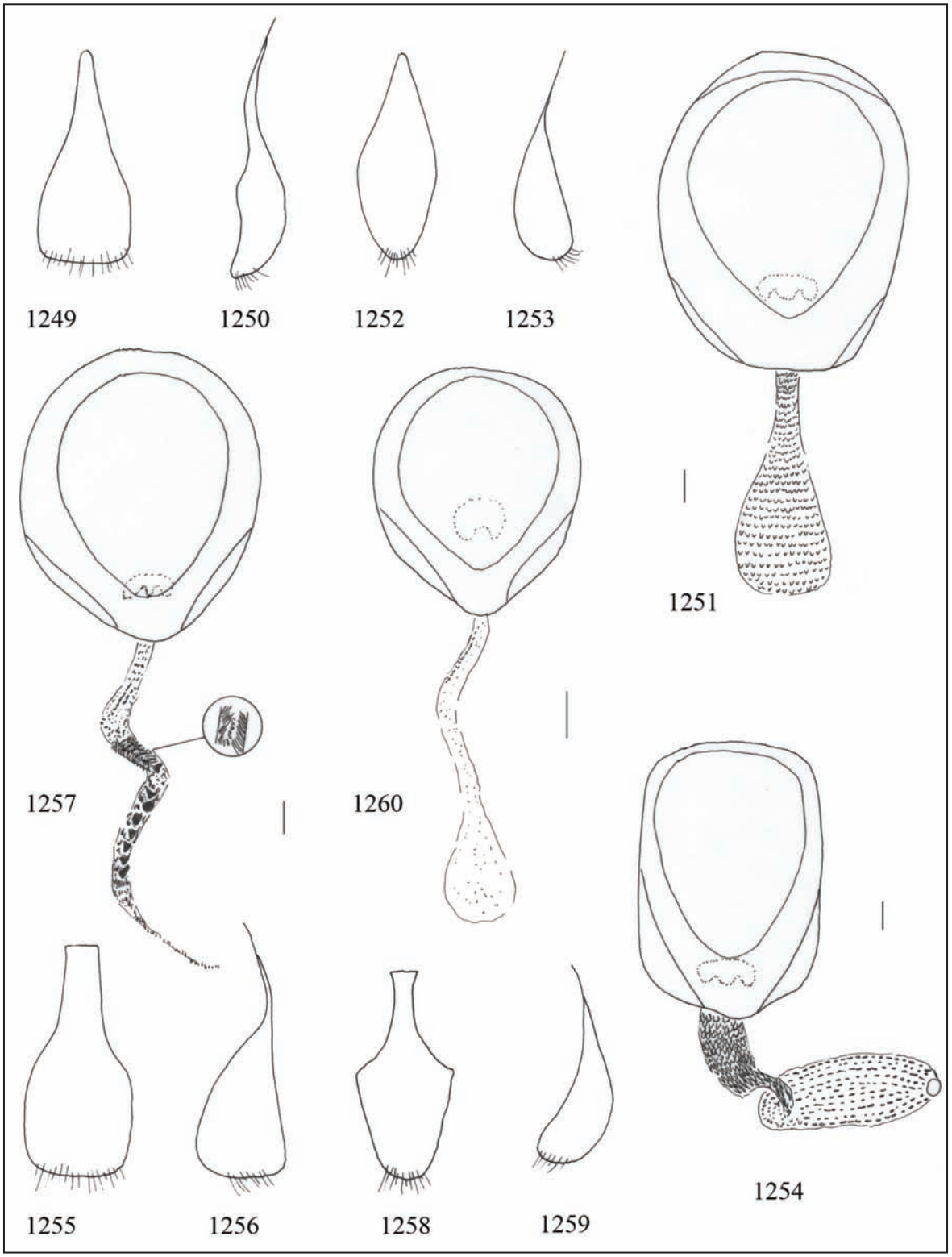
Nigeria, Maiduguri, Bornu Sta., Wypr. SKNB Ut leg., 13–15.XI.1979, 2 exx. (DEI), 1 ex. (cB).

Cameroon, Maroua, G. Schmitz, X–XI.1965, 2 males, 4 females (MRAC); 2 males, 2 females (cB).

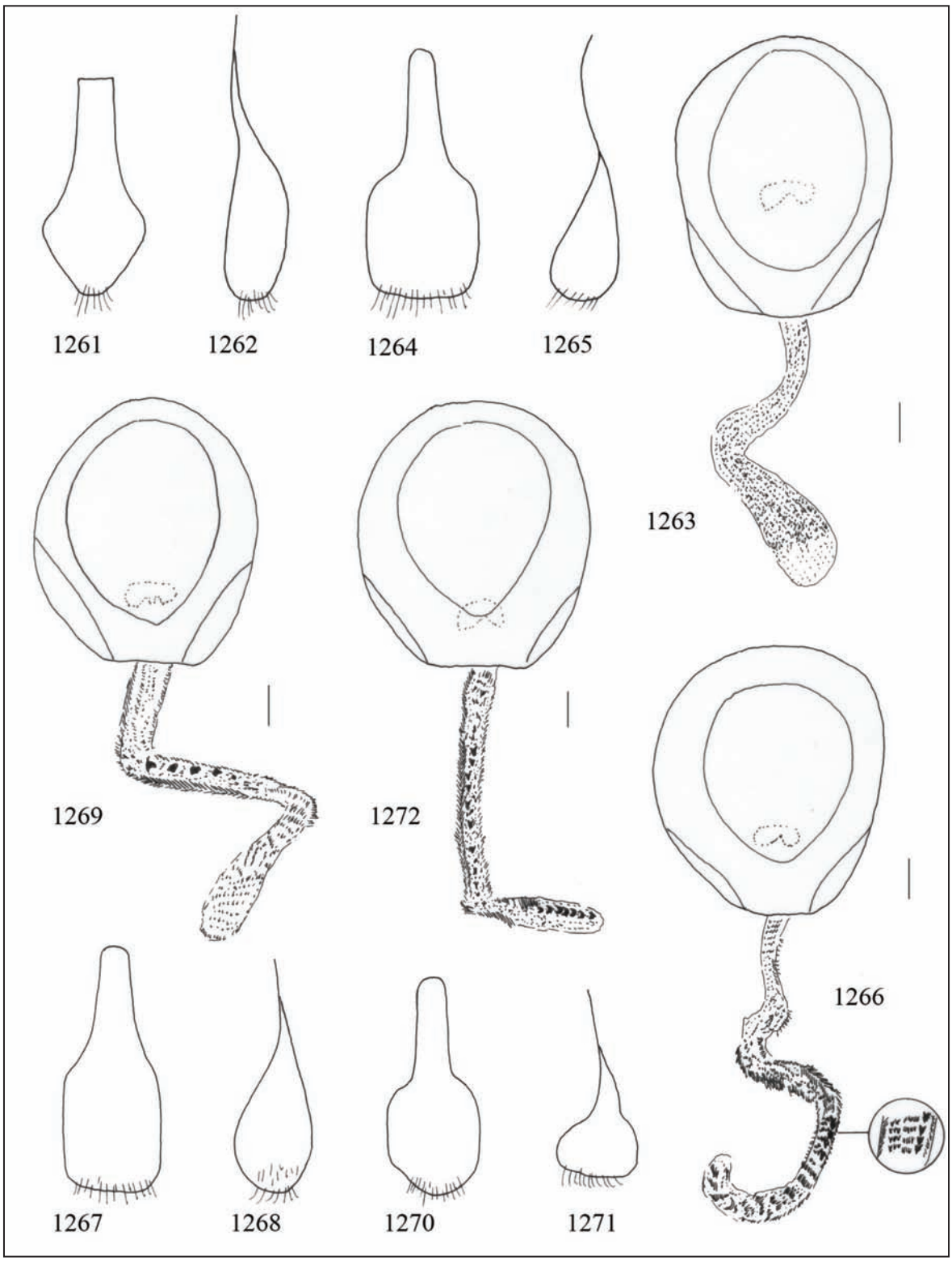
CITED MATERIAL. Sudan, Khartoum, P. Stys, 10.X–23.XI.1966, 5 exx. (cJ) (Janak, 1989); Shabat, P. Stys, 15.X–22.XI.1966, 21 exx. (cJ) (Janak, 1989); Nilufer, Wad Medani, F. Hieke, 8–31.X.1979, 194 exx. (MNB, cJ) (Janak, 1989); Wad Medani, a Bl. Nil, F. Hieke, 8–31.X.1979, 9 exx. (MNB) (Janak, 1989).

DESCRIPTION. Length of body: 4.2–5 mm; from anterior margin of head to posterior margin of elytra: 2.5–2.7 mm. Fully winged. Body shiny, but with traces of more or less polygonal microreticulation on head. Head dark brown, pronotum and abdomen reddish brown, elytra yellowish, partially infuscate. Head elongate-oval, narrowed anteriorly. Eyes large and protruberent. Surface of head with deep and dense punctures except on a broad median band. Pronotum a little longer than head, dilated anteriorly where it is as wide as head, with dorsal irregular series of 9, 10 punctures and lateral oblique series of 5, 6 larger punctures. Elytra long, longer and wider than pronotum, a little dilated posteriad, with fine, not sparse punctures arranged in 5, 6 series. Tergite and sternite of the male genital segment as in figures 1298, 1299. Aedeagus 0.74 mm long (Figs. 1300, 1778), with inner sac medium-sized, broad, covered with fine scales and with two large median opposing spines, a median series of spinules and one distal spine.

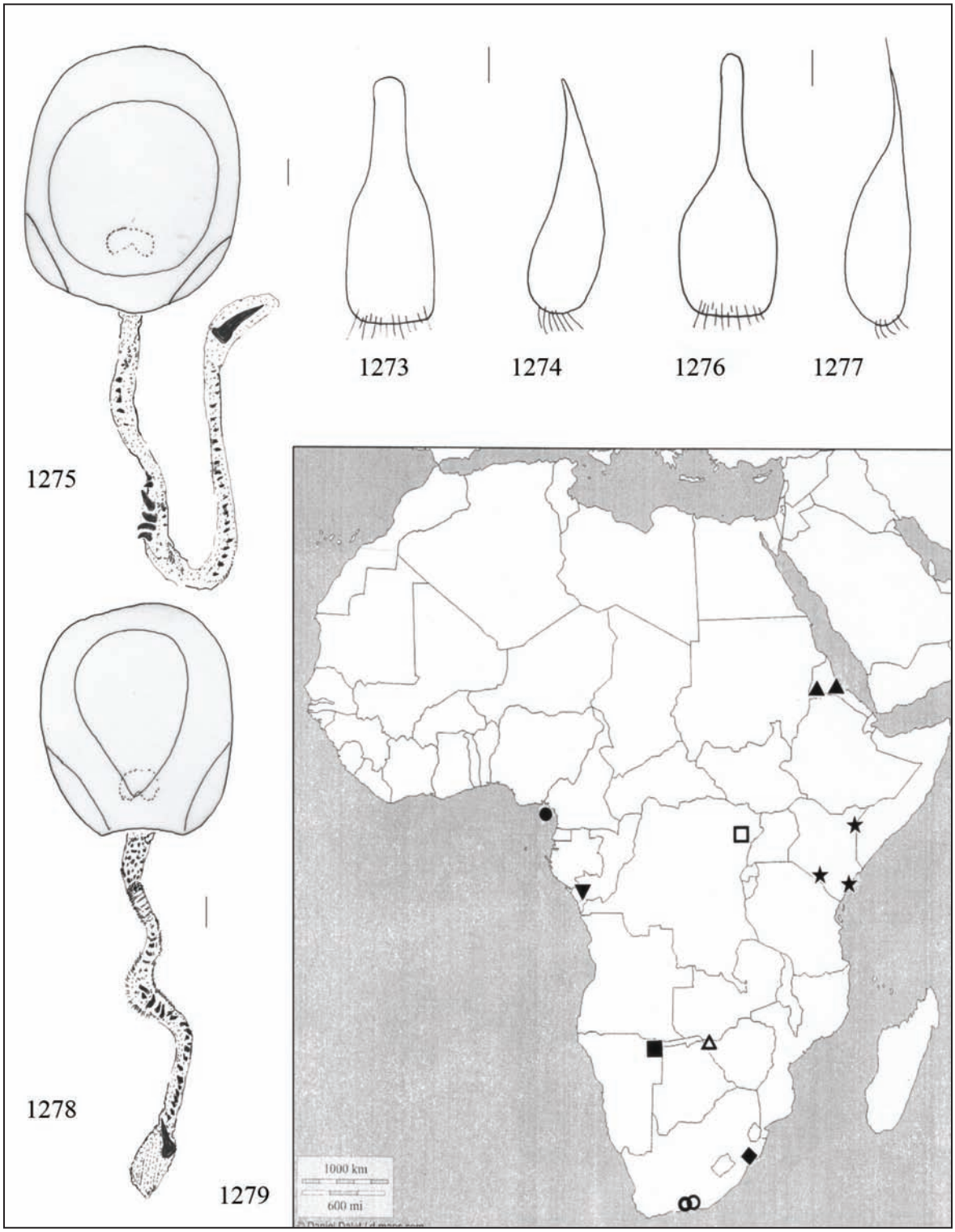
DISTRIBUTION. Mauritania, Mali, Senegal, Chad, Sudan, Eritrea, Nigeria, Cameroon (Fig. 1301). Coiffait (1968) cite also from Libia, "*Hamadas du Sud Marocain*" and, as probably, from Giarrabub oasis.



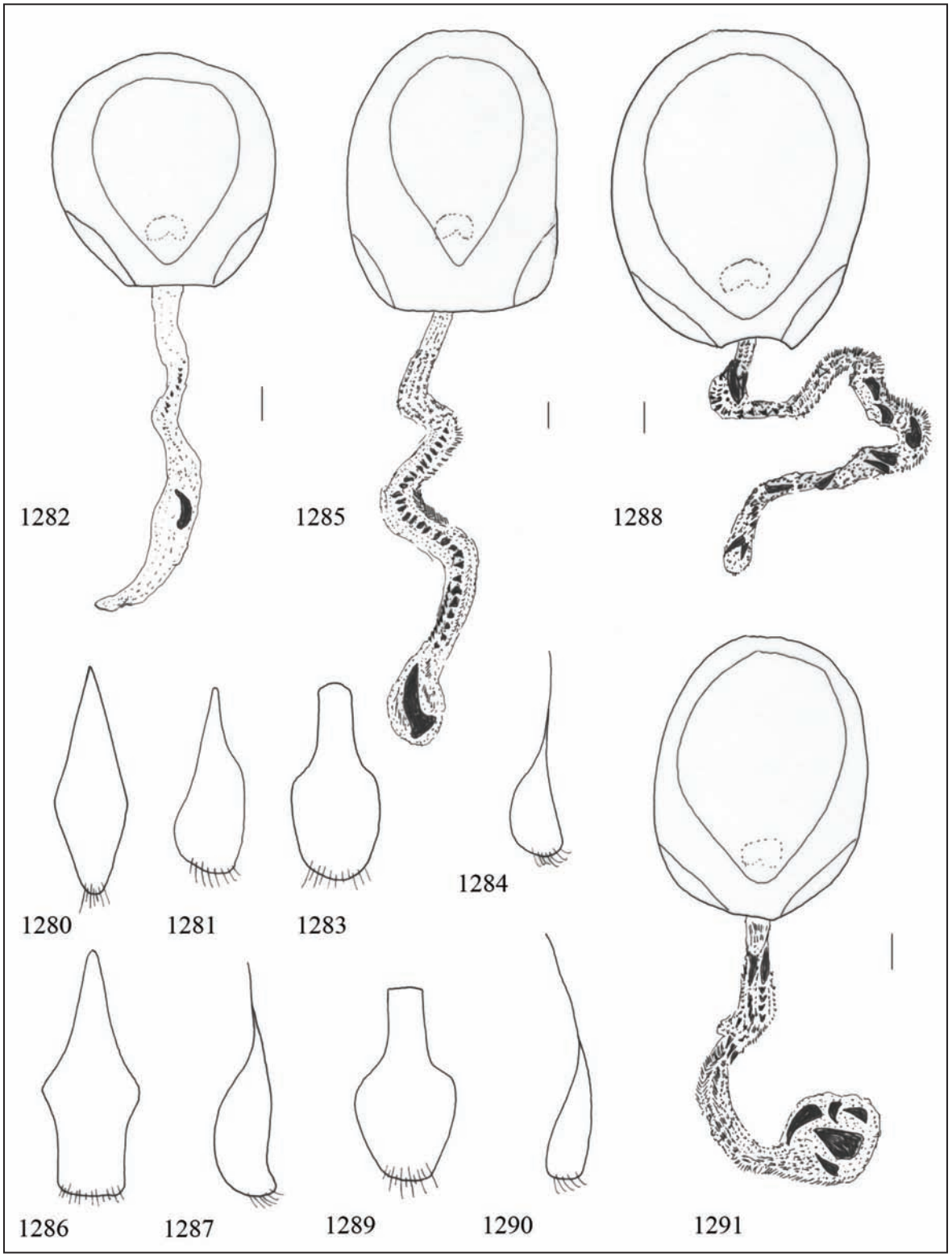
Figures 1249–1260. Tergite and sternite of the male genital segment, aedeagus of *Phacophallus tuniseus* (Figs. 1249–1251) and *P. erythraeus* n. sp. (Figs. 1252–1254) (bar scale: 0.1 mm), tergite and sternite of the male genital segment, aedeagus of *P. elaeis* n. sp. (Figs. 1255–1257) and *P. elephantorum* n. sp. (Figs. 1258–1260) (bar scale: 0.1 mm).



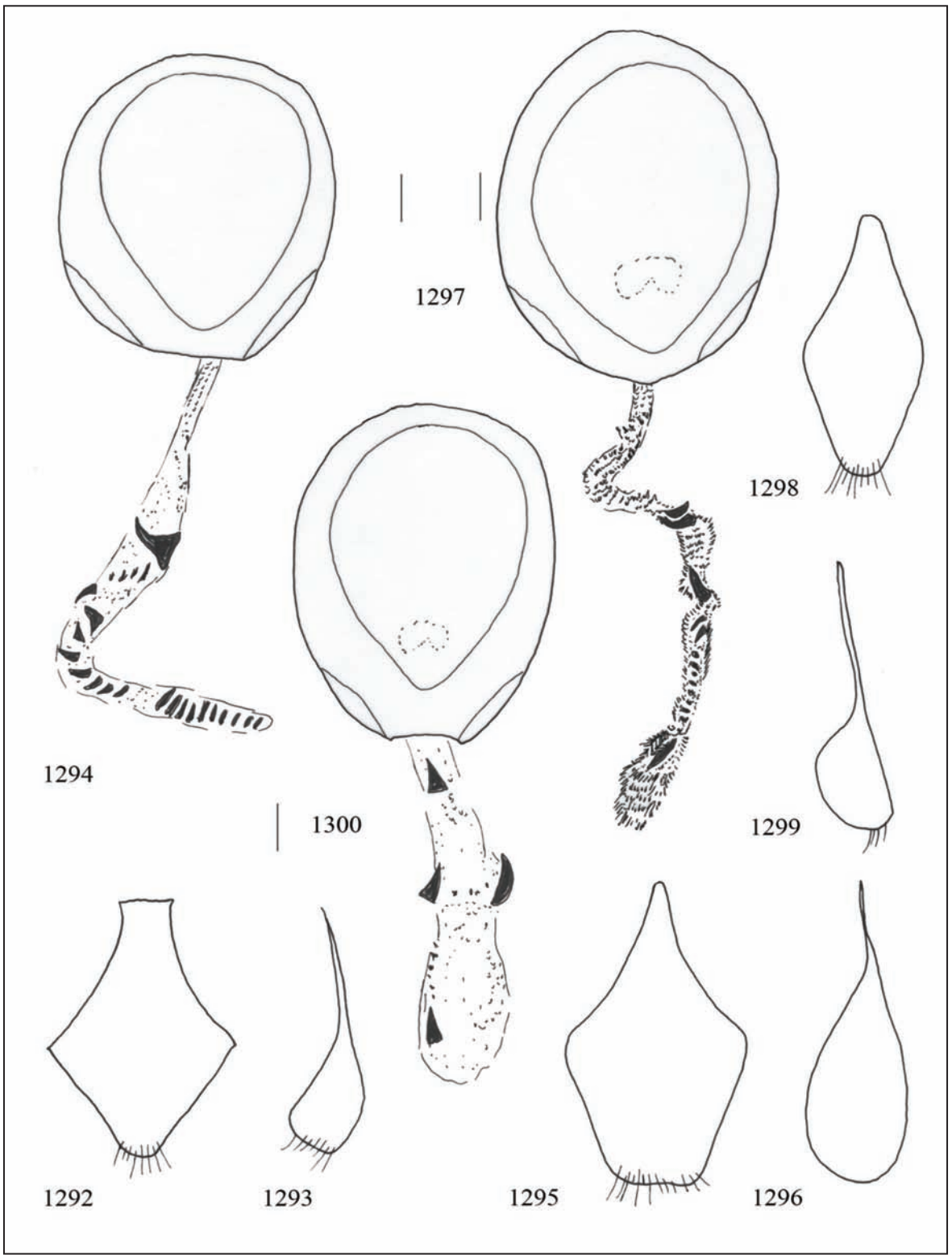
Figures 1261–1272. Tergite and sternite of the male genital segment, aedeagus of *P. pallidipennis* (Figs. 1261–1263) and *P. congoensis* n. sp. (Figs. 1264-1266) (bar scale: 0.1 mm), tergite and sternite of the male genital segment, aedeagus of *P. insularis* n. sp. (Figs. 1267–1269) and *P. afrus* n. sp. (Figs. 1270–1272) (bar scale: 0.1 mm).



Figures 1273–1279. Tergite and sternite of the male genital segment, aedeagus of *Phacophallus bangoranus* n. sp. (Figs. 1273–1275) and *P. politus* (Figs. 1276–1278) (bar scale: 0.1 mm). Fig. 1279: distribution of the genus *P. uhligi* group: *P. uhligi* n. sp. (filled square); *P. tuniseus* group: *tuniseus* (star), *erythraeus* n. sp. (filled triangle); *P. afrus* group: *P. elaeis* n. sp. (open square), *P. elephantorum* n. sp. (open circle), *P. pallidipennis* (rhombus), *P. congoensis* n. sp. (inverted triangle), *P. insularis* n. sp. (filled circle), *P. afrus* n. sp. (open triangle).



Figures 1280–1291. Tergite and sternite of the male genital segment, aedeagus of *Phacophallus unispinosus* n. sp. (Figs. 1280–1282) and *P. xanthopygus* (Figs. 1283–1285) (bar scale: 0.1 mm), tergite and sternite of the male genital segment, aedeagus of *Phacophallus nigerianus* n. sp. (Figs. 1286–1288) and *P. sudanensis* n. sp. (Figs. 1289–1291) (bar scale: 0.1 mm).



Figures 1292–1300. Tergite and sternite of the male genital segment, aedeagus of *Phacophallus mirus* n. sp. (Figs. 1292–1294), tergite and sternite of the male genital segment, aedeagus of *Phacophallus ghanensis* n. sp. (Figs. 1295–1297), tergite and sternite of the male genital segment, aedeagus of *P. sahariensis* (Figs. 1298–1300) (bar scale: 0.1 mm).

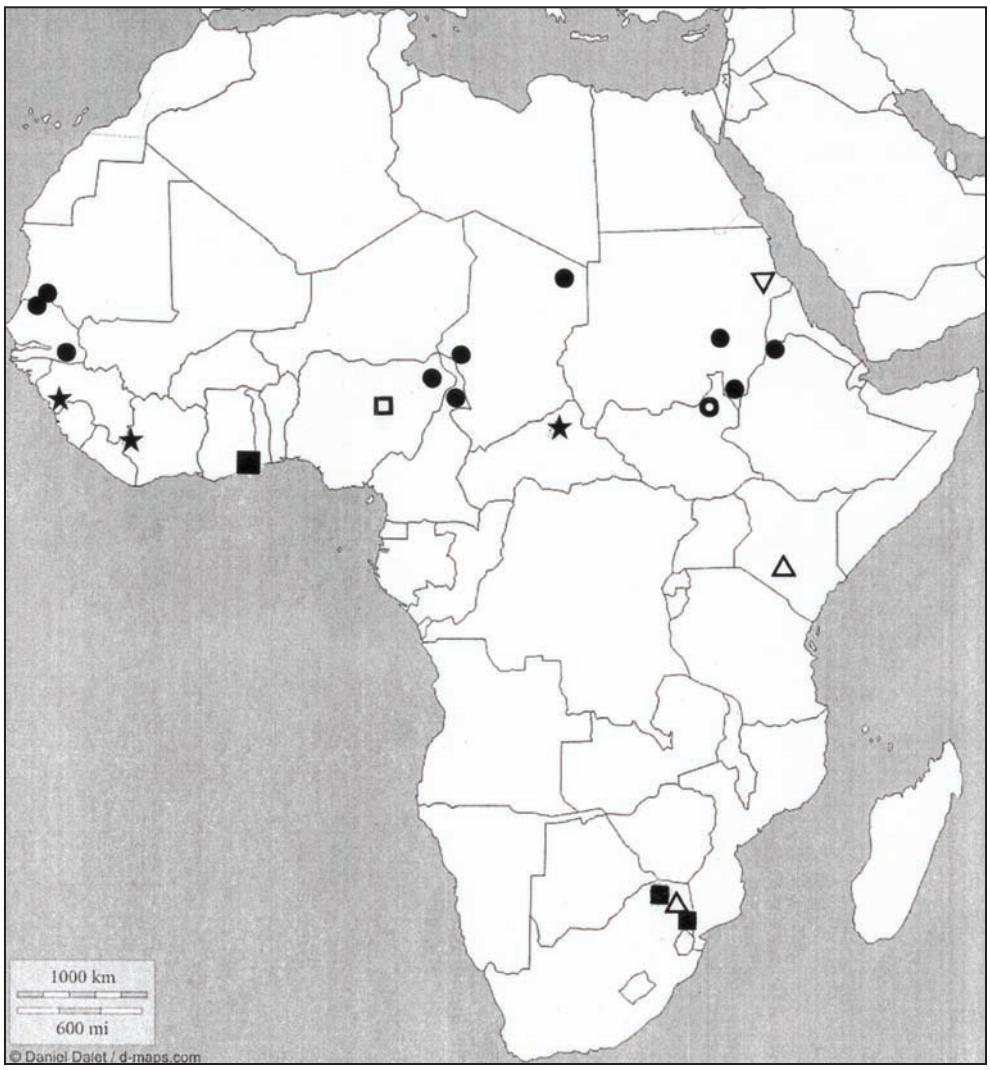


Figure 1301. Distribution of the genus *Phacophallus*: *P. unispinosus* group: *P. bangoranus* n. sp. (star), *P. unispinosus* n. sp. (open triangle), *P. xanthopygus* (inverted open triangle); *P. senegalensis* group: *P. nigerianus* n. sp. (open square), *P. mirus* n. sp. (small filled square), *P. sudanensis* n. sp. (open circle), *P. ghanensis* n. sp. (big filled square), *P. sahariensis* (filled circle).

24. Genus ***Xanthophius*** Motschulsky, 1859 (Figs. 1302–1320)

Xanthophius - Motschulsky, 1859: 75; Fauvel, 1895: 240; Bordoni, 2002: 576; 2005: 573; 2010: 410
Xanthophyus - Gemminger & Harold, 1868: 607; Sharp, 1874: 54 (wrong writing)
Xantophyus - Bernhauer & Schubert, 1914: 294 (wrong writing)

TYPE SPECIES of *Xanthophius*: *Xanthophius serpentarius* Motschulsky, 1859, by monotypy.

DESCRIPTION. Body very small (Fig. 1302), frail, with integuments poorly sclerified, of small sizes (3–4.5 mm). Fully winged species. Head subrectangular, elongate, pronotum very narrow, elytra long and proportionately very wide. Head with more or less dense and strong punctation; ocular grooves poorly obvious, short and hidden by the punctation. Eyes large and prominent. Labrum as in figure 1305. Mandibles with a broad lateral groove (Fig. 1306). Epistoma narrow between the antennae, slightly protruding, with a rounded dorsum and the anterior margin more or less rounded. Antennae with the scape short, swollen apically, as long as the 3 following segments combined, the 2nd antennomere longer than the 3rd which is subspherical; the following ones transverse, not very close to one another. Maxillary palpi with the 2nd segment shorter than the 3rd which is also larger, the last one shorter than the preceding, narrower, with the apex sub-acute (Fig. 1303). Labial palpi with the 2nd segment much longer than the 1st, lar-

ger, about as long as the last one which is subulate, narrow, much narrower than the previous one (Fig. 1304). Neck as wide as 1/3rd the breadth of head. Gular sutures divergent for much of their length, then parallel but not contiguous over a short distance. Pronotum with some dorsal and lateral series of punctures; antesternal plate divided; upper epipleural line of the pronotum directed towards the prosternum long before the anterior angles of pronotum and not meeting the lower line. Elytra with a few series of punctures; mesosternum narrow; metasternum very long, swolled distally. Legs with anterior tarsi not dilated; median and posterior tarsi with the 1st segment shorter than the 2nd which is equal to the 3,; the 4th shorter, the last one about as long as the 3 preceding ones combined; tibiae without large spines; metatibiae only with an apical ctenidium and sparse setae on the inner side.

This genus is close in its general aspect to *Leptacinus* from which it differs however by the elongate shape of the head, with large and very prominent eyes, the 2nd antennomere longer than the 3rd instead of sub-equal, the pronotum narrow and elongate, the elytra large and obviously dilated.

Moreover it differs above all in the shape of the genital segment, with pleura very elongated, and by the really unusual shape of the aedeagus, the basal bulb of which is sub-spherical, similar to that of *Phacophallus*, with a small sub-circular introflected plate and an extraordinarily dilated distal pore (Fig. 1310). The inner sac is composed of a kind of wide ribbon, covered with clusters of spinules and spines, coiled spirally like a corkscrew; always out of the basal bulb which it does not seem able to enter and is held between two peculiar symmetrical structures that do not have the normal position of parameres, but are connected to the lateral margins of the distal part of the bulb by means of muscles; however such structures, that I call parameres for the sake of convenience, as they are also furnished with placoid sensilla, are very different from the parameres of the majority of these staphylinids and are shaped like a kind of S, these are flat and narrow and enclose, on either side, the inner sac. Therefore they are closely connected to the latter and, by means of a rather fragile musculature, to the inner face of the sternite of the genital segment. The shape of the aedeagus of *Xanthophius* is absolutely anomalous within the Xantholinini. Female genital segment with the sternite proportionately small, of a narrow rhomboidal shape, furnished with two pairs of setae and large, symmetrical supplementary pieces, longer than the sternite of which they cover the proximal part (Fig. 1307).

DISTRIBUTION. Species of this genus, probably mostly synanthropic and living in decaying plant debris, are widespread in the Oriental Region from India and Sri Lanka, through Nepal, Bhutan, Assam, Thailand, Vietnam to the Philippines, south China and Taiwan, and southward through Sumatra and Java to Sumba (Bordoni, 2002). In Australia the

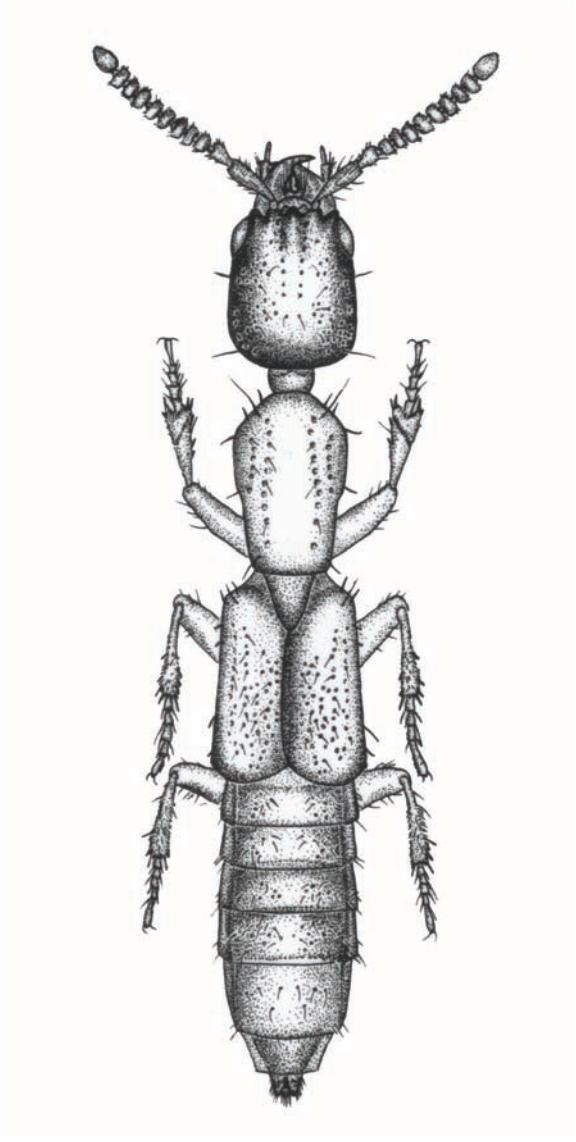


Figure 1302. Habitus of *Xanthophius* sp. (ex Bordoni, 2002).

two known species occupy most of the continent (Bordoni, 2005). In Africa the genus occurs in central-easthern regions (Fig. 1320).

REMARKS. Motschulsky (1859) described the genus *Xanthophius* to accommodate one species from Ceylon (*serpentarius*) which other authors hurried to put in synonymy with *Leptacinus*. It seems that they examined the external characters alone, which resemble those of the latter genus which, as with *Xantholinus*, were most often the sole criteria used in the descriptions of species with a similar facies.

In fact *Xanthophius* is a genus characterized by the very perculiar structure of the aedeagus. The exomorphological characters, carefully examined, confirm the differences between this genus and closely related ones. Motschulsky (1859) had described the differences he found, at least in the palpi and antennae. The fact remains that, due to the size and to remarkable external variability, the species of this group are very difficult to study and require careful examination of the aedeagus and of the genital segment, which are also difficult to study, owing to the small size and the fragility of the pieces to be examined. The inner sac, in particular, must be examined with extreme care for identification of the species.

Scheerpeltz (1974) cites *Leptacinus linearis* Gravenhorst, 1802 from Sudan: Kirdofan, Lake Keilak, Linnavuori, 8–11.II.1963, 1 ex.; Equatoria, Imatong Mts, nr. Gilo, Linnavuori, 18-24.III.1963, 1 ex. I have not seen these specimens, so I cannot corroborate this identification and the presence of the genus *Leptacinus* in Sudan.

KEY TO THE SPECIES

1. Body dark, about 4–4.5 mm long.....2
-. Body pale, less than 4 mm long.....3

2. Head broader and a little shorter, with denser punctation; eyes slightly smaller and more prominent; pronotum shorter; elytra longer and wider. Aedeagus smaller, about 0.7 mm long, with characteristic parameres (Fig. 1310); inner sac with a semicircle shaped surface covered with sparser and smaller scales, followed by a series of smaller spines. Tanzania, Congo, Malawi.....1. *X. pennatus*

-. Head narrower and a little longer, with sparser punctation; eyes a little larger and less prominent; pronotum longer; elytra shorter and narrower. Aedeagus larger, about 1 mm long, with different parameres (Fig. 1313); inner sac with a tape-like surface, coiled like a corkscrew, covered with larger and much denser scales, followed by a series of larger spines. Tanzania.....2. *X. usaensis* n. sp.

3. Body a little larger, 3.7 mm long, light reddish brown, with slightly darker head (light brown); head narrower, with slightly larger eyes. Aedeagus smaller, about 0.8 mm long, with particular parameres (Fig. 1316); inner sac with fewer, sparse scales, followed by a group of subquadrate larger scales. Angola.....3. *X. angolanus* n. sp.
-. Body a little smaller, 3.4 mm long, pale yellowish; head broader with slightly smaller eyes. Aedeagus larger, about 1 mm long, with different parameres (Fig. 1319); inner sac with a group of sparse, small scales, followed by a group of larger spines. South Africa.....4. *X. africanus* n. sp.

1. ***Xanthophius pennatus*** (Fauvel, 1907) comb. n.

Leptacinus pennatus - Fauvel, 1907: 33; Bernhauer & Schubert, 1914: 294; Herman, 2001a: 3681

TYPE MATERIAL. The Institute royal des Sciences Naturelles of Bruxelles, preserves 3 males, the first labelled "*Mars*", "*Museum Paris / Afrique Orient. All./ Kilimandjaro / Kiboscho / Ch. Alluaud 1904*", "*Ex-Typis*" (red print), "*Coll. et det. A. Fauvel* / Leptacinus / pennatus *Fauv./ R. I. Sc. N. B. 14–478*", "*Lectotypus male* / Leptacinus / pennatus *Fauvel / J. Janak des. 1992*" (in litt.); the second with the same labels and "pennatus Fvl.", "*Paralectotypus male* / Leptacinus/ pennatus *Fauvel / J. Janak des. 1992*"; the third with the same label as the first and "*Paralectotypus male* / Leptacinus / pennatus *Fauvel / J. Janak des. 1992*" (in litt.). These species have now the label, respectively "*Lectotypus* / Leptacinus / pennatus *Fauvel/ Bordoni des. 2013*" and "*Paralectotypus* / Leptacinus / pennatus *Fauvel / Bordoni des. 2013*", and all the determination label "Xanthophius pennatus *(Fvl.), Bordoni det. 2013*".

EXAMINED MATERIAL. (Tanzania), Tanganyika, Terr. Kilimanjaro, N de Marengu, vers. SE, 2200–2400 m, P. Basilewsky and N. Leleup, 22.VII.1957, 1 male (MRAC); Tanganyika, Kilimandjaro, Kiboscho, 1 male (in opinion of Levasseur - *in litteris* - probably paratype of the species) (MNHNP).

Tanzania, Arusha, P. Benoit, 4.IX.1972, 7 males (MRAC), 4 males (cB); Lindi Reg., Litipo For. Res., 10.02S, 39.29E, 180–270 m, "Frontiere-Tanzania" ZMUC, VII-IX.1993, 1 male (ZMUC); (D. O. Afrika), Kwasengiwa (probably Kiwengwa), C. Schroder, 16–17.I.1906, 1 male (MNB); (D.O. Afrika), Kihusio (?), C. Schroder, 7–10.I.1906, 1 male (MNB).

Congo, Kivu, Terr. Lubero, Mt Kibatsiro, Visiki, 2080 m, R.P.M.J. Celis, XII.1954, 1 male (MRAC); Kivu, Terr. Lubero, Mont Bugera, R.P.M.J. Celis, X–XI.1954, 1 male, 2 females (MRAC); Kivu, N Lac Kivu, Rwankwi, J. Leroy, 25.XII.1950, 1 ex. (MRAC), 1 ex. (cB).

Malawi, Central region, 30 km S Lilongwe Bunda, 1100 m, L. Schmidt, 19–20.VII.2000, 1 male (cA).

CITED MATERIAL (not examined). (Tanzania), Kilimandjaro, Meru (Eichelbaum, 1910, sub *Leptacinus*).

DESCRIPTION. Length of body: 4.5 mm; from anterior margin of head to posterior margin of elytra: 2.2 mm. Fully winged. Body shiny, reddish brown. Head sub-rectangular, with slightly rounded sides and broadly rounded posterior angles. Eyes large and protruberent. Surface of head with fine and sparse punctation except on a broad median band. Pronotum as long and as wide as head, dilated anteriorly, with sinuate sides, anterior margins very oblique, dorsal series of 6, 7 punctures and lateral series of 5 anterior punctures. Elytra large, much longer and wider than pronotum, with marked humeral angles and fine punctures arranged in three series, one juxtasutural, one median and one lateral. Tergite and sternite of the male genital segment as in figures 1308, 1309. Aedeagus 0.7 mm long (Fig. 1310), with characteristic parameres; inner sac composed of a proximal C-shaped portion and covered with scales and by a distal portion with 2 series of minute spines.

DISTRIBUTION. Tanzania, Congo, Malawi (Fig. 1320).

BIONOMICS. "*Forêt de montagne*".

REMARKS. The species is variable in size and punctation.

2. ***Xanthophius usaensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Tanganjika, Usa river (near Arusha), 3900 feet, J. Szonyoghy, 1–10.I.1966 (MTM).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.5 mm; from anterior margin of head to posterior margin of elytra: 2.5 mm. Fully winged. Body shiny, reddish brown. Similar to *X. pennatus* but more robust and larger. Head sligthly larger, with smaller eyes. Surface of head with much sparser but coarser punctation. Pronotum less dilated anteriorly, with less oblique anterior margins, dorsal series as in *X. pennatus*, lateral series of 5, 6 punctures. Elytra much shorter and narrower than in pennatus, with less marked humeral angles; punctation finer than in *X. pennatus*. Tergite and sternite of the male genital segment as in figures 1311, 1312. Aedeagus larger than that of *X. pennatus* (Figs. 1313, 1779, 1780), 1.1 mm long, with characteristically different parameres; inner sac composed of a larger proximal portion, of different shape and with a different set of spines; distal portion with only one series of longer and larger spines.

ETYMOLOGY. The specific epithet refers to the type locality.

DISTRIBUTION. The species is only known from the type locality in Tanzania (Fig. 1320).

REMARKS. Female unknown. This species, in my opinion, differs from *X. pennatus* in some external characters and in the shape of aedeagus, parameres and inner sac, therefore it is possible that the specimen belongs to a population that in future may be ascribed to *X. pennatus*.

3. ***Xanthophius angolanus*** n. sp.

EXAMINED MATERIAL. Holotype male: Angola, Alto Cuilo, rives Cuilo, E. Luna de Carvalho, VI.1954 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.5 mm; from anterior margin of head to posterior margin of elytra: 2.5 mm. Fully winged. Body shiny. Similar to *X. pennatus* but darker; head narrower, with more sub-rectilinear and sub-parallel

sides. Eyes a little larger than in *X. pennatus*. Surface of head with sparser punctation. Pronotum narrower than in *X. pennatus*, less dilated anteriorly. Elytra missing. Tergite and sternite of the male genital segment as in figures 1314, 1315. Aedeagus 0.8 mm long (Fig. 1316), with very different parameres, shorter and broader than in *X. pennatus*; inner sac covered with minute scales, gradually increasing in size in distal portion.

ETYMOLOGY. The specific epithet refers to Angola (Fig. 1320).

DISTRIBUTION. Female unknown. The species is only known from the type locality in Angola.

4. ***Xanthophius africanus*** n. sp.

EXAMINED MATERIAL. Holotype male: South Africa, Transvaal, Pretoria, Monumental Park, L. Schulze I., 1970 (TMSA); paratypes: stessi dati, 3 exx. (TMSA), 3 exx. (cB); Pretoria Tvl., L. Schulze 22.IX.1969, 1 ex. (TMSA), 2 exx. (cB); Transvaal, Waterberg, 24.11S, 22.50E, A. Strydom 11.II.1976, 1 ex. (TMSA); Zululand, Dukudatu For., 28.22S, 32.19E, Endrödy-Younga, 4.IV.1974, 4 exx. (TMSA), 3 exx. (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body 3.5 mm; from anterior margin of head to posterior margin of elytra: 2.1 mm. Reddish brown with posterior margin of elytra yellowish. Similar to *X. luridipennis* (MacLeay, 1873); from Australia but much smaller; head more sub-rectangular, not dilated posteriad, with much finer and sparser punctation; dorsal series of 7, 8 punctures and lateral series of 4, 5 punctures. Elytra wider and proportionately longer than that of *X. luridipennis*, with more rounded humeral angles. Tergite and sternite of the male genital segment as in figures 1317, 1318. Aedeagus short (Fig. 1319), 1 mm long, with very long parameres of characteristic shape; inner sac with some short spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Africa.

DISTRIBUTION. South Africa: Zululand, Transvaal (Fig. 1320).

BIONOMICS. Some specimens were collected in "*trees in river bed*".

25. Genus ***Balchis*** n. gen. (Figs. 1321–1341, 1723)

TYPE SPECIES. *Leptacinus micropterus* Bernhauer, 1931.

DESCRIPTION. Similar to *Notolinopsis* in general shape (Fig. 1321) but differing in the following characters: body smaller; maxillary palpi as in figure 1322; labial palpi with filiform last segment much longer than the preceding segment (Fig. 1323); labrum narrow and short, with a feeble emargination (Fig. 1324); mandible as in figure 1324; antennae with 3rd segment shorter than 2nd; obsolete ocular and frontal grooves; gular sutures V-shaped, separated for almost their entire lengths (Fig. 1326); pronotum usually with only dorsal and lateral series of punctures; sternum with parterior portion very short; metasternum as in figure 1327; anterior tarsi not dilated. Aedeagus small, of very peculiar shape, with long parameres, between which there is a big sclerite (Fig. 1331). Fully winged and apterous species. Female genital segment about similar to that of *Leptacinus* (Fig. 1328).

ETYMOLOGY. Balchis (or Balkis) is the name of the Queen of Sheba, who ruled over northern Ethiopia and Eritrea at the end of the ninth century BC. Feminine gender.

DISTRIBUTION. Ethiopia (Fig. 1341).

REMARKS. The species are very similar to one another, so a study of the aedeagus is crucial.

KEY TO THE SPECIES

1. Body, larger, 5.5–6 mm long, apterous.....2
-. Body smaller, about 4 mm long, fully winged; reddish brown; head sub-rectangular, with slightly rounded sides; eyes small and flat; dorsal series of pronotum of 10, 11 punctures; elytra long, sub-rectangular. Male unknown. Ethiopia.....1. *B. abessina*

2. Head sub-oval; body robust, dark reddish brown, 6.5 mm long; head large; pronotum narrow;

elytra narrow and short. Aedeagus large, 1.15 mm long (Fig. 1331). Ethiopia.....2. *B. balensis* n. sp.
-. Head sub-rectangular.....3

3. Body reddish brown, 5.5–6 mm long; pronotum wider; elytra wider and longer. Aedeagus a little longer, 0.6 mm long (Fig.1334). Ethiopia.....3. *B. microptera*
-. Body yellowish brown, slender, 5.7 mm long; pronotum narrower and shorter; elytra shorter. Aedeagus a little shorter, 0.55 mm long, with additional, lateral structures (Fig.1337). Ethiopia.....4. *B. alpica* n. sp.

1. ***Balchis abessina*** (Bernhauer, 1931) comb. n.

Leptacinus abessinus - Bernhauer, 1931: 581; Scheerpeltz, 1933: 1300; Cameron, 1950g: 29; Herman, 2001a: 3665
Leptacinus aethiopicus - Bernhauer, 1931: 582; Scheerpeltz, 1933: 1300; Herman, 2001a: 3665, syn. n.

Type Material. The Natural History Museum of London preserves 2 specimens labelled "*Abessynia: / Djem Djem Forest / circa 9000 ft. / 4.X.1926 / Dr. H. Scott*", "Leptacinus / abessinus / *Brnh. Typ.*" (handwritten by Bernhauer), "*Type*" (on round label with red border), and "*Abessynia: / Djem Djem Forest / IX.1926 / J. Omar-Cooper*", Leptacinus / abessinus / *Brnh.*", "*Syntype*" (on round label with light blue border). They are two females. I choose one of these as lectotype of the species, and the other as paralectotype of the species. They now bear respectively the labels "*Lectotypus* Leptacinus abessinus *Bh., Bordoni des. 2006*" and "*Paralectotypus* Leptacinus abessinus *Bh., Bordoni des. 2006*".

The Field Museum of Natural History in Chicago preserves 1 specimen labelled "*Abyssinia / Edge of / Djem-Djem for.", "circa 9000 ft / 4.X.1926 / Dr. H. Scott*", "*Brit. Mus. / 1927–127*", "abessinus *Brh. / cotype*", "Leptacinus / abessinus *Brnh. / cotypus*" (handwritten by Bernhauer). I also choose this specimen, female, as paralectotype of the species. It bears the label "*Paralectotypus* Leptacinus abessinus *Bh., Bordoni des. 2006*".

The Natural History Museum in London preserves 2 specimens labelled "*Abyssinia / Djem-Djem forest / IX.1925 / J. Omer-Cooper*", "Leptacinus / aethiopicus / *Brnh. Typ.*", one "*Type*" (on round label with red border) and the other "*Syntype*" (on round label with light blue border). They are two females. I choose these specimens as paralectotypes. They have the labels "*Paralectotypus* Leptacinus aethiopicus *Bh., Bordoni des. 2006*".

All the named specimens have the determination "Balchis abessina *(Bh.), Bordoni det. 2006*".

The Field Museum of Natural History in Chicago preserves 1 specimen labelled "*Abyssinia / Djem-Djem forest / IX.1925 / J. Omer-Cooper*", "*Brit. Mus. / 1927–127*", "aethiopicus / *Brnh. cotyp.*", "aethiopicus / *Brnh. Typus / Don. Arrow*" (handwritten by Bernhauer). It is a female. I also choose this specimen as lectotype of the species. It bears the label "*Lectotypus* Leptacins aethiopicus *Bh., Bordoni des. 2006*".

Cited material (not examined). Congo, Nyasheke, volc. Nyamuragira, 1820 m (Cameron, 1950, sub *Leptacinus abessinus*), probably as a result of misidentification.

Description. Length of body: 4 mm; from anterior margin of head to posterior margin of elytra: 2 mm. Fully winged. Body brown. Similar to *A. microptera* but clearly smaller; head more sub-rectangular, with denser and deeper punctation; pronotum more quadrate, with clearly sinuate sides; dorsal series of 10, 11 punctures and lateral series of 4, 5 punctures; between these with another series of 6 punctures; elytra much longer, dilated posteriad, with less marked humeral angles; surface with fine and sparse punctures arranged in a few widely spaced series; abdomen with transverse micro-striation and fine and sparse punctation. Male unknown.

Distribution. Ethiopia (Fig. 1341).

2. ***Balchis balensis*** n. sp.

Examined Material. Holotype male: Ethiopia, Bale Prov., Bale Mts, 30 km SW Goba, 3900 m, R. Clarke, 4.VI.1975 (MRAC); paratypes: same data, 1 female (MRAC), 1 male, 1 female (cB).

Description of Holotype. Male. Length of body: 6.5 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Apterous. Body reddish brown, with transverse micro-striation on head

and pronotum. Similar to *B. microptera*, but larger and more robust. Head larger than that of microptera, with coarser punctation. Eyes small. Pronotum narrower, more dilated anteriorly, with dorsal and lateral series composed of larger punctures. Elytra narrower and shorter than in microptera, with obsolete humeral angles and deeper punctures. Tergite and sternite of the male genital segment as in figures 1329, 1330. Aedeagus 1.15 mm long (Figs. 1331, 1781), sub-spherical, with long, characteristic parameres; two flat lobules between the parameres; inner sac not visible.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality.

DISTRIBUTION. The species is only known from the type locality in Ethiopia (Fig. 1341).

3. ***Balchis microptera*** (Bernhauer, 1931) comb. n.

Leptacinus micropterus - Bernhauer, 1931: 580; Scheerpeltz, 1933: 1302; Herman, 2001a: 3678

TYPE MATERIAL. The Field Museum of Natural History in Chicago preserves 4 specimens labeled "*Box 112*", "*Abyssinia / Mount Chillálo / Moorland.*", "*ca. 12000–13000 ft / 21.XI.1926 / Dr. H. Scott*", "*from damp / moss*", "*Brit. Mus. 1927-127*", "Leptacinus / micropterus / *Bernh. Cotypus*" (handwritten by Bernhauer). I choose one of these specimens as lectotype of the species. It now bears the label "*Lectotypus* Leptacinus micropterus *Bh., Bordoni des. 2006*".

The Natural History Museum in London preserves 11 specimens labeled as the specimens cited above, 1 specimen labeled "*9000 ft, 13.XI.1926, in humus under forest trees*", collected at a lower altitude and with different data. I choose these as paralectotypes of the species; they bear the label "*Paralectotypus* Leptacinus micrropterus *Bh., Bordoni des. 2006*". All the named specimens bear the determination label "Balchis microptera *(Bh.), Bordoni det. 2006*".

DESCRIPTION. Length of body: 5.5–6 mm; from anterior margin of head to posterior margin of elytra: 2.7–3 mm. Brachypterous. Reddish brown. Head oval, with less rounded sides and broadly rounded posterior angles. Eyes very small and a little protruberent, with diameter greater than the length of 2nd antennomere. Surface of head with fine and dense polygonal micro-reticulation and deep, sparse punctures. Pronotum sub-rectangular, longer and slightly narrower than head, with not oblique but almost transverse anterior margins, and with narrowly rounded anterior angles. Surface with transverse micro-striation; dorsal series of 10, 11 punctures and lateral series of 7, 8 irregular punctures, and some punctures near the anterior angles. Elytra short, shorter and slightly wider than pronotum, with obsolete humeral angles. Surface with transverse micro-striation and punctation similar to that of the pronotum but more superficial, arranged in several, not sparse, series. Abdomen with transverse micro-striation and fine, very sparse punctures. Tergite and sternite of the male genital segment as in figures 1332, 1333. Aedeagus very small (Fig. 1334), 0.6 mm long, of particular shape, oval, short, with distal portion very narrow and with dilated apex; parameres very broad and long; inner sac not visible.

DISTRIBUTION. Ethiopia (Fig. 1341).

BIONOMICS. The specimens were collected especially "*from damp moss on the high heath-land*". Scott (1931) wrote "*on the bare heathland at the summit of Mt. Chillalo*", and Bernhauer (1931) wrote "*from damp moss on the high heathland and humus under forest trees*".

4. ***Balchis alpica*** n. sp.

EXAMINED MATERIAL. Holotype male: Ethiopia, Bale Prov., Bale Mts, 30 km SW Goba, 3900 m, R. Clarke 4.VI.1975 (MRAC); paratypes: same data, 1 female (MRAC), 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body 5.7 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Apterous. Body reddish brown, with transverse micro-striation on head and pronotum. Similar to *B. balensis* n. sp., but smaller. Head much narrower and not dilated anteriorly, with finer punctures. Eyes small. Pronotum much smaller and narrower than that of *B. balensis* n. sp., with narrowly rounded anterior angles; dorsal series of 9, 10 punctures and lateral irregular series of 7, 8 punctures. Elytra shorter

and narrower than in *B. balensis* n. sp., with similar obsolete humeral angles but with larger and sparser punctures. Tergite and sternite of the male genital segment as in figures 1335, 1336. Aedeagus (Fig. 1337) small, 0.55 mm long, subtriangular, with characteristic, narrow parameres; a flat lobule between the parameres; inner sac not visible.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is the the Latin *alpicus -a- um* (alpine), in reference to the elevation at which the specimens were collected.

DISTRIBUTION. The species is only known from the type locality in Ethiopia (Fig. 1341).

REMARKS. I provisionally place *Leptacinus perplexus* Cameron, 1950: 30 next to the above species (see also Herman, 2001a: 3681), described from Congo (North Kivu Lake), preserved in IRSNB ["*Type*" (printed on orange label), "*M. Cameron det. 1949 /* Leptacinus/ perplexus *n. sp.*", "*Congo, Gitebe (Volc. Nyamaragira) / 2324 m, G. F. de Witte 14-26.VI.1935*" (female); same data, 1 male "*Paratype*" (printed on orange label), as the following: 2 females, 1 male "*Nyasheka ((Volc. Nyamaragira) / 1820 m, G. de Witte 26.VI.1935*"; 1 female "*Kanyabayongo (Kabasha) / 1760 m, G. de Witte 7.XII.1934*"; 1 female "*Rutshuru, 1285 m / G. de Witte 1–6.VI.1935*"].

Description: length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Body shiny, reddish brown with lighter elytra and first 4 abdominal segments; antennae and legs yellowish brown. Head sub-rectangular, slightly narrowed anteriorly, with less rounded sides and broadly rounded posterior angles. Eyes medium-sized and protruberent. Surface of head with very sparse, not large but clearly visible punctures. Pronotum as long as head, dilated anteriorly where it is as wide as head, with sinuate sides; dorsal series of 5 puntures and lateral series of 4 punctures. Elytra long, dilated posteriad, with marked humeral angles. Surface with fine punctures arranged in some series. Scutellum very large. Tergite and sternite of the male genital segment as in figures 1338, 1339; sternite filiform over a long distance in the proximal portion. Aedeagus very small (Fig. 1340), 0.6 mm long, of particular shape; parameres very narrow and long, together with a short membranous structure.

These specimens differs from the nominate species of the genus *Balchis* n. gen. in the following characters: ocular and frontal grooves present, posterior margin of sternum almost sub-rectilinear, shape of female genital segment with small additional sclerites and aedeagus.

26. Genus ***Agaporina*** n. gen. (Figs. 1342–1361, 1724)

TYPE SPECIES. *Leptacinus cooperi* Bernhauer, 1931

DESCRIPTION. This new genus is similar to *Elapheia* n. gen. in some characters: body (Fig. 1342) more or less flat, shape of maxillary and labial palpi, (Figs. 1343, 1344), labrum (Fig. 1345), ocular grooves absent or barely marked, mandibles with external groove, gular sutures separate, antesternal plate divided, pronotum with dorsal and lateral series of punctures, superior epipleural line of pronotum not meeting the inferior line, anterior tarsi not dilated. It differs in the following characters: body not so flat, ocular and frontal grooves obsolete, at most the ocular grooves barely marked, neck wide and not narrow, antennae with 2nd segment a little shorter, not scarcely longer than 3rd; upper epipleural line present only for over a short anterior distance; metasternum short and flat and not long and flat, mesosternum with posterior median protrusion acute and not rounded (Fig. 1347), aedeagus (Figs. 1354, 1357) and female genital segment (Fig. 1348) of different shape.

ETYMOLOGY. Fictitious name. Feminine gender.

DISTRIBUTION. Ethiopia, Kenya, Burundi, Tanzania, Cameron, Uganda, Rwanda, Ghana (Fig. 1361).

REMARKS. The shape of the aedeagus is vaguely similar to that of *Metocinus* from which the new genus differs by several characters and in particular upper epipleural line present only for over a short anterior distance; the anterior tarsi not dilated (Fig. 1346).

KEY TO THE SPECIES

1. Head with very fine and sparse punturation; body 4,5 mm long, brown orange; pronotum and elytra sub-rectangular. Aedeagus as in figure 1351. Tanzania.....1. *A. encephala*
-. Head with larger, deeper, denser punctation.....2

2. Body larger, 6–6.5 mm long.....3
-. Body smaller, less than 6 mm long.....4

3. Body reddish brown, 6.5 mm long; head broader; eyes medium-sized and a little protruberent; pronotum less dilated forward. Male unknown. Kenya: Mt Elgon.....2. *A. elgonensis*
-. Body brown, slender, 6 mm long; head narrower; eyes large and flat; pronotum more dilated forward. Male unknown. Burundi.....3. *A. raptor*

4. Body about 5 mm long.....5
-. Body 4.5 mm long, reddish brown, with infuscate posterior half of elytra; eyes small, a little protruberent; pronotum narrower than head; dorsal series of pronotum of 9, 10 punctures; long and narrow elytra. Aedeagus as in figure 1354. Cameroon.....4. *A. basipennis*

5. Body 5.5 mm long, reddish brown with darker head; head very large, long, sub-rectangular, with small almost flat eyes; pronotum small, shorter and narrower than head. Aedeagus as in figure 1357. Uganda., Rwanda.....5. *A. diaphana* n. sp.
-. Body 5.3 mm long, reddish yellow with pale yellowish elytra; head sub-oval, strongly dilated posteriad; eyes large and protruberent; pronotum as long and wide as head. Male unknown. Ethiopia.....6. *A. cooperi*
-. Body 4.9 mm long, reddish brown, with darker head and infuscate elytra; shape of body similar to that of *A. diaphana* n. sp., but head shorter, narrower; eyes a little smaller; pronotum narrower; elytra not rectangular. Aedeagus smaller (Fig. 1360). Ghana.....7. *A. ghanensis* n. sp.

1. ***Agaporina encephala*** (Fauvel, 1907)

Leptacinus encephalus - Fauvel, 1907: 33; Bernhauer & Schubert, 1914: 293 (sub *eucephalus*); Scheerpeltz, 1933: 1302; Herman, 2001a: 3672

TYPE MATERIAL. I could not find the type of this species (cited from Kilimandjaru, Kilema), but I have studied 2 specimens preserved in the coll. Bernhauer in the FMNH of Chicago. One, female, is labelled "*West Usumbara, coll.*...[illegible], *III.1912*"; the other, male, is labelled "*Arusha-Ju, XII.1905, and Africa or., Katona*". Both have the label "encephalus *Fauv., det. Bernhauer*".

CITED MATERIAL (not examined). Tanzania, Kilimandjaro-Meru (Eichelbaum, 1910, sub *Leptacinus*).

DESCRIPTION. Length of body: 4.5 mm; from anterior margin of head to posterior margin of elytra: 2.4 mm. Fully winged. Entirely brown orange, shiny, characterized by head with very sparse punctation. Head ovoid, elongate, with almost rectilinear sides and largely rounded posterior angles. Eyes large and a little protruding. Surface of head with sparse and very fine punctation. Pronotum longer and a little wider than head, sub-rectangular, with very oblique anterior margins and very largely rounded anterior angles, almost not sinuate sides. Surface with dorsal series of 8, 9 punctures and oblique lateral series of 4, 5 punctures; all the punctures very fine. Elytra large, longer and wider than pronotum, sub-rectangular, slightly dilated posteriad, with marked humeral angles. Surface with fine, superficial punctures, arranged in three series, one near the suture, one median and one lateral. Abdomen with fine and superficial micro-striature and fine, sparse punctation. Tergite and sternite of the male genital segment as in figures 1349, 1350. Aedeagus 0.88 mm long (Fig. 1351) , with symmetrical parameres; inner sac tape-like, short and narrow, covered with little spines.

DISTRIBUTION. Tanzania (Fig. 1361).

REMARKS. This species differs immediately from other species of the genus by the very fine and sparse punctation on head, instead of large, deep, dense punctation.

2. ***Agaporina elgonensis*** (Bernhauer, 1939) comb. n.

Leptacinus elgonensis - Bernhauer, 1939: 75; Herman, 2001a: 3672

Leptacinus macropterus - Bernahuer, 1939: 76; Herman, 2001a: 3677, syn. n.

TYPE MATERIAL. The Muséum national d'Histoire naturelle in Paris preserves 1 specimen labelled "*Kenya / Suam fishing hut / Mt Elgon vers' Est / 2400 m*", "*Muséum de Paris / Mission de l'Omo / C. Arambourg / P. A. Chappuis et E. Jeannel / 1932-33*", "Leptacinus / elgonensis / *Typ. Bh.*", "*Type"* (printed on red label). It is a female. I chose this specimen as lectotype; it is now labelled "*Lectotypus* Leptacinus elgonensis *Bernh., Bordoni des. 2006*" and "Agaporina elgonensis *(Bh.), Bordoni det. 2011*".

The same museum preserves 2 specimens of *Leptacinus macropterus*. The first is labelled "*Kenya / Vallée Koptawelil / Mt. Elgon vers' Est / 2300 m*", "*Muséum de Paris / Mission de l'Omo / C. Arambour / P. A. Chappuis et E. Jeannel / 1932-33*", "*Type*" (printed on red label), "Leptacinus / macropterus / *Typ. Bh.*". It is a female. I chose this specimen as lectotype, now labelled "Lectotypus *Leptacinus macropterus Bernh., Bordoni des. 2006*". The second bears the same labels and "*Paratype*". I chose this specimen, female, as paralectotype, now labelled "*Paralectotypus* Leptacinus macropterus *Bernh., Bordoni des. 2006*". The two specimens are now labelled "Agaporina elgonensis *(Bh.), Bordoni det. 2013*".

DESCRIPTION. Length of body: 6.5 mm; from anterior margin of head to posterior margin of elytra: 3.5 mm. Fully winged. Body reddish brown. Head elongate, a little dilated posteriad, with broadly rounded posterior angles and sub-rectilinear sides. Eyes medium-sized and slightly protruberent. Surface shiny, with evident and deep punctation; the distance between the punctures is twice the diameter of punctures. Pronotum a little longer and wider than head, dilated anteriorly, the sides not sinuate. Surface shiny, with dorsal series of 7 irregular punctures and lateral series of 3, 4 widely spaced punctures. Elytra longer and wider than pronotum, with not very marked humeral angles. Surface with sparse punctures arranged in two series near the suture, one median and one lateral. Abdomen with transverse micro-striation and fine punctation on the sides. Male unknown.

DISTRIBUTION. The species is only known from Mount Elgon in Kenya (Fig. 1361).

REMARKS. The specimen of *A. macroptera* is smaller (6.2 mm long) and differs apparently from *A. elgonensis* in the following characters that I attribute to the range of variability of the species, collected on the eastern flank of Mt Elgon: head less dilated posteriad, pronotum shorter, not dilated anteriorly, dorsal series of 10 punctures and lateral series of 5 punctures; elytra shorter than in *A. elgonensis*, with more numerous series of punctures. Only the study of males can define the systematic position of this species.

3. ***Agaporina raptor*** (Tottenham, 1956) comb. n.

Leptacinus raptor - Tottenham, 1956: 243; Herman, 2001: 3684

TYPE MATERIAL. The Royal Museum for Central Africa in Tervuren preserves 1 specimen labeled "*Holotype*" (printed on orange label), "*Coll. Mus. Congo / Urundi: t. Bururi, 900 m / Nyamurembe, 7.III.1953 / P. Basilewsky*", "Leptacinus / raptor / *Tottenham / Type*". It is a female.

DESCRIPTION. Female. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 2.3 mm. Fully winged. Body brown, elongate. Head narrow and elongate. Eyes large and flat. Surface of head with large, deep and dense punctures except from on a median band. Pronotum very narrow posteriad and dilated anteriorly, with narrowly rounded anterior angles; dorsal series of 6 large punctures and lateral series of 5 smaller punctures. Elytra broad, with very fine punctures, arranged in several series. Male unknown.

DISTRIBUTION. Rwanda (Fig. 1361).

4. ***Agaporina basipennis*** (Bernhauer, 1942) comb. n.

Leptacinus basipennis - Bernhauer, 1942: 361; Herman, 2001a: 3666

TYPE MATERIAL. The Field Museum of Natural History in Chicago preserves 2 specimens. The first is labelled "*Mt. Cameroun / 1800–2000 m / versant S-E", "Muséum Paris / P. Lepesme R. Paulian / A. Villiers / Cameroun 1939*", "Leptacinus / basipennis / *Brnh. Type*", "basipennis / *Brnh. Type* / Leptacinus" (handwritten by Bernhauer on red label); the second bears the same labels and "basipennis /

Brnh. / cotypus / Leptacinus". These specimens are males. I choose the first as lectotype and the second as paralectotype of the species. The first is labelled "*Lectotypus* Leptacinus basipennis *Bh., Bordoni des. 2006*" and the second "*Paralectotypus* Leptacinus basipennis *Bh., Bordoni des. 2006*". Both are labelled "Agaporina basipennis *(Bh.), Bordoni det. 2011*".

The Muséum national d'Histoire naturelle in Paris preserves 1 specimen with the same labels and "*Type*" (printed on red label), "Leptacius / basipennis / *Brnh. Type*", "Xantholinus / basipennis / *Brnh, Typ.*". I choose this specimen as paralectotype, now labelled "*Paralectotypus* Leptacinus basipennis *Bh., Bordoni des. 2006*" and "Agaporina basipennis *(Bh.), Bordoni det. 2011*".

EXAMINED MATERIAL. Cameroon, Mt Cameroun, 1800–2000 m, coll. Levasseur, 1 female (MNHNP) (Bernhauer added, probably after completing the description, the label "Leptacinus (*?*) basipennis *Bh., Paratype*", but I think that it is not part of the type series of the species).

DESCRIPTION. Length of body: 4.5 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Fully winged. Body reddish brown with elytra largely infuscate on the posterior half; antennae and legs pale testaceous. Head and pronotum with traces of transverse micro-striation. Head subrectangular, a little narrowed anteriorly, with slightly rounded sides and rounded posterior angles. Eyes small and scarcely protruding. Surface of head with large and small, deep, dense punctures, apart from on a median band. Pronotum a little longer and narrower than head, with narrowly rounded anterior angles and sub-rectilinear sides; dorsal series of 9, 10 fine punctures and lateral series of 5, 6 irregular punctures. Elytra sub-rectangular, with subrectilinear and sub-parallel sides, long and very narrow, much longer than and as wide as pronotum, with less marked humeral angles and finer and denser punctures arranged in some series. Tergite and sternite of the male genital segment as in figures 1352, 1353. Aedeagus 1 mm long (Figs. 1354, 1782), narrow in the distal portion and enlarged in the median and proximal portion, with short symmetrical parameres; inner sac filiform, without scales.

DISTRIBUTION. Cameroon (Fig. 1361).

5. ***Agaporina diaphana*** n. sp.

EXAMINED MATERIAL. Holotype male: Uganda, Fort Portal, 15 km W Sebitoli, M. Snizek, 23.XI–5.XII.1994 (cJ); paratype: same data, 1 male (cB); Ruanda, Cyangugu, Nyakabuye, H. Mhüle 11–3.IV.1983, 1 male (MNB).

DESCRIPTION. Length of body: 5.5 mm; from anterior margin of head to posterior margin of elytra: 2.7 mm. Fully winged. Body reddish brown with dark head and with transverse micro-striation on head and pronotum. Head large, sub-rectangular, a little dilated posteriorly, with sub-rectilinear sides and narrowly rounded posterior angles. Eyes medium-sized, less protruberent. Surface of head with clearly visible, deep, dense punctures apart from on a median band. Pronotum a little shorter and narrower than head, with less oblique anterior margins and broadly rounded anterior angles; dorsal series of 7, 8 punctures and lateral series of 5, 6 irregular punctures; all the punctures large, with other surrounding punctures. Elytra sub-rectangular, narrow, longer and wider than pronotum, with slightly rounded sides, with marked humeral angles. Surface with fine, superficial and dense punctures arranged in numerous series. Tergite and sternite of the male genital segment as in figures 1355, 1356. Aedeagus translucent (Fig. 1357), very narrow and proportionately long, 1 mm long, with particular distal margin; parameres more or less symmetrical, large; inner sac very narrow, almost filiform, without scales.

ETYMOLOGY. The specific epithet refers to the Latin *diaphanus -a -um* "diaphanous", in reference to the rather insubstantial, translucent aedeagus.

DISTRIBUTION. The species is actually known from Uganda and Rwanda (Fig. 1361).

6. ***Agaporina cooperi*** (Bernhauer, 1931) comb. n.

Leptacinus cooperi Bernhauer, 1931: 581; Scheerpeltz, 1933: 1301; Herman, 2001a: 3671.

TYPE MATERIAL. The Field Museum of Natural History in Chicago preserves 1 specimen labelled "*Abyssinia: / Hawash Railway Stn*", "*circa 3.500 ft / 2.IX.1926 / J. Omer Cooper*", "*Came to light*", "cooperi *Brnh. / cotypus*", "*Brit. Mus. 1927–127*",

"Leptacinus / cooperi / *Brnh. / cotypus*" (handwritten by Bernhauer). It is a female.

The Natural History Museum in London preserves 1 specimen with the same labels and "Leptacinus / cooperi *Brh. / Typus*" (handwritten by Bernhauer), "Leptacinus / cooperi *Brnh. / P. M. Hammond / det. 1981 / Holotype female*".

I choose the second specimen as lectotype and the first as paralectotype of the species. They now bear respectively the label "*Lectotypus* Leptacinus cooperi *Bh., Bordoni des. 2006"* and "*Paralectotypus* Leptacinus cooperi *Bh., Bordoni des. 2006*". Both have the determination label "Agaporina cooperi *(Bh.), Bordoni det. 2011*".

DESCRIPTION. Female. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.5 mm. Fully winged. Body shiny, reddish brown, with head dark and elytra yellowish. Head elongate, dilated posteriad, with sub-rectilinear sides and broadly rounded posterior angles. Eyes large and a little protruberent. Surface of head with fine, dense punctures except on a median band. Pronotum as long as head, strongly dilated anteriorly where it is wider than head, with very rounded anterior angles; dorsal series of 8, 9 punctures and lateral series of 7, 8 punctures, all fine. Elytra long, dilated posteriad, longer and wider than pronotum, with marked humeral angles. Surface with very fine, sparse punctures arranged in a few series. Male unknown.

DISTRIBUTION. Ethiopia.

REMARKS. The specimen in the London Museum should be the holotype of the species, but in the description Bernhauer wrote "*1 example*", so I think it useful to designation a lectotype.

The specimen in the FMNH is broken into several parts.

7. ***Agaporina ghanensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Ghana, Atewa Ridge, W. Rossi 16.VI.1986 (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.5 mm. Fully winged. Body reddish brown with head dark and elytra broadly infuscate in the posterior half; the first two visible abdominal segments paler; antennae and legs light brown. Head and pronotum with transverse microstriation. Head sub-rectangular, with sub-rectilinear and sub-parallel sides and narrowly rounded posterior angles. Surface with deep, not sparse punctures, apart from on a median band. Pronotum narrow, longer and narrower than head, slightly dilated anteriorly, with less oblique anterior margins and sides not sinuate; dorsal series of 8 small, deep and widely spaced punctures and lateral series of 2 anterior and 2 posterior punctures. Elytra broad, longer and wider than pronotum, dilated posteriad, with rounded humeral angles and fine, dense punctures arranged in several series. Tergie and sternite of the male genital segment as in figures 1358, 1359. Aedeagus narrow (Fig. 1360), 0.74 mm long, with short and narrow parameres; inner sac filiform, without scales.

ETYMOLOGY. The specific epithet refers to Ghana.

DISTRIBUTION. Ghana (Fig. 1361).

REMARKS. Female unknown.

27. Genus ***Elapheia*** n. gen. (Figs. 1362–1390, 1735)

TYPE SPECIES. *Leptacinus gracilentus* Scheerpeltz, 1974.

DESCRIPTION. Body similar to *Leptacinus* from which differs by a few external characters: body almost flat, ocular grooves absent, replaced by one or two close punctures; mandibles with a small tooth and very short prostheca (Fig. 1366); maxillary palpi with segments globose, except the last (Fig. 1363); antennae with short first segment, globose 2nd and 3rd segments, the 2nd slightly longer than 3rd; gular sutures separate; neck of particular shape, very narrow (Fig. 1362); upper epipleural line present only in the anterior part and not meeting the lower line; scutellum very large. This genus also differs from *Leptacinus* in the structure of the sternite with long filiform proximal portion, and in aedeagus (Figs. 1371, 1386), sometimes with narrow proximal and distal portions; parameres usually symmetrical, short and thick, with sometimes uncinate apex. Female genital segment of particulat shape, without additional sclerites and with large median sclerite (Fig. 1368). Fully winged species.

ETYMOLOGY. Nickname of Diana the huntress. Feminine gender.

DISTRIBUTION. Ethiopia, Nigeria, Congo, Rwanda, Tanzania, Malawi, Namibia, Zimbabwe, South Africa (Natal, Swaziland, Zululand, Transvaal) (Fig. 1390).

KEY TO THE SPECIES

1. Body larger, 5-6 mm long.....2
-. Body less than 5 mm long.....3

2. Body brown, with darker head, 5.5-6 mm long; head sub-rectangular, long, with large prominent eyes; pronotum narrow, narrower than head; elytra sub-rectangular, long. Aedeagus as in figure 1371 with short, robust parameres. Congo, Tanzania, Malawi, Zimbabwe, Swaziland, South Africa.....1. *E. gracilenta*
-. Body reddish brown, with pale yellowish posterior half of elytra, about 5 mm long; head sub-oval, narrowed anteriorly, with smaller and less prominent eyes; pronotum similar to that *E. gracilenta*; elytra dilated posteriad. Aedeagus as in figure 1374, with particular parameres. Namibia.....2. *E. inusualis* n. sp.
-. Body similar to that of *E. gracilenta*, 5.3 mm long, smaller and more slender, brown, with darker head and partially pale yellowish elytra. Aedeagus with short parameres and inner sac (Fig. 1377). Ethiopia.....3. *E. aethiopica* n. sp.

3- Head evidently narrowed anteriorly; body reddish yellow, 4.3 mm long; pronotum narrower than head. Aedeagus with small parameres and tightly coiled inner sac (Fig. 1383). Nigeria.....4. *E. nigeriana* n. sp.
-. Head sub-rectangular, not narrowed anteriorly.....4

4. Body about 4.5 mm long.....5
-. Body 3.8 mm long, reddish brown, with black head and partially yellowish elytra; elytra long, sub-rectangular. Aedeagus oval (Fig. 1380) with inner sac tape-like, not coiled. Rwanda.....
.....5. *E. helvenaca* n. sp.

5. Body 4.5 mm long, reddish brown; head larger, longer; eyes larger; elytra very long. Aedeagus sub-spherical (Fig. 1386). Rep. Congo.....6. *E. subaequatorialis* n. sp.
-. Body 4.6 mm long, brown, with yellowish elytra; head smaller, shorter; eyes smaller; elytra less long and less dilated posteriad. Aedeagus very characteristic (Fig. 1389), narrow and long. Angola, Zambia, Namibia, Malawi, Botswana, Zimbabwe, South Africa.....
.....7. *E. meridionalis* n. sp.

1. ***Elapheia gracilenta*** (Scheerpeltz, 1974) comb. n.

Leptacinus gracilentus - Scheerpeltz, 1974: 120; Herman, 2001a: 3674

TYPE MATERIAL. The Zoological Museum in Lund preserves 1 specimen labelled "*S. Afr. Rhodesia / Victoria Falls / 16-17.V.51 No 307*", "*Swedish South Africa / Expedition / 1950-1951 / Brinck-Rudebeck*", "Leptacinus gracilentus / *sp. n.*" "*Holotype*" (handwritten on red label), "*Typus* / Leptacinus / gracilentus / *O. Scheerpeltz*" (on red label), "Leptacinus / gracilentus / *sp. n. / det. Scheerpeltz 1968*", "*Type No 620.1 / Zool. Mus. Lund Sweden / Staphylinidae*". It is a female labelled "Elapheia gracilenta *(Scheerp.), Bordoni det. 2006*".

EXAMINED MATERIAL. Congo, Katanga, Kolwezi, V. Allard, 18.II.1962–8.VI.1966, 1 male, 5 females (MNHNP), 1 female (cB).

(Tanzania), D. O. Africa, Umluigawe (?), S. Methner, 1.IV.1907, 1 male (MNB).

Malawi, 35 km SW Monkey Bay, Buschamp, 490 m, 14.20S, 34.44E, U. Gölner, 27–28. VIII.2001, 1 male (cB).

Zimbabwe, Victoria Falls, Zambezi N. P., 17.53S, 25.49E, M. Uhlig ,11–12.XII.1993, 1 male (MNB); Kariba Nat. Park, Charara Safari Area, 30 km SO Kariba, 700 m, 16.40S, 29.01E, U. Heining, 19.III.1990, 1 male (cB).

Swaziland, Hlane Nat. Park, Camp Ndlovu, 26.15S, 31.52E, 300 m, M. Hartmann, 20–21.XI.1996, 1 male, 1 female (NME), 2 exx. (cB).

South Africa, Natal, Tagela river. Stanger, Werner, I.1989, 1 male, 1 female (DEI), 2 males, 1 female (cB); Natal, Tagela river. Stanger, Werner, I.1990, 1 male (DEI); (Kwa Zulu-Natal Prov.), Pietrmaritzburg, Schwarze, 1919, 2 exx. (with the red label "*Cotypus*" evidently added to the specimens after the description of the species) (NMW,

cB); Transvaal, Pretoria, Bonaccordam, A.V. Peez, 18.VIII.1953, 1 ex. (NMW); Transvaal, Nelshoogte galery for., 25.51S, 30.53E, S. Endrödy-Younga, 10.II.1987, 4 exx. (TMSA), 4 exx. (cB); Transvaal, Nelshoogte galery for., 25.51S, 30.53E, S. Endrödy-Younga, 2.XII.1986, 1 ex. (TMSA); Transvaal, Nelshoogte galery for., 25.51S, 30.53E, S. Endrödy-Younga, 4.XII.1988, 2 exx. (cB); Transvaal, 15 km NE Klaserie, Guernseyfarm, S. and J. Peck, 18–30.XII.1985, 1 male (FMNH); NE Prov., Tahipise. Honey Nat. Res., Camp LF, 22.36S, 30.10E, 300 m, M. Hartmann, 23–25.XI.1996, 1 female (NME), 1 female (cB); Zululand, Dukuduku for. St., 28.22S, 32.19E, Endrödy-Younga, 4.IV.1974, 1 male (TMSA).

Description. Length of body: 4.5–6.5 mm; from anterior margin of head to posterior margin of elytra: 2.2–3 mm. Body shiny, brown with darker head and paler elytra, yellowish on the posterior half. Head elongate, sub-rectangular, subparallel sided. Eyes very large and prominent. Surface of head with traces of transverse micro-striation and large, deep and dense punctures (the distance between the punctures is about equal to 3 times their diameter) apart from on a median band. Pronotum longer than head, slightly dilated anteriorly where it is as wide as head, with oblique anterior margins, well rounded anterior angles, and sinuate sides. Surface with dorsal series of 13, 14 irregular punctures and lateral series of 8, 9 irregular punctures. Elytra broad, longer and wider than pronotum, with marked humeral angles. Surface a little wrinkled, with large, dense punctures arranged in numerous series, among which the most evident is a median series. Abdomen with transverse micro-striation and fine and sparse punc-tures on the sides. Tergite and sternite of the male genital segment as in figures 1369, 1370. Aedeagus 0.74–0.88 mm long (Figs. 1371, 1784), sub-spherical; parameres symmetrical, thick, with uncinate apex; inner sac broad, covered with minute scales.

Distribution. Congo, Tanzania, Malawi, Zimbabwe, Swaziland, South Africa (Fig. 1390).

Remarks. This species is the commonest members of the genus, very variable in size, more or less pale colouration, and length of the inner sac of the aedeagus, covered with more or less dense small scales.

2. ***Elapheia inusualis*** n. sp.

Examined Material. Holotype male: Namibia, Okahandja Distr., Toggekry (Omatako Range), 55 km NNW Okahandja, 21°30'43"S, 16°43'00"E, M. Uhlig and K. Ebert, 25.IV.2001 (MNB); paratypes: same data, 1 male, 2 females (MNB), 2 males, 2 females (cB).

Description of Holotype. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.4 mm. Reddish brown with posterior half of elytra pale yellow. Head with transverse micro-striation. Head oval, elongate, anteriorly narrow, with sub-rectilinear sides and narrowly rounded posterior angles. Eyes medium-sized and a little protruberent. Surface of head with deep, clearly visible and dense punctures apart from on a median band. Pronotum as long as head, dilated anteriorly where it is as wide as head, with narrowly rounded anterior angles and sinuate sides; dorsal series of 7 large widely spaced punctures and lateral oblique series of 8 punctures. Elytra long, much longer and broader than pronotum, dilated posteriad, with less marked humeral angles. Surface with very fine, sparse punctures arranged in a few series. Tergite and sternite of the male genital segment as in figures 1372, 1373. Aedeagus 0.88 mm long (Figs. 1374, 1783), sub-spherical; parameres more or less symmetrical, narrow and long, of particular shape; inner sac very narrow and very long, coiled several times, covered with minute scales.

Variability. The paratypes have no substantial morphological differences with the holotype described.

Etymology. The specific epither is the Latin adjective *inusualis -e* (unusual), in reference to the shape of the parameres.

Distribution. The species is only known from the type locality in Namibia (Fig. 1390).

3. ***Elapheia aethiopica*** n. sp.

Examined Material. Holotype male: Ethiopia, Harerge Reg., Gursum, Dakhata Valley, A. Sforzi and L. Bartolozzi, 22.VII.2002 (MZF); paratypes: same data, 4 females (MZF), 2 females (cB); Ethiopia, Gojjam Prov., Tissesat Falls, 1620 m, R.

Clarke, 19.X.1973, 1 male (MRAC); Ethiopia, Debre Zeyt, Shoa, Werner, V.1989, 1 male (DEI), 1 male (cB).

DESCRIPTION. Length of body: 4.9 mm; from anterior margin of head to posterior margin of elytra: 2.4–2.7 mm. Reddish brown with darker pronotum and lighter elytra; head black. Head with transverse micro-striation. Characterized by the large, sub-rectangular head with evident, deep, dense punctures except on a narrow median band, and by sub-rectangular, long and narrow elytra. Head slightly narrowed anteriorly, with narrowly rounded posterior angles. Eyes medium-sized, not protruberent. Pronotum as long as head, a little dilated anteriorly where it is narrower than head; dorsal series of 11, 12 closely punctures and lateral series of 3 anterior punctures, with some other punctures near the sides. Elytra with sub-rectilinear, sub-parallel sides and marked humeral angles. Surface with deep punctures arranged in numerous series. Tergite and sternite of the male genital segment as in figures 1375, 1376. Aedeagus 0.92 mm long (Fig. 1377), subspherical; parameres symmetrical, thick, strongly arcuate, with uncinate apex; inner sac long, not particularly narrow, coiled once, covered with minute regular scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described. Length of body: 4.6–5.3 mm; from anterior margin of head to posterior margin of elytra: 2.4–2.7 mm.

ETYMOLOGY. The specific epithey refers to Ethiopia.

DISTRIBUTION. The species is only known from Ethiopia (Fig. 1390).

4. ***Elapheia nigeriana*** n. sp.

EXAMINED MATERIAL. Holotype male: Nigeria, Jov/ Vom, V. Assing, 5.XI–2.XII.1984 (cA).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.5 mm; from anterior margin of head to posterior margin of elytra: 2 mm. Body slender, shiny, yellowish with posterior half of elytra, antennae and legs pale yellow. Head sub-rectangular, with slightly rounded sides and narrowly rounded posterior angles. Eyes large and a little protruberent. Surface of head with deep, dense punctures except on a median band, with some larger punctures on the disc. Pronotum narrow, sub-rectangular, longer and narrower than head, with feebly sinuate sides and broadly rounded anterior angles; dorsal series of 10, 11 punctures and lateral series of 9, 10 irregular punctures, all fine. Elytra longer and wider than pronotum, a little dilated posteriad, with marked humeral angles. Surface with fine and sparse punctures arranged in 4, 5 series. Abdomen with more or less polygonal micro-reticulation and fine and sparse punctures. Tergite and sternite of the male genital segment as in figures 1381, 1382. Aedeagus 0.74 mm long (Fig. 1383), sub-spherical; parameres symmetrical, thick; inner sac narrow and long, coiled several times, covered with minute scales.

ETYMOLOGY. The specific epithet refers to Nigeria.

DISTRIBUTION. The species is only known from the type locality in Nigeria (Fig. 1390).

REMARKS. Female unknown.

5. ***Elapheia helvenaca*** n. sp.

EXAMINED MATERIAL. Holotype male: Rwanda, Lac Thema, R. Jocqué, 1.XII.1985 (MRAC); paratype: same data, 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 3.8 mm; from anterior margin of head to posterior margin of elytra: 2.2 mm. Fully winged. Reddish brown with much darker head and partially yellowish elytra; antennae and legs yellowish. Head sub-rectangular, with slightly rounded sides and broadly rounded posterior angles. Eyes medium-sized, visibly protruberent. Surface of head with traces of transverse micro-striation and deep, dense punctures. Pronotum longer and narrower than head, with very oblique anterior margins and scarcely sinuate sides. Surface shiny, without micro-sculpture; dorsal series of 10, 11 punctures and lateral series of 5, 6 irregular punctures. Elytra sub-rectangular, not dilated posteriad, longer and wider than pronotum, with rounded humeral angles. Surface with fine punctures arranged in several series. Abdomen with transverse micro-striation and fine, sparse punctation. Tergite and sternite of the male genital segment as in figures 1378, 1370. Tergite of particuar shape. Aedeagus oblong (Fig.

1380), narrow, 0.66 mm long, with long parameres; inner sac strip-like, long and narrow, covered with fine scales, denser in the proximal portion.

VARIABILITY. The paratype female has no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is the Latin adjective *helvenacus -a -um* (reddish).

DISTRIBUTION. The species is only known only from the type locality in Rwanda (Fig. 1390).

6. ***Elapheia subaequatorialis*** n. sp.

EXAMINED MATERIAL. Holotype male: Dem. Rep. Congo, Elisabetville (Lubumbashi), C. Seydel, XI.1949 (MNW).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.3 mm; from anterior margin of head to posterior margin of elytra: 2.2 mm. Body reddish brown with darker head and abdomen. Similar to *E. nigeriana* n. sp. but larger, darker, with head subrectangular, longer and wider, with denser punctation; eyes more prominent; pronotum longer, evidently more dilated anteriorly; elytra visibly broader, sub-rectangular, scarcely dilated posteriad. Tergite and sternite of the male genital segment as in figures 1384, 1385. Aedeagus 0.7 mm long (Fig. 1386), sub-spherical, with robust and long parameres; inner sac broader and longer than that of nigeriana, covered with fine scales, thickened in the median portion.

ETYMOLOGY. The specific epithet refers to the sub-equatorial area of the type locality.

DISTRIBUTION. The species is only known from the type locality in the Democratic Republic of Congo (Fig. 1390).

REMARKS. Female unknown.

7. ***Elapheia meridionalis*** n. sp. (Fig. 1735)

EXAMINED MATERIAL. Holotype male: Zambia, Chinganganka Hills, 15.53S, 28.11E, M. Uhlig, 17.III.1993 (MNB); paratypes: Zambia, 8 km E Mongu, 15°14'37"S, 23°18'31"E, J. Deckert, 30.III.1993, 1 ex. (MNB), 1 ex. (cB); Angola, Muanda, Sof Rocades, Vernay Tvl. Mus. Exp., VI.1954, 2 exx. (TMSA); Malawi, Balaka env., Bezdek, 5–6.I.2002, 1 ex. (cJ), 1 ex. (cB); Namibia, E Caprivi, Katima Mulilo, 17.29S, 24.17E, M. Uhlig, 8.III.1992, 2 exx. (MNB), 1 ex. (cB); same data, M. Snizek, 15–24.I.1995, 8 exx. (cJ), 2 exx. (cB); Zimbabwe, Victoria Falls, Zambesi N. P. Camp, 17.53S, 25.49E, M. Uhlig, 11–12.XII.1993, 25 exx. (MNB), 11 exx. (cB); Botswana bor., Kasane, M. Snizek, 1.I.1994, 5 exx. (cJ), 2 exx. (cB); South Africa, Natal, Mkuze N. P., 27.36S, 32.13E, M. Uhlig, 2–3.II.1994, 2 exx. (MNB), 1 ex. (cB); Natal, Kunzulu, Hluhluwe Game Res., 28.02S, 32.05E, F. Koch, 10.II.1995, 1 ex. (MNB), 1 ex. (cB).

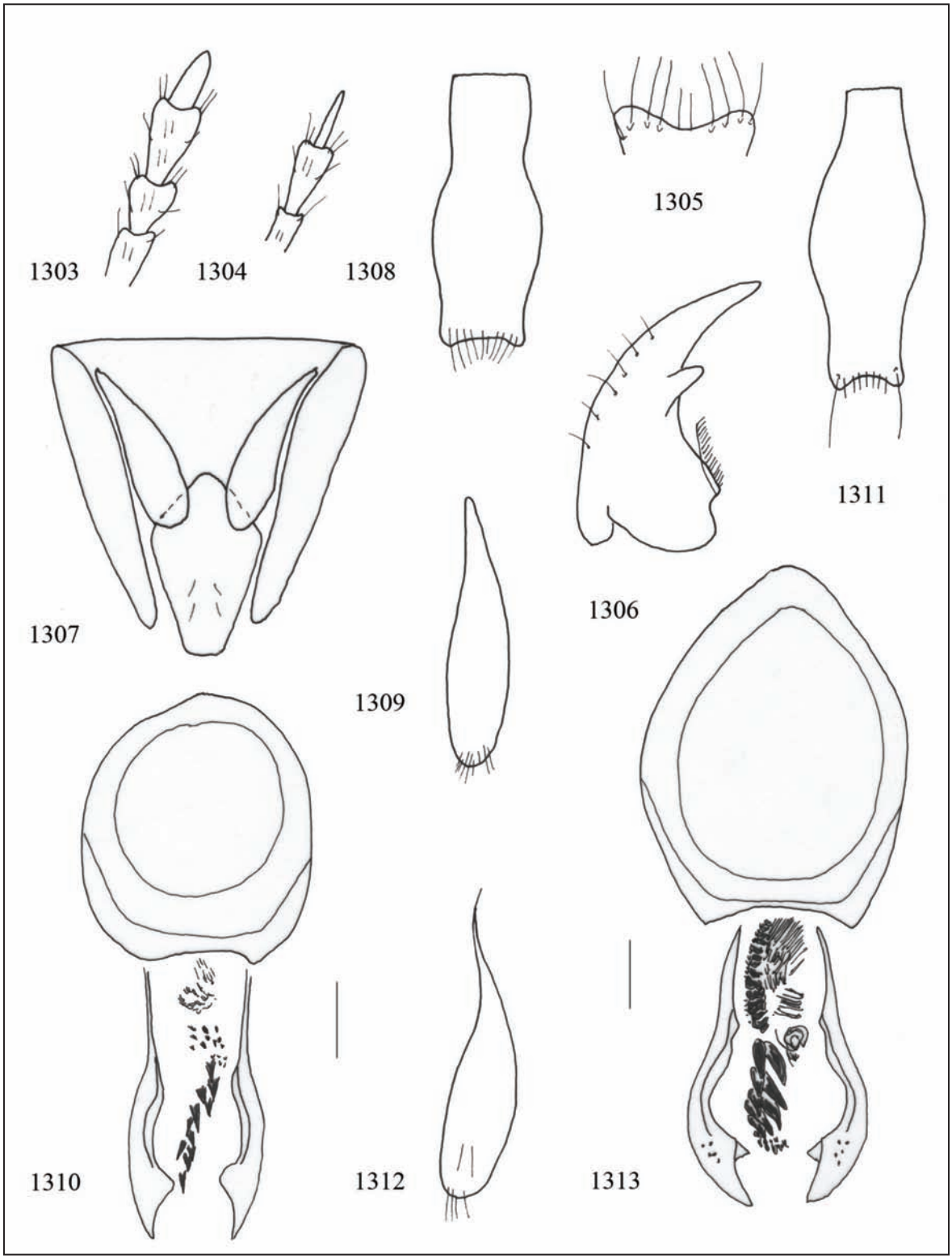
DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.2 mm; from anterior margin of head to posterior margin of elytra: 2.2 mm. Fully winged; reddish brown with darker head and yellowish posterior half of elytra. Head sub-rectangular, with narrowly rounded posterior angles. Eyes medium-sized and prominent. Surface of head with traces of transverse micro-striation and deep, dense punctures. Pronotum slightly longer and narrower than head, with broadly rounded anterior angles and sinuate sides. Surface shiny, with dorsal series of 10, 11 deep, closely set punctures and oblique lateral series of 6, 7 similar punctures. Elytra broad, much longer and wider than pronotum, a little dilated posteriad, with marked humeral angles. Surface with very fine punctures arranged in several series. Abdomen with traces of transverse micro-striation and fine, sparse punctures. Tergite and sternite of the genital segment as in figures 1387, 1388; tergite with emarginate posterior margin. Aedeagus very small (Fig. 1389), 0.5 mm long, very narrowly oval, with long narrow parameres; inner sac not visible.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

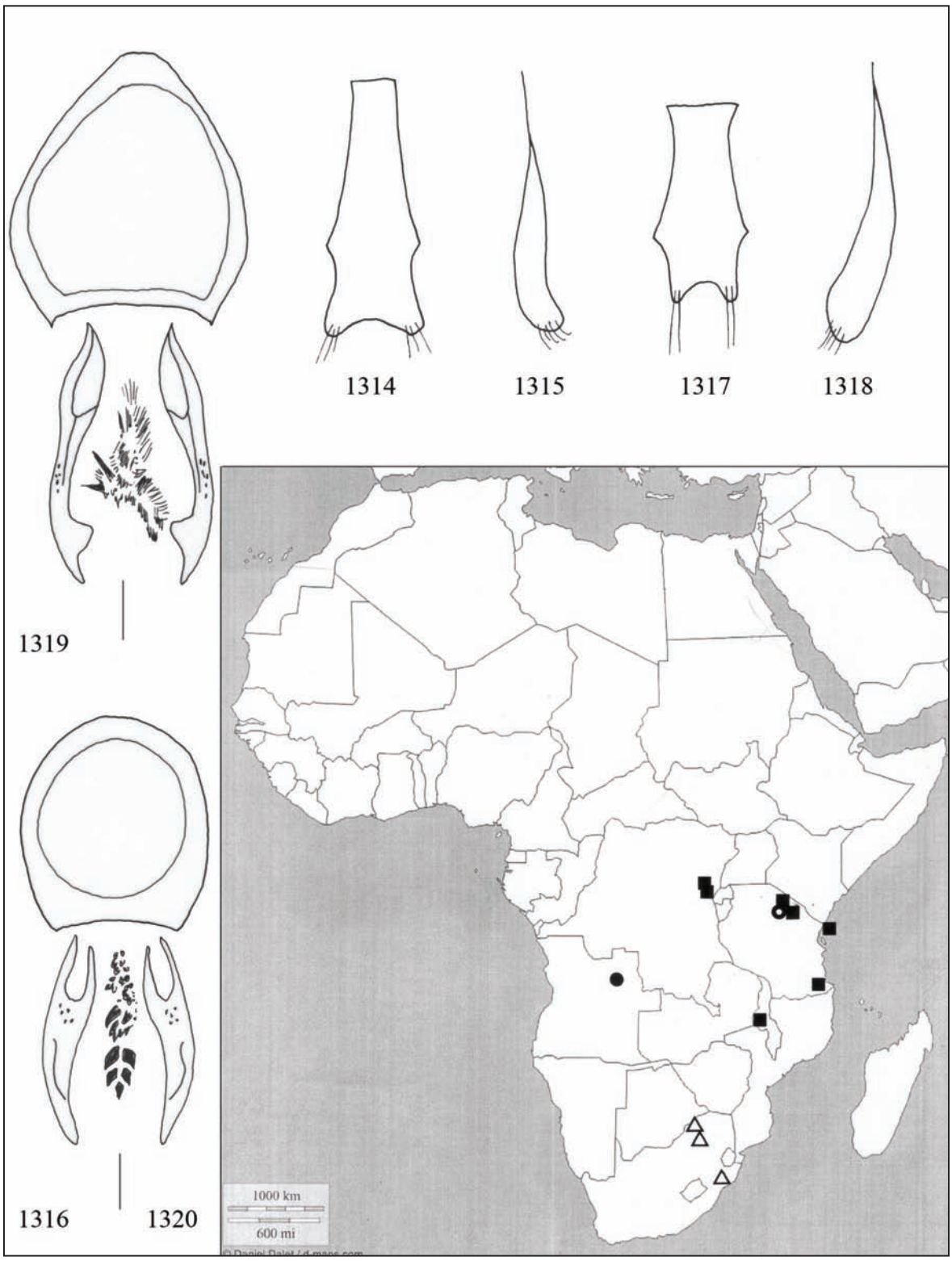
ETYMOLOGY. The specific epithet is the Latin *meridionalis -e* (southern), in reference to the distribution of the species.

DISTRIBUTION. The species is known from Angola, Zambia, Namibia, Malawi, Botswana, Zimbabwe and South Africa (Fig. 1390).

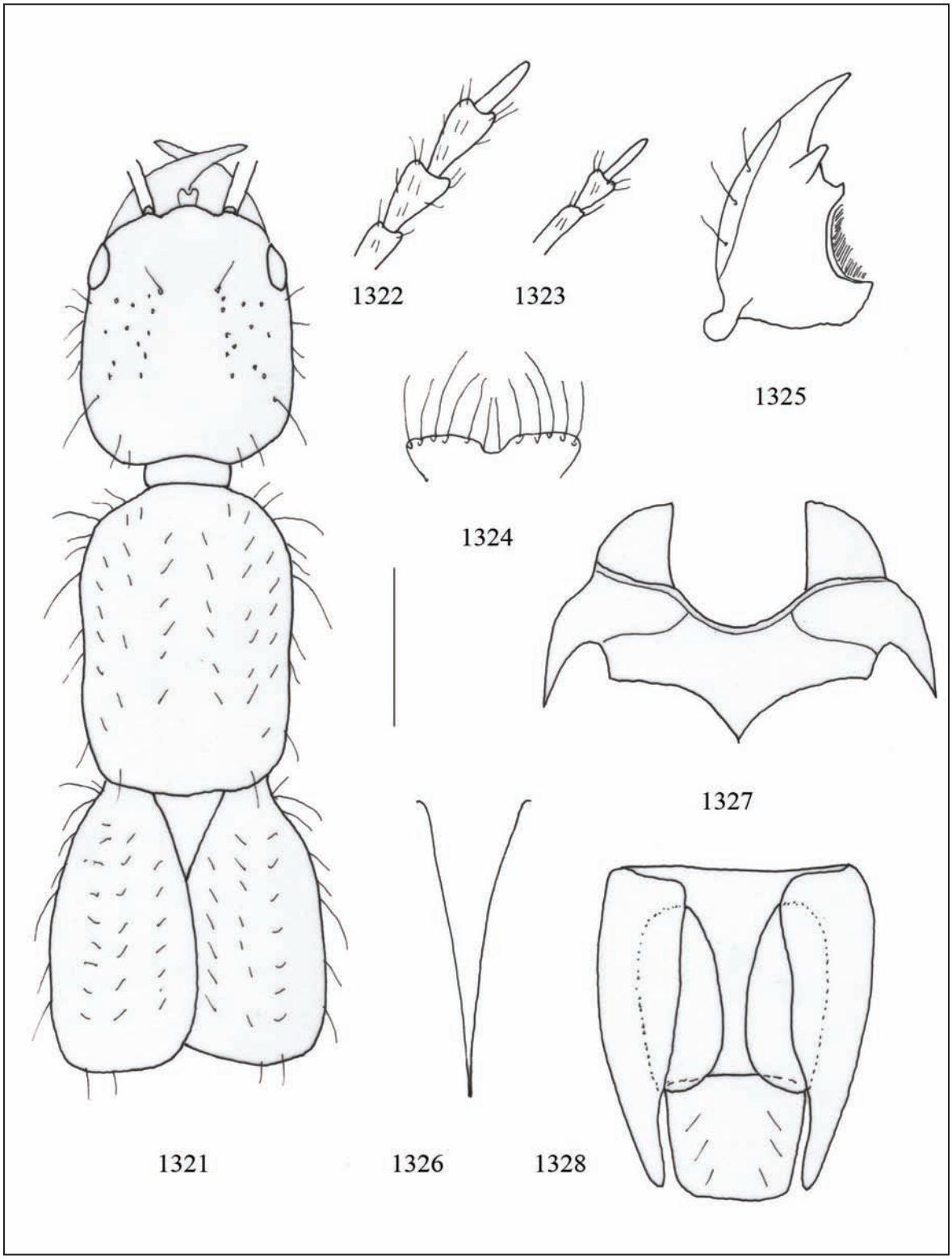
BIONOMICS. Almost all the specimens were collected at light.



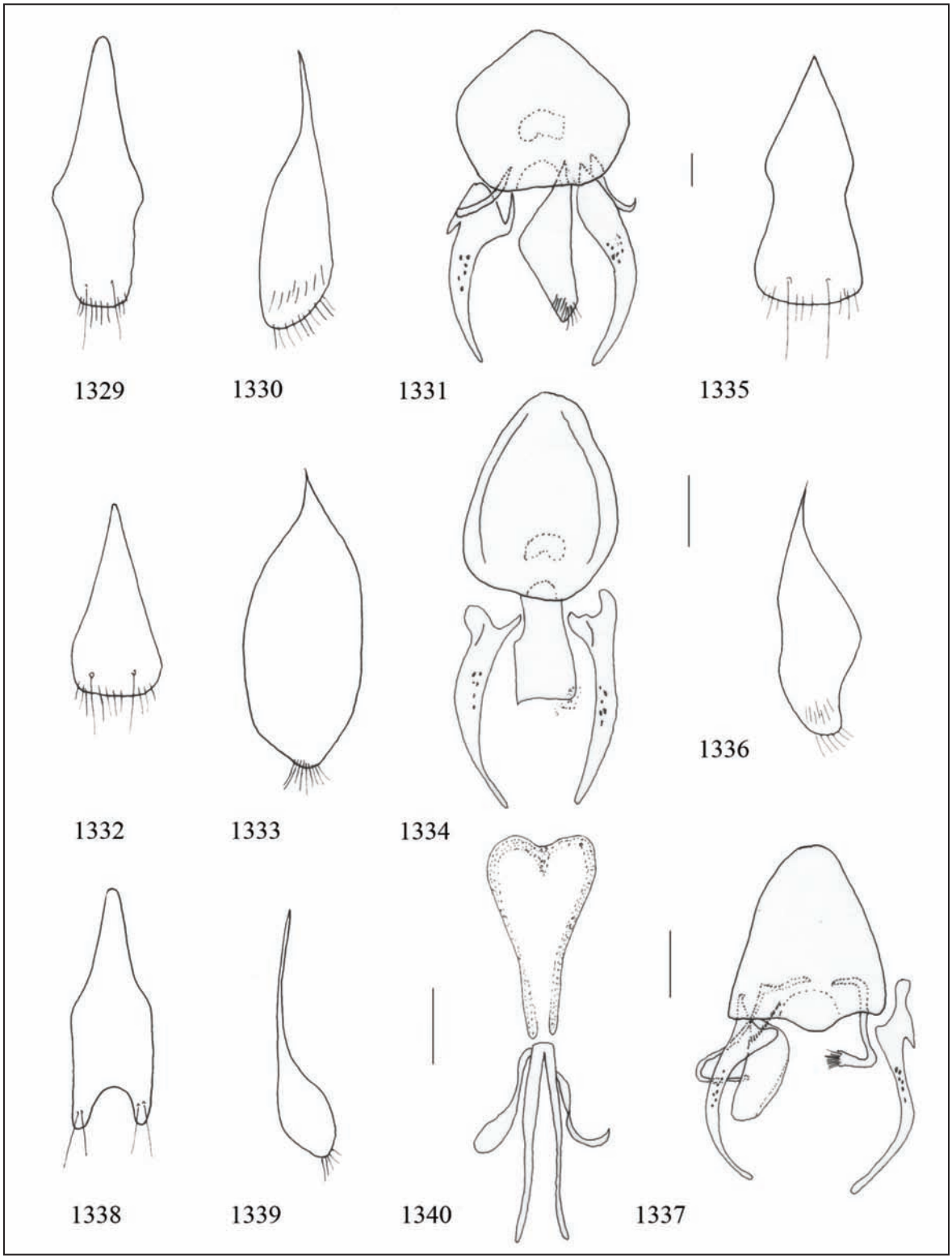
Figures 1303–1313. *Xanthophius* sp.: maxillary and labial palpi (Figs. 1303, 1304), labrum (Fig. 1305), mandible (Fig. 1306), female genital segment (Fig. 1307). Tergite and sternite of the male genital segment, aedeagus of *Xanthophius pennatus* (Figs. 1308–1310). Tergite and sternite of the male genital segment, aedeagus of *Xanthophius usaensis* n. sp. (Figs. 1311–1313) (bar scale: 0.1 mm).



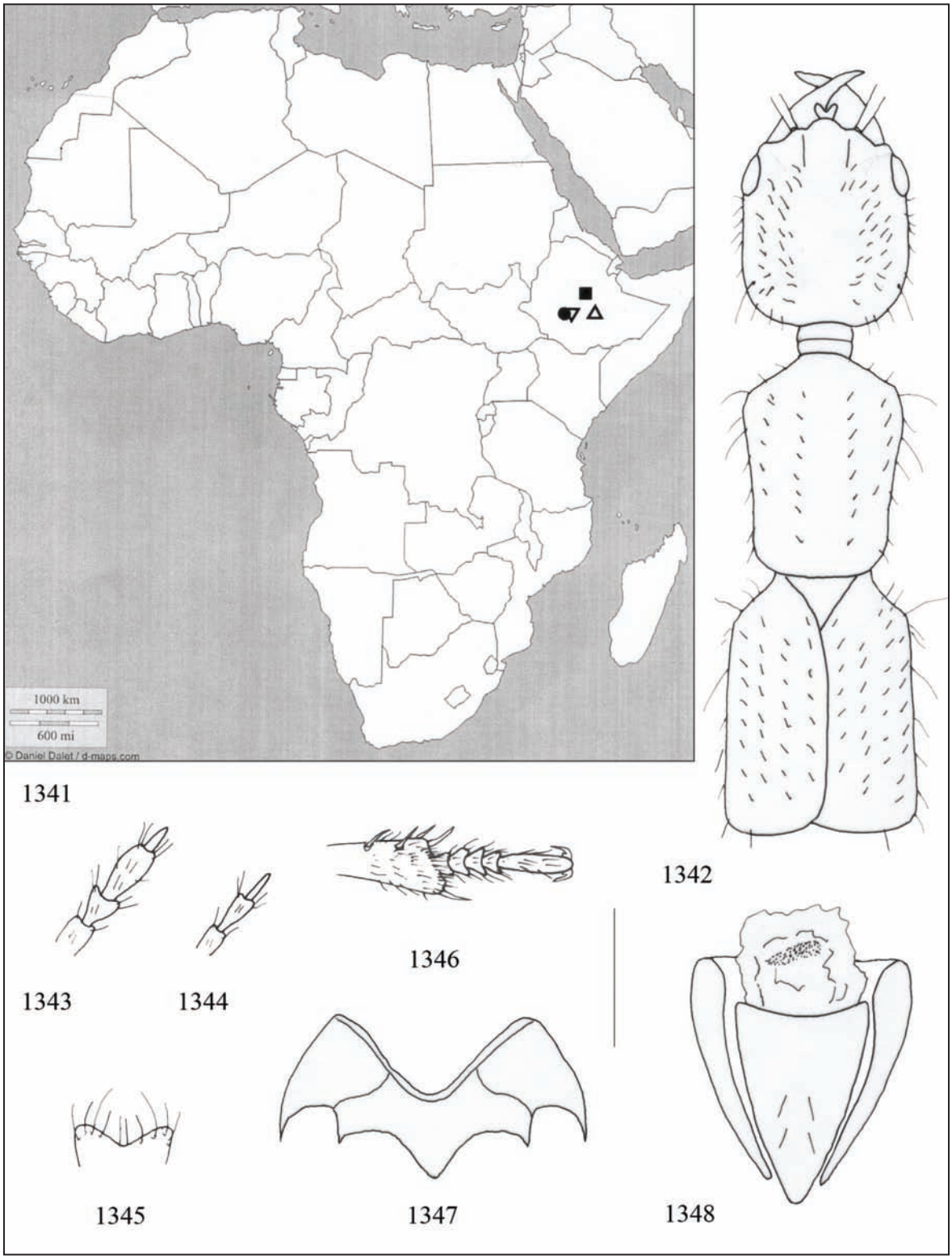
Figures 1314–1320. Tergite and sternite of the male genital segment, aedeagus of *Xanthophius angolanus* n. sp. (Figs. 1314–1316) and *Xanthophius africanus* n. sp. (Figs. 1317–1319) (bar scale: 0.1 mm). Fig. 1320: distribution of the genus *Xanthophius*: *X. pennatus* (square), *X. usaensis* n. sp. (open circle), *X. angolanus* n. sp. (filled circle), *X. africanus* n. sp. (open triangle).



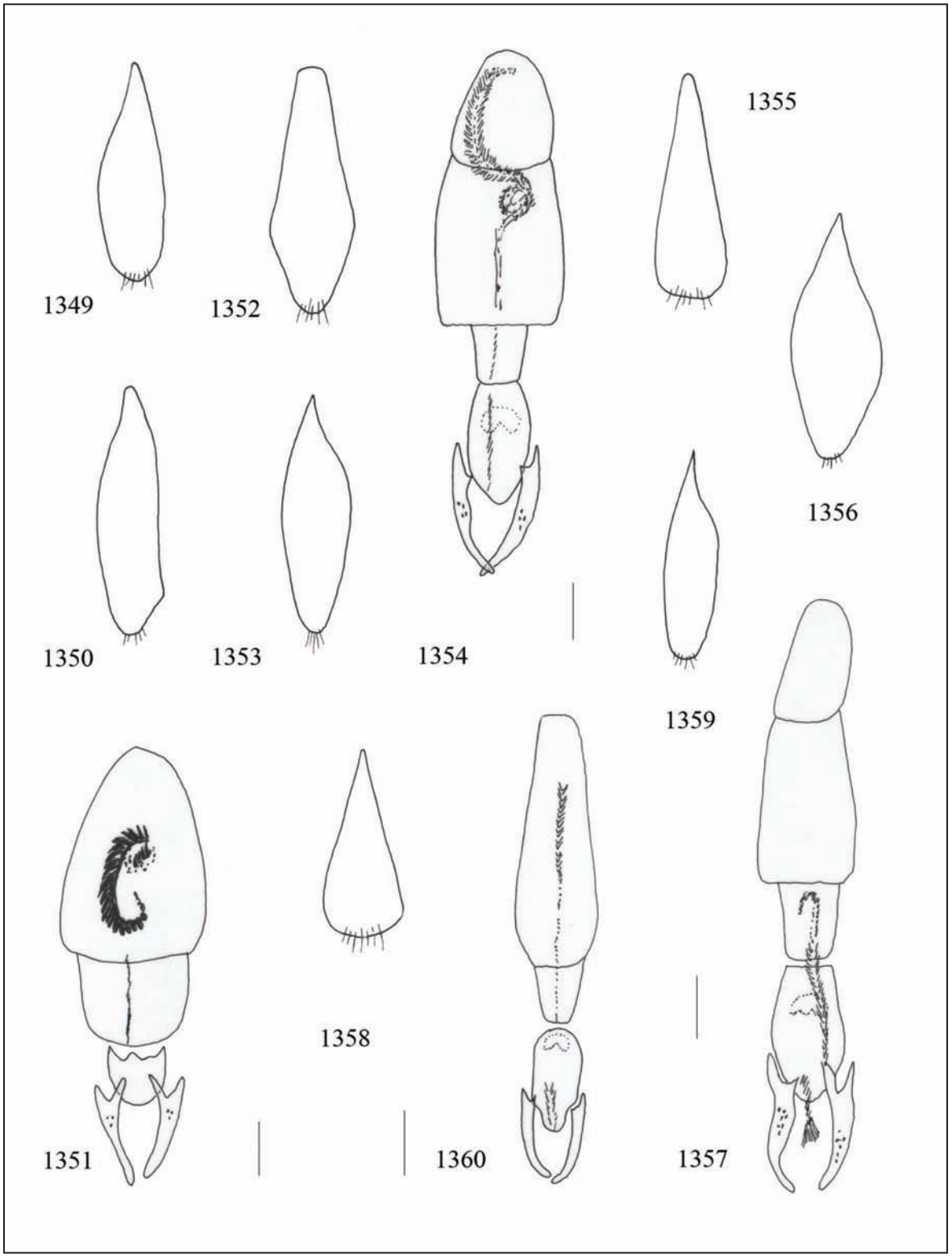
Figures 1321–1328. *Balchis microptera*: fore-body (bar scale: 0.5 mm) (Fig. 1321), maxillary and labial palpi (Figs. 1322, 1323), labrum (Fig. 1324), mandible (Fig. 1325), gular sutures (Fig. 1326), mesosternum (Fig. 1327), female genital segment (Fig. 1328).



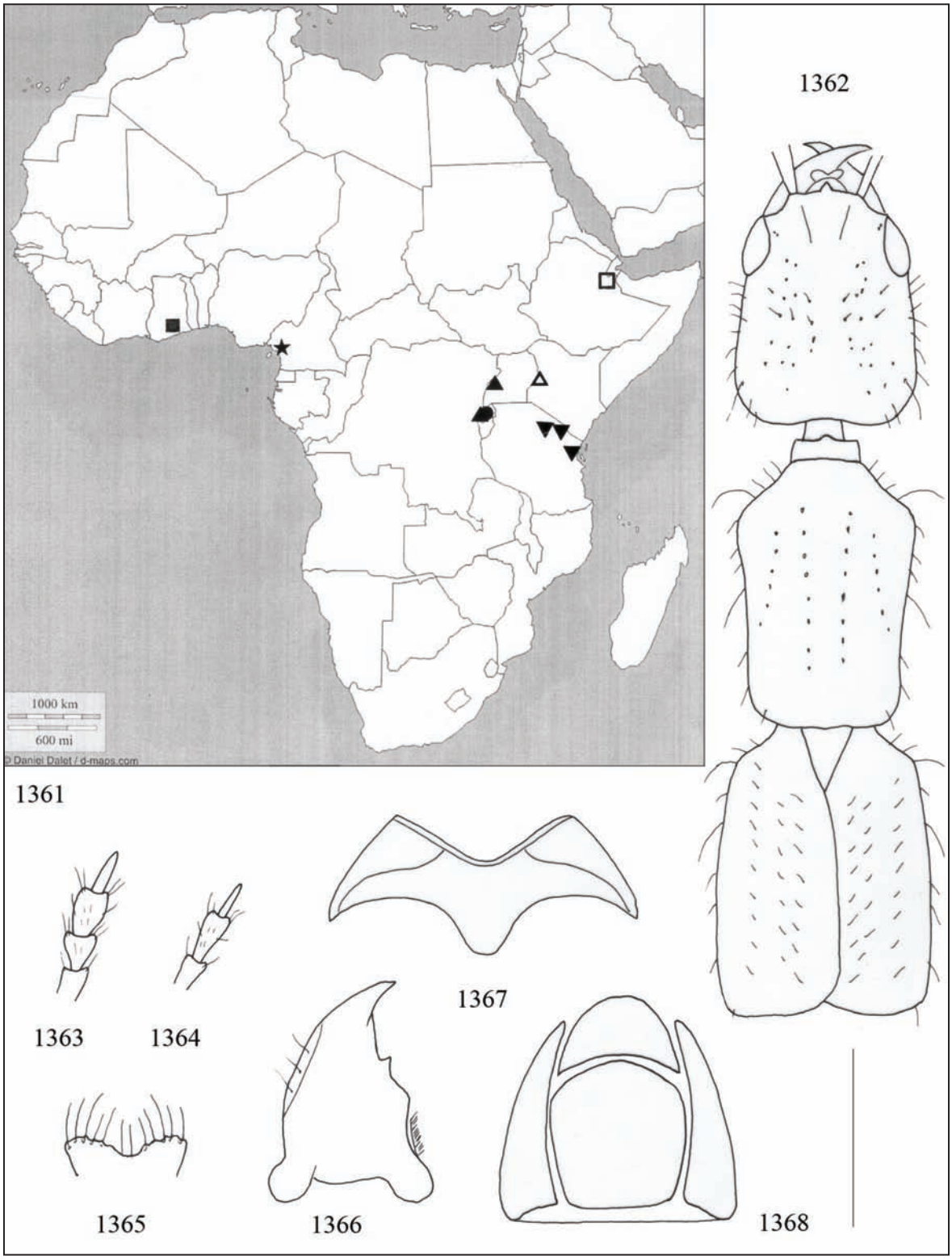
Figures 1329–1340. Tergite and sternite of the male genital segment, aedeagus of *Balchis balensis* n. sp. (Figs. 1329–1331); tergite and sternite of the male genital segment, aedeagus of *B. microptera* (Figs. 1332-1334) (bar scale: 0.1 mm), tergite and sternite of the male genital segment, aedeagus of *B. alpica* n. sp. (Figs. 1335–1337), tergite and sternite of the male genital segment, aedeagus of *B. perplexa* (Figs. 1338–1340) (bar scale: 0.1 mm).



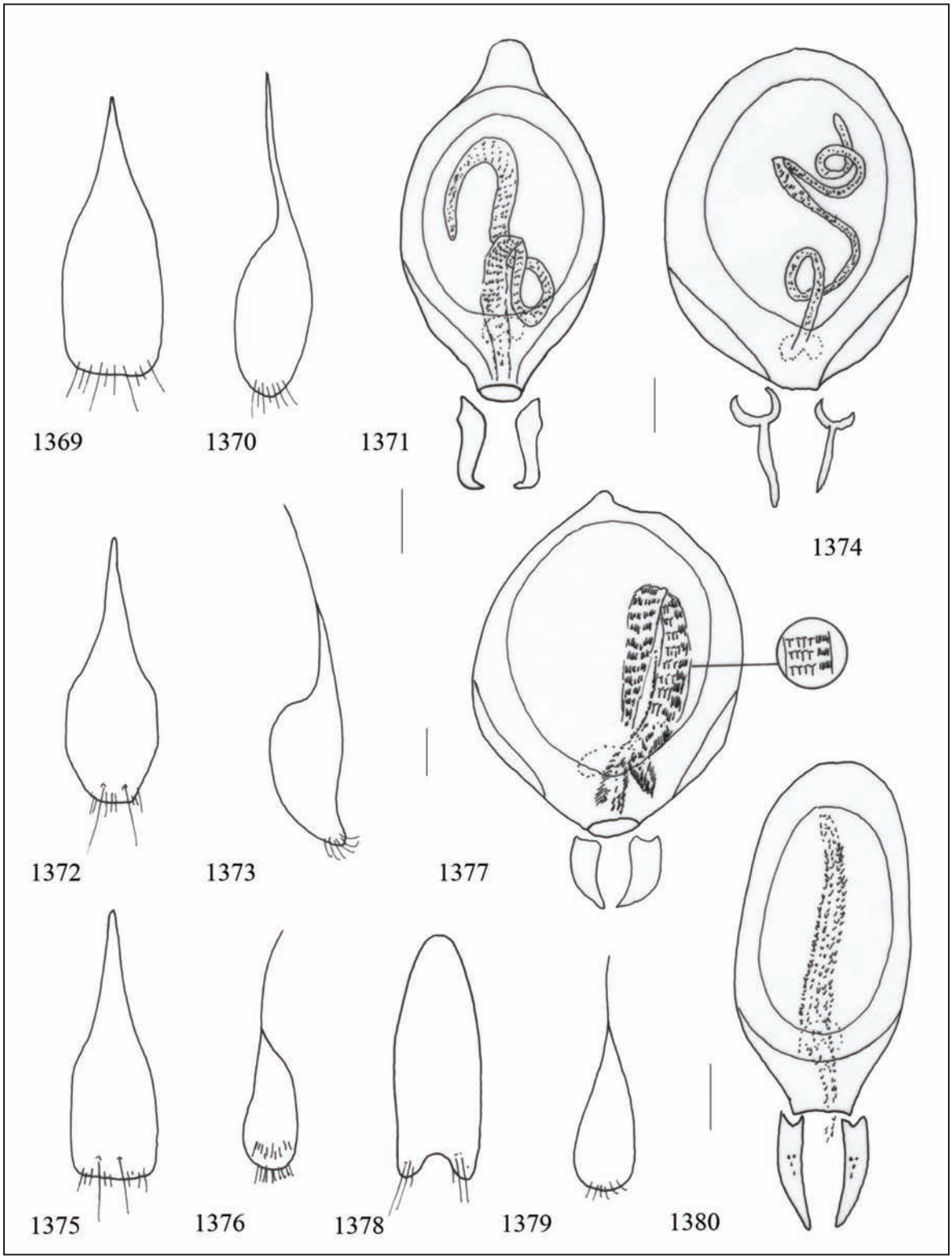
Figures 1341–1348. Fig. 1341: distribution of the genus *Balchis*: *B. abessina* (square), *B. balensis* n. sp. (open triangle), *B. microptera* (inverted open triangle), *B. alpica* n. sp. (circle). *Agaporina basipennis*: fore-body (bar scale: 0.5 mm) (Fig. 1342), maxillary and labial palpi (Figs. 1343, 1344), labrum (Fig. 1345), anterior tarsus (Fig. 1346), mesosternum (Fig. 1347), female genital segment (Fig. 1348).



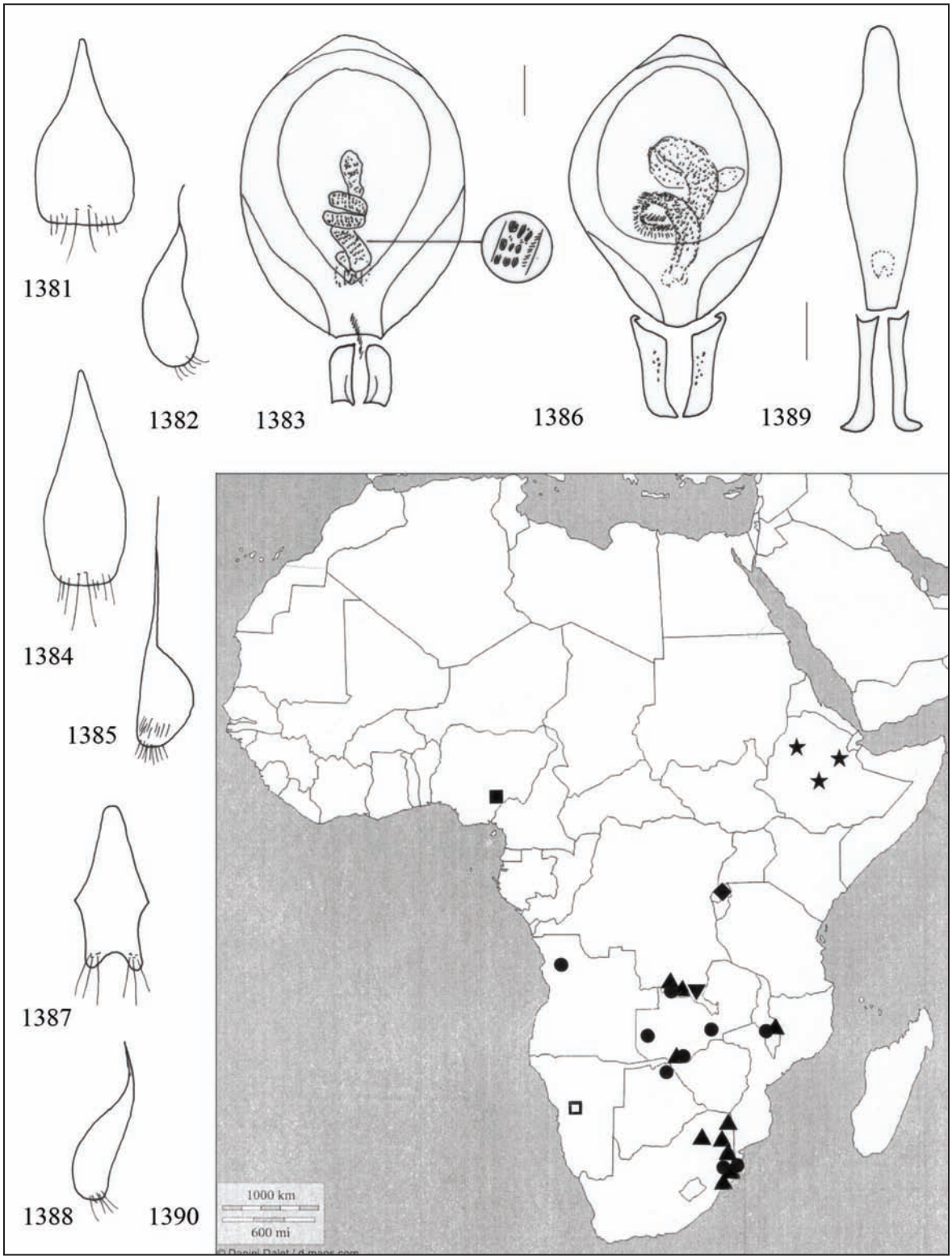
Figures 1349–1360. *Agaporina encephala*: tergite and sternite of the male genital segment, aedeagus (Figs. 1349–1351) (bar scale: 0.1 mm). Tergite and sternite of the male genital segment, aedeagus of *A. basipennis* (Figs. 1352–1354), tergite and sternite of the male genital segment, aedeagus of *A. diaphana* n. sp. (Figs. 1355–1357), tergite and sternite of the male genital segment, aedeagus of *A. ghanensis* n. sp. (Figs. 1358–1360) (bar scale: 0.1 mm).



Figures 1361–1368. Fig. 1361: distribution of the genus *Agaporina*: *A. encephala* (inverted filled triangle), *A. elgonensis* (open triangle), *A. raptor* (filled circle), *A. basipennis* (star), *A. diaphana* (filled triangle), *A. cooperi* (open square), *A. ghanensis* n. sp. (filled square). *Elapheia gracilenta*: fore-body (bar scale: 0.5 mm) (Fig. 1362), maxillary and labial palpi (Figs. 1363, 1364), labrum (Fig. 1365), mandible (Fig. 1366), mesosternum (Fig. 1367), female genital segment (Fig. 1368).



Figures 1369–1380. Tergite and sternite of the male genital segment, aedeagus of *Elapheia gracilenta* (Figs. 1369–1371), tergite and sternite of the male genital segment, aedeagus of *E. inusualis* n. sp. (Figs. 1372–1374), tergite and sternite of the male genital segment, aedeagus of *E. aethiopica* n. sp. (Figs. 1375–1377), tergite and sternite of the male genital segment, aedeagus of *Elapheia helvanaca* n. sp. (Figs. 1378–1380) (bar scale: 0.1 mm).



Figures 1381–1390. Tergite and sternite of the male genital segment, aedeagus of *Elapheia nigeriana* n. sp. (Figs. 1381–1383), *E. subaequatorialis* n. sp. (Figs. 1384–1386), and *E. meridionalis* n. sp. (Figs. 1387–1389) (bar scale: 0.1 mm). Fig. 1390: distribution of the genus *Elapheia*: *E. gracilenta* (filled triangle), *E. inusualis* n. sp. (open square), *E. aethiopica* n. sp. (star), *E. nigeriana* n. sp. (filled square), *E. subaequatorialis* n. sp. (inverted filled triangle), *E. meridionalis* n. sp. (filled circle).

28. Genus ***Byziniella*** n. gen. (Figs. 1391–1520, 1736, 1737)

TYPE SPECIES. *Leptacinus perforatus* Tottenham 1956: 240.

DESCRIPTION. The genus is similar to *Leptacinus* in the following characters: general shape of body; structure of maxillary and labial palpi; antesternal plate divided; superior epipleural line not meeting the inferior line; pronotum with dorsal and lateral series of punctures. It differs in the following characters: labrum much shorter and with much broader emargination (Fig. 1395); mandibles broad at the base with a small tooth and robust prostheca (Fig. 1396); ocular grooves obsolescent; gular sutures separate over a long distance, convergent but not fused in the distal portion (Fig. 1397); antesternal plate particularly large, broad; mesosternum as in figure1398; elytra long; anterior tarsi narrow. It differs from related genera especially in the shape of the aedeagus (Figs. 1417, 1454, 1491). The distal portion of the basal bulb is devoid of the particularly shaped sclerite present in species of *Leptacinus*. Parameres with sensilla. The male and female genital segments are similar to those of *Lepta-cinus* but the additional sclerites of the female segment are smaller and shorter (Fig. 1399). The genus includes both fully winged and apterous species.

ETYMOLOGY. Fancy name. Feminine gender.

DISTRIBUTION. Central Africa to Angola and Zimbabwe (Figs. 1480, 1501).

REMARKS. The species of this genus are very similar to one another in colouration, almost all being brown, and in size and punctation, detailed descriptions of which would be useless for the purpose of determination. I therefore prefer to indicate only the most important distinguishing characters. Identification of the taxa requires examination of the aedeagus.

The species mostly occur in mountain areas.

The species of this genus can be divided into two groups; the first includes apterous species with pale yellow bodies (apart from *B. ngorongoro n.* sp.) and very small flat eyes (*B. nigromontis* group, all from Tanzania); the second group includes the fully winged species with brown bodies and eyes of normal size, sometimes very large and prominent (*B. abacta* group). Descriptions of species refer to other species with similar characters, independently of the group to which they belong.

Some specimens have placoid sensilla on the external sides of the parameres, visible only at high magnification, but no large setae as in *Chaetocinus*.

KEY TO THE SPECIES GROUPS

1. Apterous species, usually more or less pale yellowish brown; eyes very small and flat; elytra very short. Only known from Tanzania.....1. *B. nigromontis* group
-. Fully winged species, more or less reddish brown; eyes normally shaped, sometimes very prominent; elytra longer.....2. *B. abacta* group

1. *Byziniella nigromontis* group

KEY TO THE SPECIES

1. Body larger, 5–6.5 mm long.....2
-. Body less than 6 mm long.....5

2. Body robust, yellowish orange.....3
-. Body slender.....4

3. Body 6.5 mmm long; head sub-rectangular, broad; pronotum less dilated anteriorly; elytra very short; fore-body as in figure 1403; aedeagus as in figure 1402. Tanzania: Mt. Meru.....1. *B. nigromontis* n. sp.
-. Body about 6 mm long; head large, dilated posteriad; pronotum more dilated anteriorly; elytra short; fore-body as in figure 1404; aedeagus as in figure 1411. Tanzania: Mt. Meru.....2. *B. olkokolaensis* n. sp.

4. Body brown with darker head, about 5 mm long; pronotum of characteristic shape; fore-body as in figure 1405; aedeagus as in figure 1414. Tanzania: Mt. Ngorongore.....3. *B. tanzanica* n. sp.
-. Body narrow, yellowish orange, about 6 mm long; fore-body as in figure 1406; aedeagus as in figure 1417. Tanzania; Mt. Kilimanjaro.....4. *B. kilimanjaroensis* n. sp.

5. Body very narrow.....6
-. Body not narrow, normally shaped.....7

6. Body smaller (Fig. 1391), 3.8 mm long, yellowish; head and pronotum shorter; elytra very short, subrectangular; aedeagus as in figure 1421. Tanzania: Mt Meru.....5. *B. meruensis* n. sp.
-. Body larger (Fig. 1407) , 4 mm long, brown; head and pronotum longer; elytra broader; aedeagus as in figure 1424. Tanzania: Mt Meru.....6. *B. lupata* n. sp.

7. Body (Fig. 1408) darker, dark brown, 4.2 mm long; head dilated posteriad; pronotum strongly dilated anteriorly and narrow posteriorly; aedeagus as in figure 1427. Tanzania: Mt Ngorongoro.....7. *B. ngorongoro* n. sp.
-. Body paler, pale yellowish, 4 mm long; head dilated posteriad; pronotum a little dilated anteriorly; aedeagus as in figure 1430. Tanzania: Mt Kilimanjaro.....8. *B. hageniana* n. sp.

1. ***Byziniella nigromontis*** n. sp. (Figs. 1736, 1785)

EXAMINED MATERIAL. Holotype male: Tanganyika, Mt. Meru, W hang, H. Franz, VII.1972 (NMW); paratypes: same data, 1 male, 4 females (NMW); 3 males, 1 female (cB), same date, Olkokola, vers. NO, 2700 m, P. Basilewsky and N. Leleup, 28.VI.1957, 1 male (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 2.7 mm. Apterous. Head and pronotum with transverse micro-striation. Body yellowish. Head large, slightly dilated posteriad, with broadly rounded posterior angles and very fine, sparse punctation. Eyes small and flat. Pronotum (Fig. 1403) longer than head, dilated anteriorly where it is wider than head, with very oblique anterior margins and slightly sinuate sides; dorsal series of 8, 9 punctures and lateral series of 4, 5 punctures. Elytra short, a little dilated posteriad, with obsolete humeral angles; surface with large, shallow, sparse punctures arranged in several series. Tergite and sternite of the male genital segment as in figures 1400, 1401; aedeagus oval (Fig. 1402), large, 1.15 mm long with broad short parameres; inner sac with a distal rounded structure with fine protrusions followed by some thickened parts, among which is a central series of spines extending from the proximal to the distal portions of sac.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the Meru, called black mount by the local tribes.

DISTRIBUTION. The species is only known from Mount Meru, Tanzania (Fig. 1431).

REMARKS. Franz usually omitted to give the date on which he collected specimens. My colleague H. Schillhammer informed me that Franz collected in Tanganyika in 1972 and in South Africa in 1975.

2. ***Byziniella olkokolaensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Tanganyika, Terr. Mt Meru, Olkokola, vers. NO, gorge de la Kordikorda, P. Basilewsky and N. Leleup, 29.VI.1957 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margins of head to posterior margin of elytra: 2.2 mm. Apterous. Head, pronotum and abdomen with transverse microstriation; elytra with more or less polygonal microreticulation, Head large, dilated posteriad, with subrectilinear sides and narrowly rounded posterior angles. Eyes very small and flat. Surface of head with fine, very sparse but evident punctation. Pronotum as long as head, strongly dilated anteriorly where it is as wide as head, with broadly rounded anterior angles; dorsal series of 9, 10 shallow irregular punctures and lateral series of 5, 6 very fine punctures. Elytra very short, much shorter and narrower than pronotum, with obsolescent humeral angles; surface with dense shallow punctures arranged in several series. Abdomen with very fine and sparse punctation. Tergite and sternite of the male genital segment as in figures 1409, 1410. Aedeagus oval (Fig. 1411), large, 1.18 mm long, with broad short parameres furnished with evident sensilla on their inner surface; inner sac with a distal rounded surface furnished with short protrusions, followed by some large thickened spines and scales, the proximal portion with a long curved spine.

ETYMOLOGY. The specific epithet refers to the type locality.

DISTRIBUTION. The species is only known from the type locality in Tanzania (Fig. 1431).

REMARKS. Female unknown.

3. ***Byziniella tanzanica*** n. sp.

EXAMINED MATERIAL: Holotype male: Tanganyika, Ngorongoro, tête de source, 2200 m, P. Basilewsky and N. Leleup, 11.VI.1957 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.2 mm. Apterous. Body shiny, reddish brown with darker head. Characterized by the shape of fore-body (Fig. 1405). Head sub-rectangular with slightly rounded sides; surface with fine sparse visible punctation except on a broad median band. Pronotum with dorsal series of 5 widely spaced punctures and lateral series of 5 finer punctures. Elytra very short with obsolescent humeral angles and very fine and sparse punctures arranged in several series. Tergite and sternite of the male genital segment as in figures 1412, 1413. Aedeagus oval (Fig. 1414) oval, 0.77 mm long, with short parameres; inner sac with a distal cluster of spines followed by some thickened parts among which are two parallel series of spines.

ETYMOLOGY. The specific epithet refers to Tanzania (Fig. 1431).

DISTRIBUTION. The species is only known from the type locality in Tanzania.

BIONOMICS. The specimen was collected in "*for. montane*".

REMARKS. Female unknown. The Ngorongoro crater is the largest volcanic caldera in the world, located in the Serengeti lowlands of northern Tanzania.

3. ***Byziniella kilimanjaroensis*** n. sp.

EXAMINED MATERIAL: Holotype male: Tanganyika, Kilimanjaro, Kibu, SW hang, 2500–3100 m, H. Franz, VII.1972 (NMW); paratypes: same data, 8 males, 30 females (NMW); 9 males, 8 females (cB); same data, Waldob. Machame, 2000–2500 m, H. Franz, VII.1972, 1 male, 1 female (MW, 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Apterous. Body shiny, yellowish brown. Similar to *B. tanzanica* n. sp. but larger and longer. Head more elongate (Fig. 1406), narrower anteriorly, with broadly rounded posterior angles; surface with coarse dense punctation. Pronotum more elongate, anteriorly slightly wider than head, with less sinuate sides and much more rounded posterior angles; dorsal series of 9 larger punctures and oblique lateral series of 5, 6 irregular punctures. Elytra much longer, with coarser and sparser punctation than in *B. tanzanica* n. sp. Scutellum very large. Tergite and sternite of the male genital segment as in figures 1415, 1416. Aedeagus oval (Fig. 1417), 0.74 mm long, with short parameres (Fig. 1418); inner sac with a distal rounded structure with fine protrusions, followed by some thickened parts among which there is a central series of spines extending from the proximal to the distal portions of the sac, and a long narrow spine on the right side.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Kilimanjaro (Fig. 1431).

DISTRIBUTION. The species in only known from Mount Kilimanjaro in Tanzania.

REMARKS. The number of specimens studied shows a degree of variability in the size of the body. This species occurs on the same mountain as *B. hageniana* n. sp. but differs in size, shape of the fore-body and sclerotized structures of the inner sac of the aedeagus.

5. ***Byziniella meruensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Tanganyika, Terr. Mt Meru, Olkokala, vers. NO, 2600 m, P. Basilewsky and N. Leleup, 8.VII.1957 (MRAC); paratypes: same data, 10 exx. (MRAC), 8 ex (cB); same data, Mt Mobduli, H. Franz, VII.1972, 1 male, 1 female (NMW), 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4 mm; from anterior margin of head to posterior margin of elytra: 1.7 mm. Apterous. Body (Fig. 1391) shiny, yellowish red. Head elongate-oval, narrowed anteriorly, with sides rounded from eyes to neck. Eyes small and flat. Surface of head

with fine, clearly visible very sparse punctation. Pronotum dilated anteriorly, as long and wide as head, the sides not sinuate; dorsal series of 8 punctures and lateral series of 5, 6 irregular punctures. Elytra short, sub-rectangular, with obsolete humeral angles; surface with fine and very sparse punctures arranged in three series, one juxtasutural, one median and one lateral. Tergite and sternite of the male genital segment as in figures 1419, 1420. Aedeagus oval (Fig. 1421), small, 0.6 mm long, with short parameres; inner sac with a series of small spines on the left, next to a long dark and narrow surface and three long narrow spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Mount Meru.

DISTRIBUTION. The species is only known from the type locality in Tanzania (Fig. 1431).

BIONOMICS. Some specimens were collected in "*étrépage sous* Hagenia".

6. ***Byziniella lupata*** n. sp.

EXAMINED MATERIAL. Holotype male: Tanganyika, Mt Meru, W hang, H. Franz, VII.1972 (cB); partypes: same data, 1 male (cB); Kilimanjaro, Kibo, SW hang, 2500–3100 m, H. Franz, VII.1972, 1 male, 4 females (NMW) 1 male, 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4 mm; from anterior margin of head to posterior margin of elytra: 2 mm. Apterous. Head, pronotum and abdomen with transverse microstriation. Body reddish brown. Head narrowly oval, with slightly rounded sides and broadly rounded posterior angles. Eyes small and flat. Surface of head with sparse, large shallow punctures only on the sides. Pronotum a little longer than head, dilated anteriorly where it is as wide as head, with broadly rounded anterior angles; dorsal series of 9, 10 punctures and lateral series of 5, 6 irregular punc-tures, all fine. Elytra short, shorter and narrower than pronotum, with obsolete humeral angles; surface with sparse, large shallow punctures arranged in several series. Tergite and sternite of the male genital segment as in figures 1422, 1423. Aedeagus oval (Figs. 1424, 1786), small, 0.63 mm long, with short parameres; inner sac with a distal rounded structure without protrusions, followed by three long structures, the left one bearing spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is derived from the Latin *lupatus -a -um* (toothed like a wolf), referring to the spines in the inner sac of the aedeagus.

DISTRIBUTION. This species is known only from Tanzania (Fig. 1431).

REMARKS. This species occurs in the same locality as *B. nigromontis* n. sp., but is very different in size, shape of the fore-body and the sclerotized structures of the inner sac of the aedeagus.

7. ***Byziniella ngorongoro*** n. sp.

EXAMINED MATERIAL. Holotype male: Tanzania, ENE side of Ngorongoro crater, 2100 m, T. Pocs, 30.XII.1988 (MTM).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.2 mm; from anterior margin of head to posterior margin of elytra: 1.8 mm. Apterous. Body shiny, reddish brown with darker abdomen, Similar to *B. cuocoi* n. sp., but very thin. Head narrower and more strongly narrowed anteriorly (Fig. 1408), with more rounded sides and narrowly rounded posterior angles. Eyes small and flat. Surface of head with denser, finer and more homogenous punctation than in *B. cuocoi* n. sp. Pronotum with dorsal series of 5 punctures and lateral series of 3 punctures. Elytra very short, with obsolescent humeral angles and fine sparse punctures. Tergite and sternite of the male genital segment as in figures 1425, 1426. Aedeagus oval (Fig. 1427), 0.74 mm long, with short parameres; inner sac with a distal curved spine followed by two partially overlapping long thickened spines between two parallel series of evident spines.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. This species is known only from the type locality in Tanzania (Fig. 1431).

BIONOMICS. The specimen was collected in "*montane evergreen forest*".

REMARKS. This species lives on the same volcano as *B. tanzanica* n. sp. but differs in the colouration, shape of the fore-body and the sclerotized structure of the inner sac of the aedeagus.

8. ***Byziniella hageniana*** n. sp.

EXAMINED MATERIAL. Holotype male: Tanzania, Kilimanjaro, Bismarck Hügel, 3100 m, P.J. and N. Leleup, 15.II 1956 (MRAC); paratypes: same data, 3 males, 4 females (MRAC), 5 males, 4 females (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4 mm; from anterior margin of head to posterior margin of elytra: 1.7 mm. Apterous. Body narrow, shiny, yellowish testaceous. Head small, ovoid, slightly narrowed anteriorly, with slightly rounded sides and sparse but clearly visible punctation. Eyes small and flat. Pronotum a little longer than head, with broadly rounded anterior angles; dorsal series of 7, 8 punctures and lateral series of 6, 7 punctures. Elytra short, much shorter than pronotum, posteriorly as wide as pronotum, with obsolete humeral angles and shallow punctures arranged in several series. Tergite and sternite of the male genital segment as in figures 1428, 1429. Aedeagus oval (Fig. 1430), 0.85 mm long, with short parameres; inner sac with a distal curved spine next to two long and large spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is derived from the name of the tree *Hagenia abyssinica*.

DISTRIBUTION. This species in known only from the type locality in Tanzania (Fig. 1431).

BIONOMICS. The specimen was collected in "*forêt de* Hagenia, Podocarpus, Philippia, *lisière super.*".

REMARKS. This species is close to *Leptacinus miltoni* (Tottenham, 1953: 492; see also Herman 2001a: 367), described on the basis of a female labelled "*Camp 2 12.450 ft / Shira Plateau / Kilimanjaro, T. T. / 29.XI.48 G. Salt*", "*Holotype*" (printed on round label with red border), "*under stones*", Leptacinus / miltoni *Tott. / TYPE*", "*Holotype* Leptacinus miltoni *Tott., det. R. G. Booth 2009*" (NHML). The specimen now bears the label "Byziniella miltoni *(Tott.) Bordoni det. 2012*".

1. *Byziniella abacta* group

This group of species can be divided into three sub-groups according to the conformation of the inner sac of the aedeagus. The first sub-group includes those species with a more or less wide inner sac, sometimes coiled once, and devoid of large spines (*B. crepitans* sub-group). The second is composed of species with more or less broad inner sac, not coiled, with some large spines (*B. schoutedeni* sub-group). The species of the third group have a very long inner sac, usually narrow in the median and proximal portions, coiled several times and sometimes with spines (*B. perforata* sub-group).

KEY TO THE SUB-GROUPS

1. Inner sac of aedeagus tape-like, usually narrow, sometimes coiled once, with spinules and scales but no spines.....*B. crepitans* sub-group
-. Inner sac not coiled, usually broad, with some large spines.....2. *B. schoutedeni* sub-group
-. Inner sac very long, usually narrow in the median and proximal portions, coiled several times, sometimes with spines...3. *B. perforata* sub-group

1. *B. crepitans* sub-group

KEY TO THE SPECIES

1. Eyes large and very prominent; body dark reddish brown, about 4 mm long; head of characteristic shape (Fig. 1432); sides of pronotum strongly sinuate; elytra sub-rectangular. Aedeagus as in figure 1435; inner sac with a large dark mass probably composed of closely bunched spinules, below which is a series of spines. Rep. Congo, Cameroon.....1. *B. tronqueti* n. sp.
-. Eyes not prominent or almost flat.....2

2. Body larger, 6.5 mm long, reddish brown with paler elytra; head sub-oval; eyes small and al-

most flat; elytra long, sub-rectangular. Aedeagus as in figure 1436; inner sac long, slightly dilated in the proximal portion, furnished with scales and short spines. Rwanda.....2. *B. rugege* n. sp.
-. Body 5–6 mm long.....3
-. Body less than 5 mm long.....9

3. Pronotum more massive.....4
-. Pronotum less massive.....5

4. Pronotum dilated anteriorly, visibly longer than head; eyes large and slightly prominent; body pale reddish brown, 5.5–6 mm long. Aedeagus very characteristic (Fig. 1439), the distal portion particularly narrow; inner sac gradually dilated, furnished with scales. Rwanda, Congo.....3. *B. sobrina*
-. Pronotum sub-rectangular, longer and narrower than head; body dark reddish brown, with darker head, 6 mm long. Aedeagus (Fig. 1442) of normal shape; inner sac with 3 broad consecutive surfaces covered in dense scales and spinules. Zimbabwe.....4. *B. chirinda* n. sp.

5. Body entirely brown.....6
-. Body reddish brown with much darker head.....7

6. Body robust, broad, 5.5 mm long; head dilated; eyes small, slightly protruberent. Aedeagus as in figure 1445; inner sac long, tape-like, furnished with scales. Congo.....5. *B. kiymbiana* n. sp.
-. Body smaller and narrower, about 5 mm long; head sub-oval, narrow. Aedeagus as in figure 1448; inner sac broad and long, furnished with sparse large scales. Rwanda.....6. *B. crepitans*

7. Head oval.....8
-. Head sub-rectangular longer and narrower; eyes larger; body 5.2 mm long. Aedeagus as in figure 1457; inner sac tape-like, dilated in posterior portion, furnished with 2 lateral series of spinules. Malawi.....9. *B. malawiana* n. sp.

8. Head oval, more dilated, shorter and broader; eyes smaller; body about 5 mm long. Aedeagus as in figure 1451; inner sac tape-like, coiled once in the proximal portion, furnished with fine spinules and distal group of spines. Burundi, Rwanda, Congo, Malawi.....7. *B. abacta*
-. Head oval, narrow; body 4.5 mm long; colouration very similar to that of *B. abacta*. Aedeagus with a sub-triangular distal portion (Fig. 1454), a little longer than that of *B. abacta*; inner sac similar to that of *B. abacta* but broader, with a different distal portion. Congo.....8. *B. bugera* n. sp.

9. Body about 4.5 mm long.....10
-. Body less than 4 mm long.....13

10. Head sub-oval.....11
-. Head sub-rectangular.....12

11. Body dark reddish brown; eyes larger and more prominent; elytra sub-rectangular, longer and narrower. Aedeagus with bilobed distal portion (Fig. 1461); inner sac tape-like, coiled once, with sparse spinules, before a triangular distal surface furnished with close spinules. Rwanda.....10. *B. cyangugu* n. sp.
-. Body reddish brown; eyes smaller and almost flat; elytra shorter, broader, dilated posteriad. Aedeagus as in figure 1464; inner sac similar to that of *B. cyangugu* n. sp. but broader and longer, with spinules before a differently shaped distal surface. Kenya, Congo.....11. *B. hypsibatha*

12. Elytra longer, sub-rectangular; eyes smaller and almost flat; body light brown; dorsal series of pronotum of 2 anterior and 3 posterior punctures. Aedeagus narrow, with characteristic distal portion (Fig. 1467); inner sac with 3 long parallel series of spinules. Kenya, Tanzania.....12. *B. kareniana* n. sp.
-. Elytra shorter, less rectangular, dilated posteriad; eyes larger and a little protruberent; body dark brown; pronotal series of 8 punctures. Aedeagus narrow in distal portion (Fig. 1470); inner sac with two widely spaced arcuate series of spinules. Congo.....13. *B. kiymbi* n. sp.

13. Head sub-oval; body very dark brown.....14
-. Head sub-rectangular; body brown; eyes slightly protruberent, larger; elytra longer; body about 3 mm long. Aedeagus smaller, 0.44 mm long (Fig. 1479); inner sac long and narrow, coiled, furnished with sparse minute scales. Zimbabwe.....14. *B. minutissima* n. sp.

14. Elytra narrower; eyes smaller; dorsal series of pronotum of 6 punctures; body 3.3 mm long.

Aedeagus narrow in the distal rounded portion (Fig. 1473); inner sac tape-like, broader, coiled, furnished with very sparse, minute scales. Kenya.....15. *B. forestalis* n. sp.

-. Elytra broader; eyes larger; dorsal series of pronotum of 5 punctures; body 2.5 mm long. Aedeagus less narrowed in the acute distal portion (Fig. 1476); inner sac tape-like, coiled, with denser, larger scales, closely arranged on the distal margins. Tanzania, Congo....16. *B. debilis*

1. ***Byziniella tronqueti*** n. sp.

Examined Material. Holotype male: Congo, Brazzaville, Kidamba, Méya, Bangou forest (about 350 m), Endrödy-Younga, 4.XI.1963 (MTM); paratype: (Cameroon, Yaoundé), Mt Febé, leg. ?, 30.VI.1966, 1 male (MNHNP).

Description of Holotype. Male. Length of body: 4 mm; from anterior margin of head to posterior margin of elytra: 2.2 mm. Fully winged, shiny. Similar to *B. cuocoi* n. sp. but uniformly reddish brown. Head and pronotum of characteristic shape (Fig. 1432). Head shorter and broader; eyes more prominent. Pronotum with more oblique anterior margins; dorsal series of 9, 10 fine punctures and lateral series of 4, 5 punctures. Elytra sub-rectangular with sub-rectilinear and sub-parallel sides, as long as pronotum and a little broader, with marked humeral angles; surface with larger and deep dense punctures arranged in 5, 6 series. Tergite and sternite of the male genital segment as in figures 1433, 1434. Aedeagus oval (Fig. 1435), small, 0.8 mm long, with very long and broad parameres; inner sac with a long broad surface covered in very thick spines, visible only on the right margin.

Variability. The paratypes have no substantial morphological differences with the holotype described.

Etymology. Patronymic. Dedicated to the friend and colleague Marc Tronquet, well known specialist in Staphylinidae, author of numerous photos.

Distribution. The species is at present known from Rep. Congo and Cameroon (Fig. 1480).

2. ***Byziniella rugege*** n. sp.

Examined Material. Holotype male: Ruanda, Forêt Rugege, 2300 m, N. Leleup, 21.II.1952 (MRAC).

Description of Holotype. Male. Length of body: 6.5 mm; from anterior margin of head to pos-terior margin of elytra: 3 mm. Fully winged. Body shiny, reddish brown with paler elytra. Abdomen with traces of polygonal micro-reticulation. Head oval, with slightly rounded sides and broadly rounded posterior angles. Eyes small, slightly protruberent. Pronotum slender, a little longer and narrower than head, with oblique anterior margins and less marked anterior angles; surface with deep punctures except on a median band; dorsal series of 9 fine punctures and lateral series of 4, 5 an-terior punctures. Elytra sub-rectangular, proportionately short, as long as and a little wider than pronotum, with marked humeral angles; surface with evident punctures arranged in several series. Aedeagus oval (Fig. 1436), 1 mm long; inner sac long and narrow, coiled once and furnished with small spines.

Etymology. The specific epithet refers to the type locality, as a noun in apposition.

Distribution. The species is only known from the type locality in Rwanda (Fig. 1481).

Bionomics. The specimen was collected in "*humus for. montagne*".

Remarks. Female unknown. The specimen lacks the genital segment and parameres.

3. ***Byziniella sobrina*** (Tottenham, 1956) comb. n.

Leptacinus sobrinus - Tottenham, 1956: 244; Herman 2001a: 3685

Type Material. The Musée royal de l'Afrique centrale in Tervuren preserves 1 specimen labelled "*Holotype*" (printed on orange label), "*Coll. Mus. Congo / Ruanda: Gitarama / 1850 m, terr. Nyanza / P. Basilewsky 1-1985*", "Leptacinus / sobrinus / *Tottenham / TYPE*". It is a male that now bears the label "Byziniella sobrina *(Tott.), Bordoni det. 2006*".

Examined Material. Congo, Kivu, Terr.

Lubero, Mont Bugera, 2000–2100 m, R.P.M.J. Celis, X–XI.1954, 10 exx. (MRAC), 5 exx. (cB).

DESCRIPTION. Length of body: 5.5–6 mm; from anterior margin of head to posterior margin of elytra: 3.8–4 mm. Body shiny, brown. Similar to *B. perforata* but smaller, with shorter head more dilated posteriad; eyes smaller; pronotum with more broadly rounded anterior angles and more strongly sinuate sides; elytra with sparser punctures arranged in several series. This new species differs from *B. perforata* especially in the sexual characters: tergite and sternite of the male genital as in figures 1437, 1438. Aedeagus small (Fig. 1439), 1 mm long, dilated, with median lobe narrow over a long distance; parameres long and thin; inner sac furnished with spinules and small scales.

DISTRIBUTION. Rwanda and Congo (Kivu) (Fig. 1480).

REMARKS. The type specimen is in poor condition, lacking the right elytron and with the abdomen in fragments.

4. ***Byziniella chirinda*** n. sp.

EXAMINED MATERIAL. Holotype male: S Rhodesia, Mt Selinda, forêt de Chirinda, 1300 m, N. Leleup, VII.1960 (MRAC); paratypes: same data 1 female (MRAC), 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Body dark reddish brown with darker head. Head oval, slightly narrowed anteriorly, with relatively dense punctation; eyes large, slightly protruberent; pronotum subrectangular, not dilated anteriorly, longer and narrower than head, with dorsal series of 12, 13 close punctures and lateral series of 8, 9 punctures; elytra large, much longer and broader than pronotum, dilated posteriad, with marked humeral angles; surface with evident punctures arranged in several series. Abdomen with fine transverse micro-striation and fine sparse punctation on the sides. Tergite and sternite of the male genital segment as in figures 1440, 1441. Aedeagus, 1 mm long (Fig. 1442), slightly narrowed in the distal portion, with narrow parameres; inner sac with 3 consecutive surfaces covered in dense scales and spinules.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is only known from the type locality in Zimbabwe (Fig. 1480).

5. ***Byziniella kiymbiana*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Haute Kiymbi, Terr. Albertville, 1750 m, N. Leleup, X.1958 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.5 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Fully winged. Body shiny, reddish brown with darker head and elytra. Head oval, slightly narrowed anteriorly, with slightly rounded sides and broadly rounded posterior angles. Eyes medium-sized, slightly protruberent. Surface of head with numerous large deep punctures except on a median band. Pronotum a little longer than head, dilated anteriorly where it is as wide as head; dorsal series of 9, 10 fine irregular punctures and lateral series of 7, 8 very fine punctures. Elytra broad, much longer and wider than pronotum, with marked humeral angles; surface with very fine dense punctures arranged in numerous series. Abdomen with polygonal microreticulation and fine sparse punctures. Tergite and sternite of the male genital segment as in figures 1443, 1444. Aedeagus oval (Fig. 1445), 0.9 mm long, with narrow parameres; inner sac ribbon-like, broad, furnished with scales and small spines.

ETYMOLOGY. The specific epithet refers to Kiymbi.

DISTRIBUTION. The species in only known from the type locality in Congo (Fig. 1480).

BIONOMICS. The specimen was collected in "*arbres creux*".

REMARKS. Female unknown.

6. ***Byziniella crepitans*** (Tottenham, 1956) comb. n.

Leptacinus crepitans - Tottenham, 1956: 239; Herman, 2001a: 3671

TYPE MATERIAL. The Musée royal de l'Afrique centrale in Tervuren preserves 4 specimens labelled

"*Coll. Mus. Congo/ Ruanda: Tshuruyaga for. / Rugege, 2400 m / P. Basilewsky 22.I.1953*", "Leptacinus crepitans / *Tottenham / TYPE*"; one with the label "*Holotype*", another with the label "*Paratype*" (both printed on orange labels). They are 4 males that now bear the determination labels "Byziniella crepitans *(Tott.), Bordoni det. 2006*".

Description. Length of body: 4.5–5 mm; from anterior margin of head to posterior margin of elytra: 2.3–2.5 mm. Reddish brown. Similar to *B. perforata* but much smaller and narrower; head shorter, oval, with coarser and sparser punctation; eyes small and almost flat; pronotum with more rounded anterior angles and less sinuate sides; dorsal series of 3, 4 punctures, larger than those of the lateral series; elytra much shorter, narrow, with less marked humeral angles; surface with much larger, deep punctures arranged in several series. *Byziniella crepitans* differs from *B. perforata* especially in the sexual characters: tergite and sternite of the male genital segment as in figures 1446, 1447; sternite very long and extremely narrow in the proximal portion. Aedeagus sub-rectangular (Fig. 1448), 0.9 mm long, with median lobe narrow but robust, with sub-rectilinear posterior margin; inner sac ribbon-like, broad, entirely covered in large scales, smaller in the proximal portion.

Distribution. Rwanda (Fig. 1481).

Remarks. In the original description of this species, as in those of another six species, all attributed here to the genus *Byziniella*, Tottenham (1956) gives a rather vague figure of the aedeagus. In the case of *B. crepitans* he did not find parameres, and in other figures he shows only one paramere, because, as he himself admits, the aedeagus had not been extracted with sufficient care. In the case of some species, including *B. crepitans*, I found parameres still adhering to the inside of the genital segments.

7. ***Byziniella abacta*** (Tottenham, 1956) comb. n. (Figs. 1737, 1787)

Leptacinus abactus - Tottenham 1956: 240; Herman, 2001a: 3665

Leptacinus luofuensis - Cameron 1950: 29; Herman, 2001a: 3677, syn. n.

Type Material. The Musée royal de l'Afrique centrale in Tervuren preserves 1 specimen labelled "*Holotype*" (printed on orange label), "*Coll Mus. Congo/ Urundi: Bururi, 2100 m / 8.III.1953/ P. Basilewsy*", "Leptacinus abactus / *Tottenham/ TYPE*". It is a male that now bears the determination label "Byziniella abacta *(Tott.), Bordoni det. 2006*".

The Institut royal des Sciences naturelles in Brussels preserves 1 specimen of *L. luofuensis* labelled "*Congo belge: Kivu, Luofu / 1700 m, 10-XII-1934/ G. F. de Witte 889*", "*Paratype*" (printed on orange label), "*M. Cameron det. 1949 /* Leptacinus luofuensis *n. sp.*". It is a female identical to *B. abacta* that now bear the determination label "Byziniella abacta *(Tott.), Bordoni det. 2013*".

Examined Material. Congo, Massif Ruwenzori, Mt Vuhonga, vallé de la Lume, 2200 m, P. Vanschuytbroeck and J. Kekenbosch, 22.VIII.1955, 1 male, 1 female (MRAC); Massif Ruwenzori, Kikyo près Kalonge, 2180 m, P. Vanschuytbroeck and J. Kekenbosch, 2.IX.1952, 2 females (MRAC); Kalonge, Ruiss. Katsambu, affl. Batahu, 2000 m, P. Vanschuytbroeck and J. Kekenbosch, 20.I–21.II.1953, 7 males, 12 females (MRAC), 9 males, 9 females (cB); Kalonge, Riv. Katunda, 1600 m, P. Vanschuytbroeck and H. Synaye, 3.V.1954, 1 female (MRAC); Kalonge, Nyamwamba-Ihogaro, 2480 m, P. Vanschuytbroeck and J. Kekenbosch, 26–28.VIII.1952, 1 female (cB); Kalonge, Riv. Nyamwamba, affl. Butaho, 2010 m, P. Vanschuytbroeck and J. Kekenbosch, 2–3.II.1953, 40 exx. (MRAC), 17 exx. (cB); Kalonge, riv. Nyamwamba, affl. Butaho, 2100 m, P. Vanschuytbroeck and J. Kekenbosch, 1–8.VIII.1952, 1 female (MRAC), 1 female (cB); same data, 2–3.II.1953, 2 males, 3 females (MRAC), 2 males, 1 female (cB); Kalonge, Nyamwamba-Ihongero, 2480 m, P. Vanschuytbroeck and J. Kekenbosch, 25–29.VIII.1952, 1 male, 4 females (MRAC); Kalonge, 2210 m, P. Vanschuytbroeck and J. Kekenbosch, 7.VIII.1952, 1 male, 1 female (MRAC), 1 male, 1 female (cB); Kalonge, R. Katauleko, affl. Butahu, 2180 m, P. Vanschuytbroeck and J. Kekenbosch, 1.VII.1952, 1 male (MRAC); same data, 2 males, 5 females (MRAC), 4 males, 2 females (cB); same data, 2800 m, P. Vanschuytbroeck and J. Kekenbosch, 11.II.1953, 1 male, 1 female (MRAC), 2 males, 1 female (cB); Kyandolire, Camp des Gardes, 1700 m, P. Vanschuytbroeck and J. Kekenbosch, 3–25.X.1952, 3 exx. (MRAC); Kiondo, affl. Butaho, 2130 m, P. Vanschuytbroeck and J. Kekenbosch, 31.VII–2.VIII.1952, 5 exx. (MRAC); Kiondo, Riv. Kamusonge, affl. Butahu, 1900 m, H. Syanave,

8.I.1954, 1 male (cB); Congo, Kalonge, 2210 m, P. Vanschuytbroeck and J. Kekenbosch, 2.IX.1952, 1 ex. (MRAC), 1 male (cB); Kalonge, Ruiss. Karambura, affl. Katauleko, 2060 m, P. Vanschuytbroeck and J. Kekenbosch, 30.I–21.II.1953, 43 exx. (MRAC), 14 exx. (cB); Kibombole, piste Kalonge-Mahungu, 2700 m, P. Vanschuytbroeck and J. Kekenbosch, 1 male, 1 female (MRAC); Kibombole, Tongero, piste vers Mahungu, 2480 m, P. Vanschuytbroeck and J. Kekenbosch, 28.I.1953, 2 females (MRAC); Kivu, T. Kabare, contr. SE Kahuzi, 2000 m, N. Leleup, VII.1951, 1 male (MRAC); Kivu, Lwiro, N. Leleup, 5.I.1952, 1 male (cB); Kivu, Lwiro, 5.I.1952, S Kahuzi, 2300 m, P. Basilewsky, 26–28.III.1953, 2 males, 2 females (MRAC); Kivu, Terr. Kalehe, contr. SO Kahuzi, 2200 m, N. Leleup, VIII.1951, 1 male, 3 females (MRAC), 2 males, 2 females (cB); Kivu, contr. S Kahuzi, 2200 m, P. Basilewsky, 27.III.1953, 1 male (MRAC); Kivu, Terr. Uvira, Hte Kahololo, 2800 m, N. Leleup I.1960, 1 male (MRAC); Kivu, Terr. Uvira, Lubuka, 2780 m, N. Leleup, 4.IX.1951, 3 males (MRAC); Kivu, Luvubu, 2850 m, N. Leleup, 21.XI.1950, 1 male (cB); Kivu, Dorsale de Lubero, Mt Lubwe, M. Celis, VIII.1963, 2 males (MRAC), 2 males, 1 female (cB); Kivu, Mt Kasongware, M. Celis, VIII.1968, 1 male, 3 females (MRAC), 1 male, 2 females (cB) (Zaire), N. P. Virunga, Volcan Mikeno, 2550 m, R. Celis, VI.1964, 1 female (MRAC), 1 male (cB); (Zaire), N. P. Virunga, Volcan Mikeno, Ravin Mbabuka, N Rweru, R.P. Celis, 23.VI.1964, 1 male (cB); (Zaire), N. P. Virunga, Volcan Mikeno, W Rweru, 2400–2600 m, R.P. Celis, 6.VI.1964, 1 male, 1 female (MRAC); (Zaire), N. P. Virunga, Volcan Mikeno, Rweru, 1288–2900 m, R.P. Celis, 20.VI.1964, 1 ex. (MRAC); (Zaire), N. P. Virunga, Volcan Mikeno, Piste Rweru-Kibumba, 2310 m, R.P. Celis, 25.VI.1964, 1 ex. (MRAC); (Zaire), N. P. Virunga, Volcan Mikeno, N Bitsiti, 2300–2400 m, R.P. Celis, 21.VII.1964, 1 male, 1 female (MRAC); (Zaire), N. P. Virunga, Volcan Mikeno, W Chanya, W Sabinyo, Tshamugassa, R.P. Celis, VII.1964, 1 male (cB).

Rwanda, Cyangugu Prov., Nyakabye, H. Mühle 4.I.1986, 1 male (MNB); Forêt Rugege, 2200 m, N. Leleup. III.1951, 2 males (MRAC), 1 male (cB); Nyngwé. R. Jocqué, 8.XI.1985, 1 ex. (MRAC).

DESCRIPTION. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Fully winged. Body (Fig. 1392) shiny, with traces of transverse micro-striation. Head dark brown, pronotum and abdomen reddish brown, elytra light brown. Head oval, slightly narrowed anteriorly, with slightly rounded sides and broadly rounded posterior angles. Eyes medium sized, slightly protruberent. Surface of head with sparse punctures on the sides. Pronotum a little longer than head, dilated anteriorly where it is as wide as head, with oblique anterior margins and broadly rounded anterior angles; dorsal series of 9–11 punctures and lateral series of 6–8 punctures. Elytra longer and broader than pronotum, with marked humeral angles. Surface with fine punctures arranged in several series. Abdomen with evident transverse micro-striation and fine sparse punctures. Tergite and sternite of the male genital segment as in figures 1449, 1450. Aedeagus oval (Fig. 1451), 0.8 mm long, with long narrow parameres; inner sac with two short, convergent distal series of fine spinules followed by a subtriangular group of fine spines directed to the right, and by a large coiled median and proximal portion covered in scales.

DISTRIBUTION. Burundi, Rwanda, Congo, Malawi (Fig. 1458).

BIONOMICS. Specimens variously bear the following habitat labels "*terreau*", "*étage bambous*", "*humus bambous*", "*bambous for. montane*", "*humus for.* Hagenia".

REMARKS. The "type" of *L. luofuensis*, from the same locality as the paratype should be in the IRSNB or the FMNH, but I was unable to find it.

This species, which is very common in the Kalonge and Kivu areas of Congo, varies in size, colouration and punctation. The inner sac of the aedeagus also varies in breadth and in the proximity of spinals.

8. ***Byziniella bugera*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Terr. Lubero, Mt Bugera, 2000–2199 m, R. Celis, X-XII.1954 (MRAC); paratypes: same data, 1 male, 3 females (MRAC), 4 males, 2 females (cB); same data, Mt Lubwe, M. Celis, VIII.1963, 1 male, 1 female MRAC), 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.5 mm; from anterior margin of head to posterior margin of elytra: 2.4 mm. Fully winged. Body shiny; head dark reddish brown, pronotum and abdomen reddish brown, elytra dark brown with

anterior half paler; antennae light brown, legs yellowish. Head oval with rounded sides and very broadly rounded posterior angles. Eyes medium-sized, slightly protruberent. Surface of head with deep, small sparse punctures. Pronotum a little longer than head, dilated anteriorly where it is as wide as head, with oblique anterior margins and broadly rounded anterior angles; dorsal series of 8 fine but deep punctures and lateral oblique series of 5, 6 punctures. Elytra large, much longer and broader than pronotum with marked humeral angles and fine punctures arranged in several series. Tergite and sternite of the male genital segment as in figures 1452, 1453. Aedeagus oval (Figs. 1454, 1788), small, 0.73 mm long, dilated into a distal sub-triangular lobule, with long, very narrow parameres; inner sac with a small, short distal series of slightly convergent fine spinules, followed by a large coiled surface covered in fine spines, most evident on the margins.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is known from the Lubero region in Congo (Fig. 1480).

BIONOMICS. Some specimens were collected in "*terreau*".

REMARKS. The aedeagus of this species is similar to that of *B. kareniana* n. sp. but the bilobate distal portion and inner sac are different. Body more slender and much darker, head not sub-rectangular, eyes prominent, not flat, pronotum narrower, elytra very long. This species also differs from *B. abacta*, especially in the narrower head and the structure of the inner sac of the aedeagus.

9. ***Byziniella malawiana*** n. sp.

EXAMINED MATERIAL. Holotype male: Malawi, North Reg., Nyika Plateau, Chowo forest, 2150 m, R. Jocqué, 4.XII.1981 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.2 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Fully winged. Body shiny, reddish brown with much darker head; antennae and legs brown. Similar to *B. cyangugu* n. sp. but a little larger and paler. Head with more rounded sides and protruberent eyes. Surface with sparser punctation. Pronotum much narrower, much less dilated anteriorly and more deeply punctured. Elytra broader and longer, more dilated posteriad. Tergite and sternite of the male genital segment as in figures 1455, 1456. Aedeagus oval (Fig. 1457), 1.2 mm long, with thin parameres; inner sac narrow and sub-rectilinear, strip-like, furnished with two series of outwardly directed spinules; between these the surface bears sparse, very minute spinules.

ETYMOLOGY. The specific epithet refers to Malawi.

DISTRIBUTION. The species is only known from the type locality in Malawi (Fig. 1480).

REMARKS. Female unknown. The aedeagus of this species is similar to that of *B. cyangugu* n. sp. but larger, with a different distal portion; inner sac with two different series of spinules.

10. ***Byziniella cyangugu*** n. sp.

EXAMINED MATERIAL. Holotype male: Ruanda, Cyangugu, Nyakabuye, H. Mühle, 1-3.IV.1983 (MNB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.5 mm; from anterior margin of head to posterior margin of elytra: 2.4 mm. Fully winged. Head with traces of transverse micro-striation. Head black, pronotum, elytra and abdomen reddish brown; antennae and legs testaceous. Similar to *B. abacta*, but a little larger. Head broader and more dilated posteriad, with more narrowly rounded posterior angles. Eyes smaller. Pronotum more massive and broader, more dilated anteriorly; dorsal series of 9, 10 punctures and lateral oblique series of 5 punctures. Elytra long, sub-rectangular, narrower, with sub-retilinear and sub-parallel sides, marked humeral angles and very fine, shallow and sparse punctures arranged in fewer series. Tergite and sternite of the male genital segment as in figures 1459, 1460. Aedeagus oval (Figs. 1461, 1789), small, 0.8 mm long, with short narrow parameres; inner sac with two distal sub-triangular structures protruding from the basal bulb, followed by a large surface briefly coiled in the proximal portion, furnished on the margins with series of small spines and in the middle with fine scales.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is only known from the type locality in Rwanda (Fig. 1481).

REMARKS. Female unknown.

11. ***Byziniella hypsibatha*** (Bernhauer, 1939) comb. n.

Leptacinus hypsibathus - Bernhauer, 1939: 75; Herman 2001a: 3675
Leptacinus pholeobius - Jeannel & Paulian, 1945: 76; Herman, 2001a: 3681, syn. n.

TYPE MATERIAL. The Muséum national d'Histoire naturelle in Paris preserves 2 specimens labelled "*Kenia / Suamfishing hut / Mt. Elgon vers. EST / 2400 m*", "*Mission de l'Omo / C. Arambourg / P. A Chappuis et R. Jeannel / 1932-33*", "*Type*" (printed on red label), "Leptacinus / hypsibathus / *typ. Bernh.*". Both are males; I choose one of them as lectotype and the other as paralectotype of the species. The specimens now bear respectively the labels "*Lectotypus* Leptacinus hypsibathus *Bh., Bordoni des. 2006*" and "*Paralectotypus* Leptacinus hypsibathus *Bh., Bordoni des. 2006*", and both the determination label "Byziniella hypsibatha *(Bh.), Bordoni det. 2006*".

The Paris museum should also house 4 specimens of *Leptacinus pholeobius*, labelled, according to the description ""*Camp II de l'Elgon, st. 15, alt. 2470 m, nid n 4, Jeannel & Paulian 30.XII.1932*", together with numerous larvae, but I was unable to find these specimens. I consider *B. pholeobius* synonym of *B. hypsibatha* according to the original description.

EXAMINED MATERIAL. Kenya, Elgon Saw Mill, Mt Elgon, vers. E, 2470, C. Arambourg, P. Chappuis & R. Jeannel, 1932–33, "*Paratype*" (printed on red label), "*nid n. 4*", 1 female (MNHNP). It is possible that it is a paratype of *L. pholeobius*, and that the label "*Paratype*" could was added later. Kenya, Mt Elgon, Sawmill, 2650 m, T. Leiler, 22.II.1983, 1 male (cJ).

Congo, Kivu Terr. Uvira, Itombwe, The Novi, 2900 m, N. Leleup, VI.1966, 1 male (cB).

DESCRIPTION. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.4 mm. Body brown with slightly darker head. Similar to *B. perforata* but smaller and narrower, with more oval head, and with much finer and sparser punctation than *B. perforata*. Pronotum shorter, with very broadly rounded posterior angles and sinuate sides; dorsal series of 8 punctures and lateral series of 4, 5 punctures. Elytra shorter than those of perforata, with denser punctures arranged in several series. Tergite and sternite of the male genital segment as in figures 1462, 1463. Aedeagus (Fig. 1464) oval, 0.77 mm long, with long narrow parameres; inner sac ribbon-like, long and broad, furnished with scales.

DISTRIBUTION. Kenya, Congo (Fig. 1480).

REMARKS. Jeannel and Paulian (1945) compared *L. pholeobius* with *L. elgonensis*, but the latter belongs to a different genus, *Agaporina* n. gen.

12. ***Byziniella kareniana*** n. sp.

EXAMINED MATERIAL. Holotype male: Kenya, Karen, D. and A. Kistner and R. Banfill, 7.VIII.1960 (FMNH); paratypes: Tanganyika, Mt Monduli, H. Franz, VII.1972, 1 male, 8 females (NMW), 2 males, 3 females (cB); Tanzania, Kilimanjaro, Marangu, 1550 m, J. and N. Leleup, 27.II.1956, 1 male, 2 females (MRAC), 1 male, 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.5 mm; from anterior margin of head to posterior margin of elytra: 2.1 mm. Fully winged. Body shiny, reddish brown with darker head. Head narrow, elongate-oval, with slightly rounded sides and broadly rounded posterior angles. Eyes small, slightly protruberent. Surface of head with fine sparse punctation. Pronotum a little shorter than head, dilated anteriorly where it is a little narrower than head, with very oblique anterior margins and obsolescent anterior angles; dorsal series of 2 anterior and 3 posterior punctures and lateral oblique series of 5 punctures, all the punctures fine. Elytra proportionately short, dilated posteriorly, a little longer and wider than pronotum, with only slightly marked humeral angles; surface with fine shallow punctures arranged in three series, one juxtasutural, one median and one lateral. Tergite and sternite of the male genital segment as in figures 1465, 1466. Aedeagus oval (Fig. 1467), small, 0.8 mm long, dilated into a sub-triangular median lobe, with very

short and narrow parameres; inner sac with a faint distal series of fine spinules followed by a surface furnished with fine scales and by three parallel series of spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality.

DISTRIBUTION. The species is only known from Kenya and Tanzania (Fig. 1480).

BIONOMICS. The holotype was collected in "*raiding column, end nest*".

13. ***Byziniella kiymbi*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Haute Kiymbi, Terr. Albertville, 1750 m, N. Leleup, X.1958 (MRAC); paratypes: same data. 1 female (MRAC), 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.5 mm; from anterior margin of head to posterior margin of elytra: 2.2 mm. Fully winged. Body shiny, dark brown. Similar to *B. abacta*, but of different colouration, with traces of micro-striation only on head. Head smaller, sub-rectangular, with sub-rectilinear and sub-parallel sides and narrowly rounded posterior angles. Eyes small and slightly protruberent. Surface of head with fine sparse punctation; pronotum broader, dilated anteriorly where it is as wide as head; dorsal series of 8 fine punctures and lateral oblique series of 5 punctures. Elytra a little longer and much wider than pronotum, dilated posteriad, with less marked humeral angles; surface with fine punctures arranged in several series. Tergite and sternite of the male genital segment as in figures 1468, 1469. Aedeagus oval (Figs. 1470, 1790), small, 0.77 mm long, with long narrow parameres; inner sac with two very long, narrow arcuate structures overlapping proximally, furnished with fine spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is the type locality, as a noun in apposition.

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1480).

14. ***Byziniella minutissima*** n. sp.

EXAMINED MATERIAL. Holotype male: Rhodesia, 7 mi ex Mt Selinda-Chipinga, J. Clover, A Kistner and R. Boulton, 14.IV.1970 (FMNH); paratypes: same data, 40 exx. (FMNH), 18 exx (cB); same data, J.L. Clover, D.H.A. Kistner and R. Boulton, 15.IV.1970, 4 exx. (FMNH).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 3.1 mm; from anterior margin of head to posterior margin of elytra: 1.7 mm. Fully winged. Body shiny, with traces of transverse micro-striation on head and pronotum; reddish brown with slightly darker head and elytra. Head narrowed anteriorly, with broadly rounded posterior angles. Eyes medium-sized and protruberent. Surface of head with large dense punctures except on a median band and with very evident micro-striation. Pronotum as long as head, a little dilated antetiorly where it is as wide as head, with less oblique anterior margins and narrowly rounded anterior angles; dorsal series of 2 anterior and 3 posterior punctures and lateral series of 2 anterior punctures. Elytra relatively large and long, much longer and wider than pronotum, a little dilated posteriad, with marked humeral angles; surface with very fine punctures arranged in three series, one juxtasutural, one median and one lateral. Tergite and sternite of the male genital segment as in figures 1477, 1478. Aedeagus oval (Fig. 1479), very small, 0.4 mm long, with very short and narrow parameres; inner sac large, furnished with scales and with a dark median structure.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is the superlative adjective Latin *minutissimus -a -um* (smallest).

DISTRIBUTION. The species in only known from the type locality in Zimbabwe (Fig. 1480).

BIONOMICS. The specimens were collected "*ex nest*", and "*ex raiding column, end nest*".

REMARKS. The information contained in "BIONOMICS" refer to collections made from ants' nests. Such captures are for other species of Xantholinini,

in particular of species of the genus *Chaetocinus*. To these must be added the words "ex debris pile nest". I think it useful to provide the following explanations; "*ex raiding column*" means that the specimen was captured in a raiding column of doryline ants. This information might be expanded by specifying that the specimen was taken in the middle of or near the end of the raiding column according to case; "*ex debris piles*" means that the specimen was taken from the ants' piles of waste materials, or "*middens*", with the exception of doryline ants, whose nests are often subterranean and not built in mounds. J.K.A Van Boven identified all the doryline ants (Kistner, pers. comm.).

15. ***Byziniella forestalis*** n. sp.

EXAMINED MATERIAL. Holotype male: Kenya, Escarpment For., T. Palm, 3–4.III.1970 (ZML).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 3.3 mm; from anterior margin of head to posterior margin of elytra: 1.8 mm. Fully winged. Body minute, shiny, dark brown with head almost black; antennae and legs testaceous. Head oval, narrowed anteriorly, with deep ocular and frontal grooves. Eyes relatively large and a little protruberent. Surface of head with traces of transverse microstriation and coarse and very sparse punctation. Pronotum longer and narrower than head, dilated anteriorly; dorsal series of 6 large punctures and lateral series of 4, 5 punctures. Elytra sub-rectangular, relatively very large, much longer and wider than pronotum, with sub-rectilinear and sub-parallel sides and very marked humeral angles; surface with shallow, widely spaced punctures arranged in three series, one juxtasutural, one median and one lateral. Tergite and sternite of the male genital segment as in figures 1471, 1472. Aedeagus oval (Fig. 1473), very small, 0.48 mm long, with very short and narrow parameres; inner sac not large, coiled, furnished with fine scales.

ETYMOLOGY. The specific epithet is the Latin *forestalis -e* (of forests).

DISTRIBUTION. The species is only known from the type locality in Kenya (Fig. 1480).

REMARKS. Female unknown. I believe the locality label on the specimen refers to the Kikuyu Escarpment forest, 30 km NNW of Nairobi, in Central Province, between 1800 and 2700 m altitude.

16. ***Byziniella debilis*** (Cameron, 1950) comb. n.

Leptacinus debilis - Cameron, 1950: 28; Herman 2001a: 3672
Leptacinus parvus - Cameron, 1950: 28; Herman 2001a: 3681, syn. n.

TYPE MATERIAL. The Natural History Museum in London preserves 1 specimen labelled "*Paratype*" (printed on round label with yellow border), "Leptacinus debilis *Cam./ cotype*", "*M. Cameron det. 1948* / Leptacinus debilis *M. Cam.*", "*Paratype*" (printed on orange label), "*Congo Belge P. N. A. / Kitondo (près Gandjo) / 2000 m, 7 au 23-1-1935 / G. F. de Witte: 1024*". It is a female.

The Institut royal des Sciences naturelles in Brussels preserves 1 specimen of *L. parvus* labelled "*Kibati (1900) / 18-19.1.1934 / G. F. de Witte / Parc Nat. Albert*", "*Paratype*" (printed on orange label), "*M. Cameron det. 1949* / Leptacinus / debilis *n. sp.*". It is a female.

The Natural History Museum in London preserves 1 specimen of *L. parvus* labelled "*Paratype*" (printed on round label with yellow border), "*M. Cameron det. 1937* / Leptacinus / parvus *Cam.*", "*Paratype*" (printed on orange label), "L. / parvus *Cam. / cotype*", "*Musée du Congo / V. Nyamuragira (2100) / Mayumbu 14/26-VI-35 / G. F. de Witte (1565)/ Parc Nat. Albert*". It is a female identical to *B. debilis*.

EXAMINED MATERIAL. Congo, Massif Ruwenzori, Kalonge, Ruiss. Katsambu, affl. Butahu, 2000 m, P. Vanschuytbroek and J. Kekenbosch, 26.I–19.II.1953, 2 males, 1 female (MRAC); Massif Ruwenzori, Ihongero, entre Kalonge et Mahungu, 2480 m, P. Vanschuytbroek and J. Kekenbosch, 1.II.1953, 1 male (cB); Massif Ruwenzori Kalonge, Riv. Nyamwamba, 2010 m, P. Vanschuytbroek and J. Kekenbosch, 2–3.II.1953, 1 male, 1 female (MRAC); (Zaire), Karisimbi, R. Lejeune, VII.1070, 1 male, 2 females (MRZC), 2 males (cB); Kivu, Terr. Lubero, Mt Bugera, 2100 m, R. Celis, XI–XII,1954, 6 exx. (MRAC), 2 exx. (cB); Kivu, T, Lubero, Mt Kibatsiro, Visiki, 2080 m, R. P. M. J. Celis, XII.1954, 6 exx (MRAC), 2 exx. (cB).

Tanzania (Tanganyika), Mt Meru, E slope, 5700 ft, J. Szvyoghy, 1.XI.1966, 24 exx. (MTM), 16 exx. (cB).

DESCRIPTION. Length of body: 2.5 mm; from anterior margin of head to posterior margin of elytra: 1.5 mm. Fully winged. Body minute, yellowish with head and elytra darker. Head oval, with rounded sides. Eyes small, not protruberent. Surface of head with fine, very sparse punctation. Pronotum narrow, narrower than and as long as head, with broadly rounded posterior angles; dorsal series of 5 widely spaced punctures and lateral series of 5 widely spaced punctures. Elytra sub-rectangular, very broad, much longer and wider than pronotum, with less marked humeral angles; surface with fine punctures arranged in four series. Tergite and sternite of the male genital segments as in figures 1474, 1475. Aedeagus oval (Fig. 1476), very small, 0.48 mm long, with a sub-triangular median lobe; parameres very short and narrow; inner sac narrow, coiled, acute in the distal portion, with dark margins, furnished with fine scales.

DISTRIBUTION. The species is now known from Congo and Tanzania (Fig. 1480).

BIONOMICS. Many specimens were taken in elephant dung and in "*terreau*".

REMARKS. The "type" of *L. parvus*, from the same locality as the paratype, should be in the IRSNB, but I did not find it.

2. *Byziniella schoutedeni* sub-group

KEY TO THE SPECIES

1. Eyes larger, prominent.....2
-. Eyes smaller and almost flat.....3

2. Body narrow, 6 long; light brown with slightly darker head; head shorter, with sparser punctation; humeral angles of elytra obsolescent. Aedeagus as in figure 1484, 1.1 mm long; inner sac with 2 distal spines followed by a narrow surface covered in spinules. Angola.....1. *B. machadoi*
-. Body 5.5 mm long, dark reddish brown; dorsal series of pronotum of 9 punctures. Aedeagus as in figure 1488; inner sac broad, furnished with fine scales under which are 3 lateral series of small spines. Congo.....2. *B. dilatata* n. sp.
-. Body about 4 mm long, reddish brown with paler pronotum and abdomen; head longer, with denser punctation; pronotum long and narrow; elytra long, sub-rectangular. Aedeagus 0.6 mm long (Fig. 1491); inner sac with 3 large long spines next to a series of short spines. Congo.....3. *B. schoutedeni*

3. Body larger, 4.5–4.8 mm long; dark reddish brown; eyes almost flat; pronotum strongly dilated anteriorly; dorsal series of pronotum of 6 punctures; elytra longer. Aedeagus 0.85 mm long (Fig. 1496); inner sac with a broad concave structure with a few series of spines and on its right a very long spine. Congo, Tanzania.....4. *B. wittei*
-. Body smaller, about 4 mm long. Reddish brown with darker head; eyes very a little protruberent; pronotum sub-oval, narrow; dorsal series of 8, 9 punctures; elytra shorter. Aedeagus 0.5 mm long (Fig. 1500); inner sac long, gradually widened in the proximal portion, furnished with sparse, evident spines. Malawi.....5. *B. cuocoi* n. sp.

1. ***Byziniella machadoi*** (Cameron, 1959) comb. n.

Leptacinus Machadoi - Cameron, 1959: 113; Herman, 2001a: 3677

TYPE MATERIAL. The Natural History Museum in London preserves 1 specimen labelled "*Type*" (printed on round label with red border), "*Museo do Dundo / Arred. Vila Luso / 2.I.1949 / Reg. Ang. 1261.16*", "*Cameron det. /* Leptacinus Machadoi/ *TYPE Cam*". I choose this male specimen as lectotype of the species; the specimen now bears the label "*Lectotypus* Leptacinus Machadoi *Cam., Bordoni des. 2006*", and the determination label "Byziniella machadoi *(Cam.), Bordoni det. 2006*".

DESCRIPTION. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 4 mm. Fully winged. Body light brown with head slightly infuscate. Similar to *B. perforata* but smaller and narrower; head narrower; eyes larger. Surface of head with much sparser and finer punctation. Pronotum narrower, proportionately longer than that of *B. perforata*. Elytra narrow, with obsolescent humeral angles. Tergite and sternite of the male genital segment as in figures 1482, 1483. Aedeagus oval (Fig. 1484), 1.1 mm long, with short

narrow parameres; inner sac with two short parallel distal series of fine spinules followed by two long spines, the median lobe and proximal portion of the sac furnished with fine spinules.

DISTRIBUTION. Angola (Fig. 1501).

REMARKS. In the description Cameron wrote "*A. B. Mach. Coll. Two specimens*". I believe the other specimen must be in the Museum Regional do Dundo in Luanda, but I am unable to study it.

2. ***Byziniella dilatata*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Chute de la Luate, SW Lubero, R.P.M.J. Celis, I.1957 (MRAC); paratype: same data, I.1.1967, 2 males, 1 female (MRAC), 2 males (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.5 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Fully winged. Body shiny, reddish brown with antennae and legs paler. Characterized by the shape of the head and pronotum (Fig. 1485). Head very broad, convex, strongly dilated posteriad, with broadly rounded posterior angles and fine, fairly dense punctation apart from on a median band. Eyes small and slightly protruberent. Pronotum longer and narrower than head, strongly dilated anteriorly, with strongly sinuate sides; dorsal series on 9 fine punctures and lateral series of 8, 9 large irregular punctures. Elytra sub-rectangular, broad, longer and wider than pronotum, with very marked humeral angles and fine sparse punctures arranged in several series. Tergite and sternite of the male genital segment as in figures 1486, 1487. Aedeagus oval (Fig. 1488), small and narrow, 0.85 mm long, with short parameres furnished with evident sensilla on their inner sides; inner sac with several series of small spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is the Latin adjective *dilatatus -a -um* (dilated), alluding to the shape of the head.

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1501).

3. ***Byziniella schoutedeni*** (Cameron, 1929) comb. n.

Leptacinus schoutedeni - Cameron, 1929: 59; 1950: 29; Scheerpeltz, 1933: 1303; Herman, 2001a: 3684

Leptacinus irritans - Tottenham, 1956: 241; Herman, 2001a: 3676, syn n.

Leptacinus pallescens - Tottenham, 1956: 242; Herman, 2001a: 3676, syn. n.

TYPE MATERIAL. The Natural History Museum in London preserves 1 specimen labelled "*Paratype*" (printed on round label with yellow border), "*Kivu: Buranga / 5.XII.1925 / H. Schouteden*", "L. / schoutedeni / *Paratype Cam.*". I choose this male specimen as lectotype of the species; the specimen now bears the label "*Lectotypus* Leptacinus schoutedeni *Cam., Bordoni des. 2006*".

The Musée royal de l'Afrique centrale in Tervuren preserves 1 specimen labelled "*Holotype*" (printed on orange label with black border). "*Musée du Congo / Kivu: Lulenga / 21.XI.1925 / Dr. H. Schouteden*", "Leptacinus shoutedeni / *TYPE* [in red] *Cam.*" [in Cameron's hand]. I choose this female specimen as paralectotype. The specimen now bears the label "*Paralectotypus* Leptacinus shoutedeni *Cam., Bordoni des. 2006*". Both the above specimens bear the determination label "Byziniella *gen. n.* shoutedeni *(Cam.), Bordoni det. 2006*".

That museum also preserves 1 specimen labelled "*Holotype*" (printed on orange label), "*Coll. Mus. Congo / Ruanda: Kayove / 2000 m. terr. Kisenyi / P. Basilewsky 14 -11 - 53*", Leptacinus / irritans *Tottenham / TYPE*". It is a male identical to *B. schoutedeni*, and another specimen labelled "*Holotype*" (printed on orange label with black border), "*Musée du Congo / Tuanda: Kibuye / 1500 , 12.II.1953/ P. Basilewsky*", "Leptacinus pallescens / *Tottenham / TYPE*". It is a female that in my opinion is identical to *B. schoutedeni*.

EXAMINED MATERIAL. Congo, Dorsale de Lubero, Muleke, M. Celis, VI–VII.1963, 3 males (MRAC), 2 males (cB); Dorsale de Lubero, Mt. Ksongwere, M.J. Celis, VIII.1962, 1 male (cB); Kivu, Terr. Lubero, Mt Kibatsiro, Visiki, 2080 m. R. Celis, XII.1954, 24 exx. (MRAC), 12 exx. (cB); Terr. Lubero, Mont Bugera, 2000-2100 m, R.P.M. J. Celis, X–XI.1954, 16 exx. (MRAC), 8 exx. (cB); same data, 2200 m, R.R.P.P. Bergmans-Celis, 2 exx.

(MRCA); Kivu, Terr. Lubero, Mulo, 1880-1960 m, R.P.M.J. Celis, VI–IX.1954, 4 exx. (MRAC), 1 ex. (cB); same data, 1960 m, VI.1954, 1 ex. (cB); Kivu, Terr. Lubero, Bukristu, 2000 m, R.P.M.J. Celis, IX.1954, 3 exx. (MRAC), 1 ex. (cB); Kivu, Terr. Lubero, rés. forest. Blena, 1800 m, R.P.M.J. Celis, 24.VII.1954, 1 ex. (MRAC); (Zaire), P. N. Virunga, Volcan Sabinyo, W Rutare, 2180 m, R. Celis, 22.VII.1964, 1 male (MRAC).

CITED MATERIAL (not examined). Congo, Kanyabayongo, Kabasha, 1760 m, G.F. de Witte, 7.XII.1934; Congo, Kibati (Cameron, 1950, sub *Leptacinus*).

DESCRIPTION. Length of body: 4 mm; from anterior margin of head to posterior margin of elytra: 1.9 mm. Fully winged. Body shiny and narrow. Characterized by the shape of the fore-body (Fig. 1492), with elongate head, narrow pronotum with strongly sinuate sides, and very large and long elytra. Head sub-rectangular, with fine, deep dense punctures on either side of a median band. Pronotum with dorsal series of 9–11 large shallow punctures and lateral series of 4–7 very fine punctures. Elytra with large punctures arranged in three series, one juxtasutural, one median and one lateral. Tergite and sternite of the male genital segment as in figures 1489, 1490. Aedeagus oval (Fig. 1491), small, 0.55–0.6 mm long, with narrow parameres; inner sac with a long narrow spine between to series of small spines.

DISTRIBUTION. Congo, Rwanda.

BIONOMICS. Specimens were collected in "*humus bambous*", "*terreau*", "*nids* Mymicaria sp." and "*sur* Lobelia". Buranga is locality in Rwanda and not in Congo.

REMARKS. The inflorescences of the giant lobelias (Campanulaceae) of the mountains of Africa have come to the notice of evolutionists and ecologists because they are particularly attractive to insects and birds. If this is not the only occurrence of a staphylinid on this plant, it may be that some staphylinids prey on other, nectar-feeding, insects.

4. ***Byziniella wittei*** (Cameron, 1950) comb. n.

Leptacinus wittei - Cameron, 1950: 30; Herman, 2001a: 3687

Xantholinus longipennis - Cameron, 1950: 32; Herman 2001a: 3809, syn. n.

TYPE MATERIAL. The Institut royal des Sciences naturelles in Brussels preserves 1 specimen labelled "*Paratype*" (printed on orange label), "*Congo belge: Kivu / Kinyanahura (Djomba) / 1800 m, 23.VIII.1934 / G. F. de Witte: 551*", "*M. Cameron det. 1949 /* Leptacinus wittei *n. sp.*". It is a male.

The Field Museum of Natural History in Chicago preserves 1 specimen labelled "*Congo belge P. N. A / Burunga (Mokoto) / 200 m. 9 au 14.III.1934 / G. F. de Witte: 303*", "*Paratype*" (printed on orange label), "Xantholinus / longipennis *Cam. / Cotype*", "Paratype" (printed on round label with yellow border). It is a male, lacking the head, and in my opinion is identical to *B. wittei*.

EXAMINED MATERIAL. Tanzania, (SW Tanganyika), Mt Mbize, 12 miles N Sumbawanga, 2000 m, N. Leleup, VI.1960, 1 male (MRAC).

Congo, Kivu, Terr. Lubero, 2200 m. N. Leleup, 30.XI.1951, 1 male (MRAC); Mombassa, 35 km S Lubero, L. Burgeon, VIII.1932, 1 male (cB).

Malawi, Zomba Plateau, D.A. and A.K. Kistner, 21.III.1978, 1 male, 2 females (cB).

Rhodesia, 7 mi ex Mt Selinda-Chipinga, J. Clover and D. Kistner, 14.IV.1970, 1 male (FMNH).

DESCRIPTION. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Fully winged. Body shiny. Characterized by the shape of the fore-body (Fig. 1493), with elongate, sub-rectangular head, the pronotum strongly narrowed posteriad, and very long elytra. Head with small flat eyes and fine, deep moderately dense punctation. Pronotum with dorsal series of 6 punctures and lateral series of 5 punctures. Elytra dilated posteriad, with marked humeral angles and fine punctures arranged in four series, two near the sutures, one median and one lateral. Tergite and sternite of the male genital segment as in figures 1494, 1495. Aedeagus oval (Fig. 1496), 1 mm long, with large parameres; inner sac cornet-like, furnished with spines of various shapes and with a very long slender spine on the right.

DISTRIBUTION. The species occurs in Congo, Tanzania, Malawi and Zimbabwe (Fig. 1501).

BIONOMICS. Specimens were collected "*dans Euphorbes géantes mortes*", in "*Réserve forestière*",

and in "*leaf litter*", "*nest*" and "*for. mont. avec bambous*".

REMARKS. Some specimens are in poor conditions. In his description of *L. wittei* Cameron (1950) states that the "*type*" is from Ngesho and two paratypes from Nyasheke (volc. Nyamuragira and Burunga, Mokoto), but I did not find those specimens. In the description of *X. longipennis* Cameron (1950) wrote that the "*Type*" is from Vitshumbi (S lac Edouard), 925 m, 18.I.1936 and the paratype from "*embouchure riv. Ruyshumbi (s lac Edouard), 925 m, 18.I.1936 (Miss. H. Damas)*". He also wrote "*Length 5 mm. Head quadrate etc.*". It would seem that Cameron was confused in this case. I did not find any specimens so labelled.

5. ***Byziniella cuocoi*** n. sp.

EXAMINED MATERIAL. Holotype male: Malawi, South Reg., Mount Mulanje, Lichenya Plateau, 2000 m, R. Jocqué, 5–24.XI,1981 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.2 mm; from anterior margin of head to posterior margin of elytra: 2.2 mm. Fully winged. Body shiny, of characteristic shape (Fig. 1497), light reddish brown with head a little darker. Head small, subquadrate, with slightly rounded sides. Eyes small and almost flat. Surface of head very sparingly punctured. Pronotum elongate-oval, scarcely dilated forward, longer and narrower than head, with very oblique anterior margins and obsolescent anterior angles; surface with dorsal series of 8, 9 punctures and lateral series of 5 punctures. Elytra sub-rectangular, a little longer and wider than pronotum, with rounded humeral angles; surface with fine shallow punctures arranged in several series. Abdomen with more or less polygonal micro-reticulation on the anterior half. Tergite and sternite of the male genital segment as in figures 1498, 1499. Aedeagus elongate-oval (Fig. 1500), 0.85 mm long, with long thin parameres; inner sac very characteristic, bag-shaped, enlarged in the proximal portion, furnished with evident widely spaced erect spines.

ETYMOLOGY. Patronymic. The species is dedicated to the friend and colleague Silvio Cuoco (Livorno, Italy), author of very nice photographs.

DISTRIBUTION. The species is only known from the type locality in Malawi (Fig. 1501).

REMARKS. Female unknown.

2. *Byziniella perforata* sub-group

KEY TO THE SPECIES

1. Body larger, 5.5–6 mm long, reddish brown; head with dense punctation; dorsal series of pronotum of 11, 12 punctures.....2
-. Body less than 5.5 mm long.....4

2. Elytra longer; body 5.5 mm long. Aedeagus as in figure 1504; inner sac tape-like, very long and narrow, coiled several times, furnished with sparse long scales. Rwanda.....1. *B. nyakabuye* n. sp.
-. Elytra shorter.....3

3. Body a little shorter, 6 mm long; eyes larger. Aedeagus as in figure 1507; inner sac tape-like, very long and narrow, coiled several times, furnished with fine dense punctures. Burundi.....2. *B. perforata*
-. Body a little longer, 6.2 mm long; eyes smaller. Aedeagus with particular posterior apophyses (Fig. 1510); inner sac with 2 very large and broad distal spines followed by a large coiled surface furnished with long slender spines. Congo.....3. *B. abnormis* n. sp.

4. Body more robust, about 5 mm long; reddish brown with darker head; pronotum narrower, with dorsal series of 11–12 punctures. Aedeagus as in figure 1515: inner sac long and narrow, coiled, furnished with scales and a distal group of thin parallel spines. Congo.....4. *B. montana* n. sp.
-. Body less robust and shorter, 4.5–4.8 mm long; light reddish brown with slightly darker head and yellowish elytra; pronotum wider, with dorsal series of 5 widely spaced punctures. Aedeagus of particular shape (Fig. 1519); inner sac with a distal group of parallel spines followed by a tape-like median-proximal portion coiled several times and furnished with scales. Central Africa and South Africa.....5. *B. africana*

1. ***Byziniella nyakabuye*** n. sp.

Examined Material. Holotype male: Ruanda, Cyangugu Prov., Nyakabuye, H. Mühle, 26.II.1985 (MNB); paratypes: Congo, Kivu, contr. S. Kahuzi, 2300 m, P. Basilewsky, 26–28.III.1985, 1 male (MRAC); Congo, Kivu, Terr. Uvira, Mulenge, 1950 m, N. Leleup, 2.IX.1951, 1 male (cB).

Description of Holotype. Male. Length of body: 5.8 mm; from anterior margin of head to posterior margin of elytra: 3.1 mm. Fully winged. Reddish brown with darker head. Head with transverse micro-striation, large, oval, slightly narrowed anteriorly, with slightly rounded sides and broadly rounded posterior angles. Eyes medium-sized, protruberent, Surface of head with deep dense punctures apart from on a median band. Pronotum as long as head, slightly dilated anteriorly where it is as wide as head, with very oblique anterior margins and slightly sinuate sides; dorsal series of 10, 11 fine punctures and lateral series of 6, 7 fine punctures. Elytra large, dilated posteriad, longer and wider than pronotum, with marked humeral angles; surface with fine dense punctures arranged in several series. Tergite and sternite of the male genital segment as in figures 1502, 1503. Aedeagus oval (Fig. 1504), 0.8 mm long, with a short fairly narrow median lobe; parameres long and narrow; inner sac with two distal series of fine spinules next to two evident spines, followed by a narrow tape-like structure, furnished in the median portion with widely spaced small scales in the coiled portion.

Variability. The paratypes have no substantial morphological differences with the holotype described. Length of body: 5.5–6 mm; from anterior margin of head to posterior margin of elytra: 3–3.2 mm.

Etymology. The specific epithet is the type locality, as a noun in apposition.

Distribution. The species is known from Rwanda and Congo (Fig. 1512).

Bionomics. Specimens were collected in "*rose aux pourris en marais*".

2. ***Byziniella perforata*** (Tottenham, 1956) comb. n.

Leptacinus perforatus - Tottenham, 1956: 240; Herman, 2001a: 3681

Type Material. The Musée royal de l'Afrique centrale in Tervuren preserves 2 specimens labelled "*Col. Mus. Congo / Urundi: Bururi, 2000 m / 8.III. 1953 / P. Basilewsky*". "Leptacinus perforatus / *Tottenham / TYPE*", the first with the label "*Holotype*", the second with the label "*Paratype*" (printed on orange labels). They are respectively a male and a female now bearing the determination label "Byziniella perforata *(Tott.), Bordoni det. 2006*".

Description. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 2.9 mm. Body shiny, brown. Head elongate-oval, with slightly rounded sides and broadly rounded posterior angles. Eyes large and a little protruberent, their diameter equal to the combined length of antennomeres 2 and 3. Frontal grooves deep. Surface of head with deep dense punctation except from on a median band, the interstices about as wide as the diameter of punctures. Pronotum about as long as head, dilated anteriorly where it is as wide as head, with oblique anterior margins, broadly rounded anterior angles and sinuate sides; dorsal series of 11, 12 punctures and lateral oblique series of 5, 6 punctures. Elytra large, much longer and broader than pronotum, with marked humeral angles; surface with fine punctures arranged in numerous series. Abdomen with fine transverse micro-striation and fine, moderately dense punctures. Tergite and sternite of the male genital segment as in figures 1505, 1506; sternite with very long and slender proximal portion. Aedeagus oval (Fig. 1507), 0.96 mm long; median lobe broad with rounded posterior margin; inner sac ribbon-like, narrow, coiled several times and furnished with small scales.

Distribution. Burundi (Fig. 1512).

3. ***Byziniella abnormis*** n. sp.

Examined Material. Holotype male: Congo, Reg. Alimbongo, km 306 Riviere Muliambuli, 2100 m, N. Leleup, 24.IV.1951 (MRAC).

Description of Holotype. Male. Length of body: 6.2 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Fully winged. Body shiny, reddish brown with head and elytra darker. Head sub-rectangular, a little dilated posteriad, with broadly rounded posterior angles and sub-rectilinear sides. Eyes medium-sized, slightly protruberent. Surface of head with sparse shallow punctures.

Pronotum longer than head, anteriorly dilated where it is as wide as head, with oblique anterior margins and broadly rounded anterior angles; dorsal series of 6, 7 irregular punctures and lateral series 0f 5, 6 fine punctures. Elytra long and narrow, longer and wider than pronotum, a little dilated, with fine punctures arranged in several series. Tergite and sternite of the male genital segment as in figures 1508, 1509. Aedeagus oval (Figs. 1510, 1511), enlarged at the proximal end, 0.77 mm long, with two lateral lobules evident in lateral view; parameres long and narrow; inner sac with several large distal spines followed by a large median-proximal portion furnished with small spines and scales.

ETYMOLOGY. The specific epithet is the Latin adjective *abnormis -e* (abnormal), in reference to the unusual shape of the aedeagus.

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1512).

REMARKS. Female unknown. The type locality is near Lake Edward, not far from Virunga National Park.

4. ***Byziniella montana*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Terr. Lubero, Mt Bugera, 2000-2100 m, R. Celis, X–XI.1954 (MRAC); paratypes: same data, 3 males, 2 females (MRAC), 1 male, 2 females (cB); same data, Mt Kibatsiro, Visiki, 2080 m, R. Celis, XII. 1954, 2 males, 3 females (MRAC), 3 males, 3 females (cB); Monbassa, 36 km S Lubero, L. Burgeon, 20.VIII.1932, 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.5 mm. Fully winged. Reddish brown with almost black head and pale elytra and abdomen. Head larger, clearly dilated posteriad, with coarser and denser punctation. Eyes larger. Pronotum as long and as broad as head, clearly dilated anteriorly; dorsal series of 11, 12 irregular punctures and lateral series of 5, 6 punctures. Elytra long and narrow, much longer and slightly wider than pronotum, with sub-rectilinear sides and rounded humeral angles; surface with fine but visible punctures arranged in numerous series. Tergite and sternite of male genital segment as in figures 1513, 1514. Aedeagus 1 mm long (Figs. 1515, 1791), enlarged proximally, with long narrow parameres; inner sac with some large distal spines followed by other smaller spines and by a narrow coiled tape furnished with short spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is the Latin *montanus -a -um* (of mountains).

DISTRIBUTION. The species is known from the Lubero region in Congo (Fig. 1512).

BIONOMICS. Specimens were collected in "*terreau*" and "*avec* Dorylus" (the label also bears the word "*Myrmécophile*", a somewhat hazardous assumption!)

5. ***Byziniella africana*** (Bernhauer, 1929) comb. n.

Leptacinus africanus - Bernhauer, 1929: 120; Scheerpeltz, 1933: 1300; Herman, 2001a: 3665
Leptacinus strangulatus - Coiffait, 1968; Herman, 2001a: 3685, syn. n.

TYPE MATERIAL. The Field Museum of Natural History in Chicago preserves 1 specimen, female, labelled "*Ghinda*", "*Levander*", "batychrus / *det. Bernhauer / var. F. Sahlberg*", "africanus / *Bernh. / Typus*).

The Muséum national d'Histoire naturelle in Paris preserves 4 specimens, one labelled "*Holotype*" and the others "*Paratype*" (printed on red labels); the holotype is a male bearing the labels "*Belinga / 14.2/ 22.6.63 / H. Coiffait*", "Leptacinus *(s. str.)* / strangulatus *Coiff. / H. Coiffait 1967*". The paratypes are 1 male and 2 females labelled "*Belinga / 8.2.63 / H. Coiffait*", "Leptacinus *(s. str.)* strangulatus *Coiff. / H. Coiffait 1967*".

These specimens, identical to *B. africana*, have now the label "Byziniella africana *(Bh.), Bordoni det. 2014*".

EXAMINED MATERIAL. Ethiopia, (Abyssinia), Maraquo, Kovacs, 1912, 1 ex. (FMNH).

Erythrea, 1 ex. (FMNH).

Burkina Faso, Haute Volta, Bobo Dioulasso, J. H. (?), XI.1956, 1 male (MNHNP).

Senegal, 1 km NW Bignona, 26 km N Ziguinchor, Cederholm, Danielsson, Hammaretedt,

Hedquvist and Samuelsson, 3.III.1977, 1 male, 2 females (ZML), 1 male, 2 females (cB).

Gambia, Sangajor, T. Palm 24.I.1970, 4 exx. (ZML), 4 exx. (cB); Bakan, T. Palm, 6–26.XI.1984, 1 male (ZML), 1 female (cB).

Ivory Coast, Lamé, Bingerville, P. Genty, 29.VIII.1966, 2 males, 1 female (MNHNP).

Cameroon, Bamendjing. Vallé du Noun, Mt Bamileke, J. Mouchet, 5.III.1959, 1 male (MNHNP)

Uganda, Victoria Nyanza, Arcipel. Sesse, Bugala, E. Bayon, 1908, 14 exx. (MCSNG), 1 ex. (FMNH), 1 ex. (cB); Bussu Busoga, E. Bayon, 1910, 1 ex. (FMNH).

Kenya, Shimba For., T. Palm, 17.III.1970, 2 exx. (ZML); Mt Elgon, T. Palm, 1980, 1 ex. (ZML); Mt Kenya, Chogaria, 1520 m, 0.15S, 37.45E, G. Bernon, 28.II.1974, 3 exx. (TMSA); Tsavo West N. P., 50 km S Kilanguri Lodge, S. and L. Mahunka, 26.VI.1992, 1 female (MTM).

Rwanda, Kisenyi, A. E. Bertrand 9.VIII.1952, 2 exx. (MRAC); Russumo, R. Jocqué, 18.XI.1985, 1 male (cB).

Congo, Brazzaville, Orstom Park, Endrödy-Younga 3.I.1964, 1 male, 1 female (MTM), 1 male (cB); Albertville, H. Bomans, VII.1954, 1 male (MRAC).

Tanzania, Usa river, 3900 ft, J. Szonyoghy, 1–10.II.1966, 1 male (MTM); Morogoro reg., Matombo, 45 km S Morogoro, S. Mahunka and A. Zicsi, 4.II.1987, 1 male, 1 female (MTM), 1 male (cB); (Tanganika), Moba, 780 m, H. Bomans, VI.1953, 1 female (MRAC); Morogoro reg., Matombo, 45 km S Morogoro, Pocs and Sontera, III–IV.1987, 1 female (MTM); Ifakara, Mofu, Kunigsbauer, IX.1967, 5 exx. (MNB), 1 ex. (cB); Lindi Reg., Litipo For. Res., 180-270 m, 10.02S, 39.29E, "Frontier-Tanzania" Zmuc, VII–IX.1993, 3 exx. (ZMUC), 1 ex. (cB).

Gambia, 6 km N Kartung, Cederholm, Danielsson, Hammaretedt, Hedquvist and Samuelsson, 20.XI.1977, 1 male, 2 females (ZML), 1 male, 1 female (cB).

Zimbabwe (Rhodesia), Zmiw of confluence of Honde, Pungwe Rivers, J. Clover and D. Kistner, 5.IV.1970, 1 male (FMNH).

Namibia, Khomas Hochland, Us Pass, 10 km Park, 23.03S, 15.40E, Endrödy-Younga, 7.VII.1978, 1 ex. (TMSA).

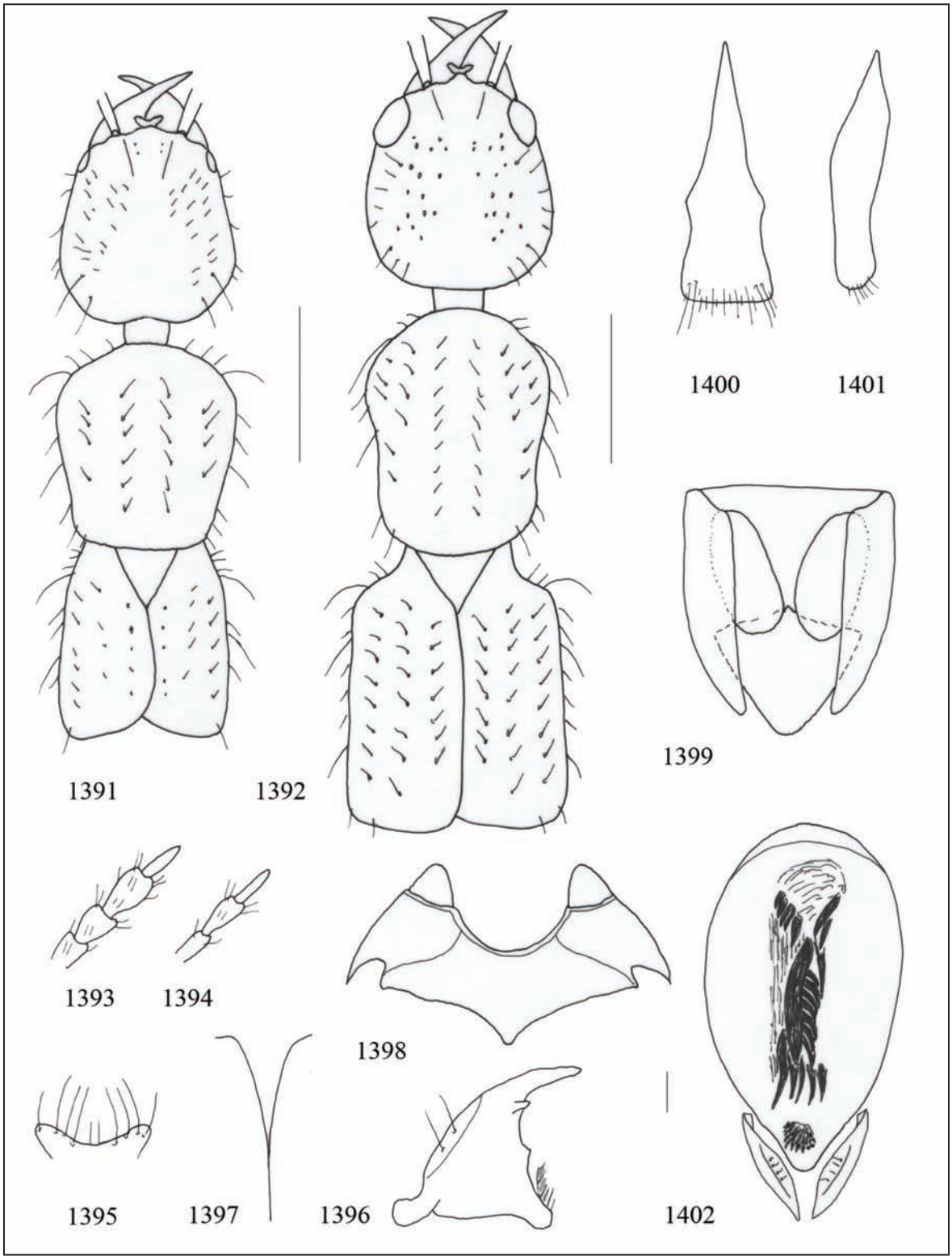
South Africa, Transvaal, Vitsoek, Grotkloof ind for., 25.15S, 30.33E, Endrödy-Younga, 15.XII.1986, 1 female (TMSA), 1 female (cB); Transvaal, 15 km N Barberton, 25.42S, 30.57E, Endrödy-Younga, 24.X.1986, 1 ex. (TMSA), 1 male (cB); Transvaal, Blyderiver Canyon, 24.35S, 30.49E, Endrödy-Younga, 2–6.V.1981, 34 exx. (TMSA); Transvaal, Springs, C. de Jager, 26.XII.1960, 1 ex. (TMSA); Zululand, Mtubatuba-Dukuduku, 28.22S, 32.19E, Endrödy-Younga, 4–7.IV.1974, 2 exx. (TMSA); Zululand, Dukuduku for. sta., 28.22S, 32.19E, Endrödy-Younga, 4–7.IV.1974, 22 exx. (TMSA).

DESCRIPTION. Length of body: 4.5–4.8 mm; from anterior margin of head to posterior margin of elytra: 2.2–2.4 mm. Fully winged. Body shiny, light reddish brown with head a little darker and posterior half of elytra yellowish. Head narrow anteriorly, broadly rounded posteriad, with deep, moderately dense punctation especially on the sides. Eyes large and scarcely protruberent. Neck very narrow (Fig. 1516). Pronotum a little longer than head, dilated anteriorly where it is as wide as head; dorsal series of 5 widely spaced punctures and lateral series of 4 very widely spaced punctures. Elytra longer and wider than pronotum, dilated posteriad, with marked humeral angles and very fine punctures arranged in several series. Tergite and sternite of the male genital segment as in figures 1517, 1518. Aedeagus oval (Figs. 1519, 1792), 0.9 mm long; median lobe very narrow, with a long very narrow extension, with rounded apex; parameres very long and narrow; inner sac with two distal series of large unequal spines, followed by a long narrow coiled tape furnished with small spines and scales.

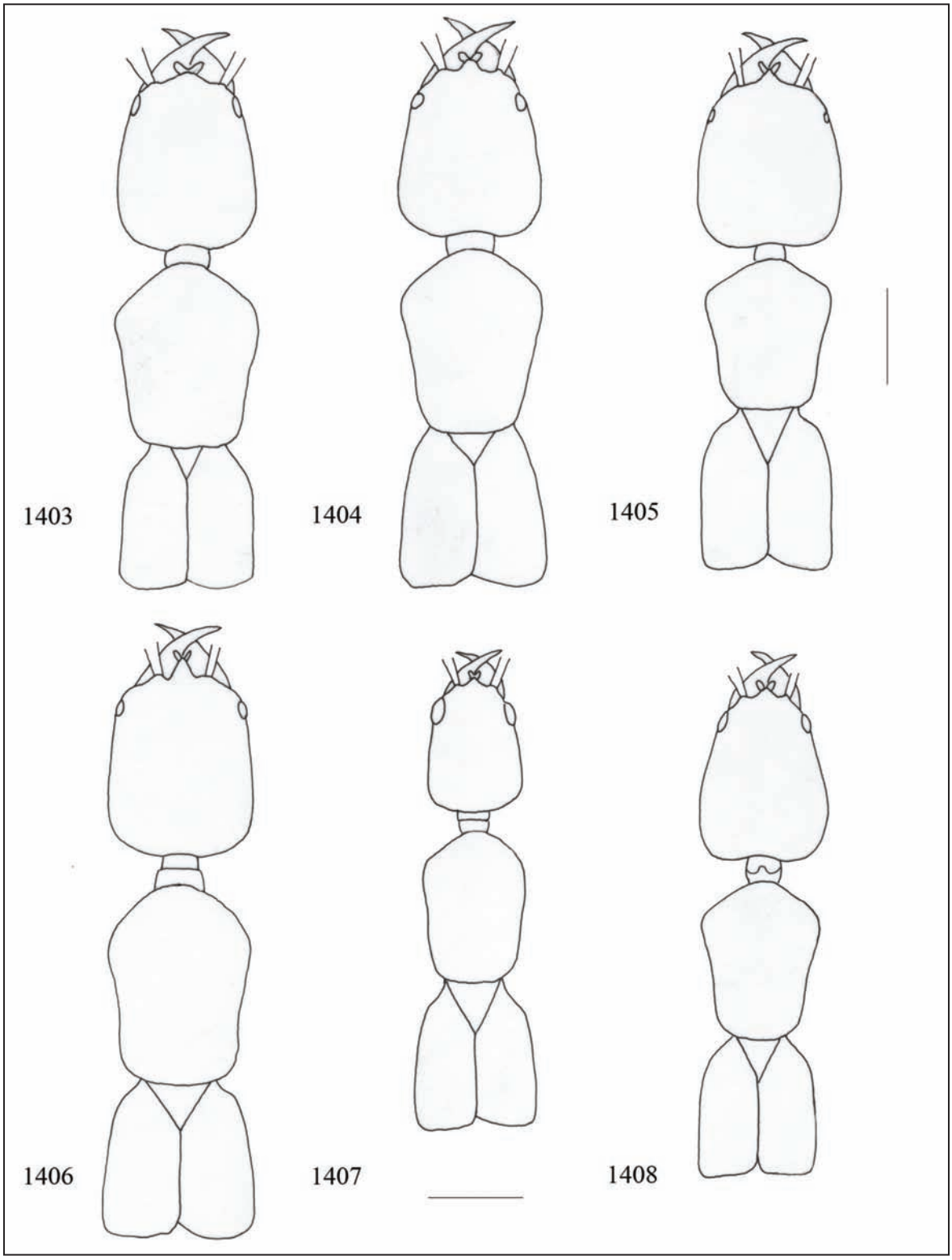
DISTRIBUTION. The species is recorded from Erythrea, Ethiopia, Senegal, Kenya, Rep. Congo, Rwanda, Uganda, Tanzania, Gambia, Zimbabwe and South Africa, but its distribution probably covers the whole of central and southern Africa (Fig. 1520).

BIONOMICS. Some specimens were collected in "*bovine dung*", "*cattle dung*", "*bamboo*", and "*sur tronc papayer pourri*".

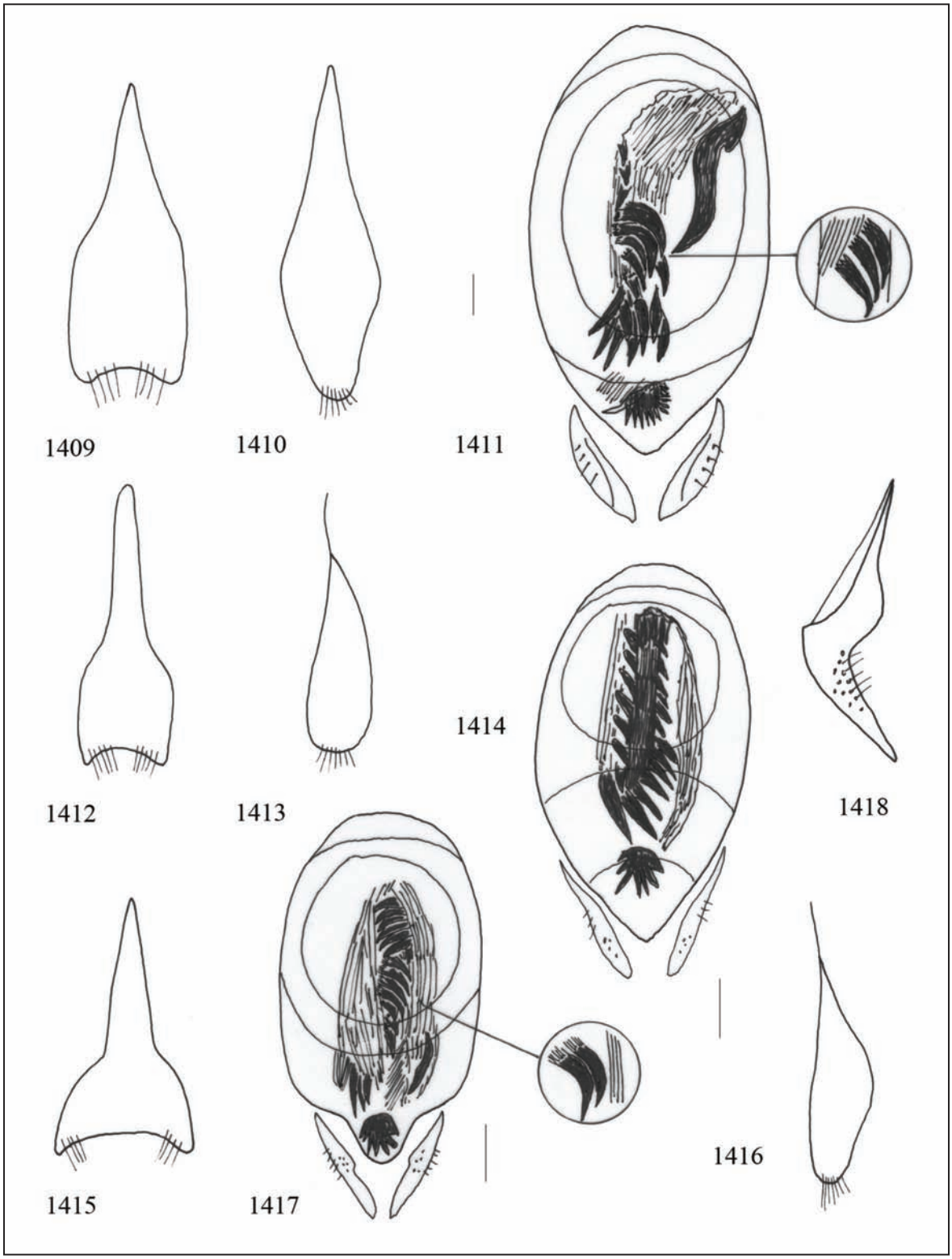
REMARKS. The very narrow neck and shape of the aedeagus are unique within the genus. The other external characters are those typical of *Byziniella* n. g. *Leptacinus africanus* was described shortly in a remark to *L. congoensis*, as unique specimen from Erythrea.



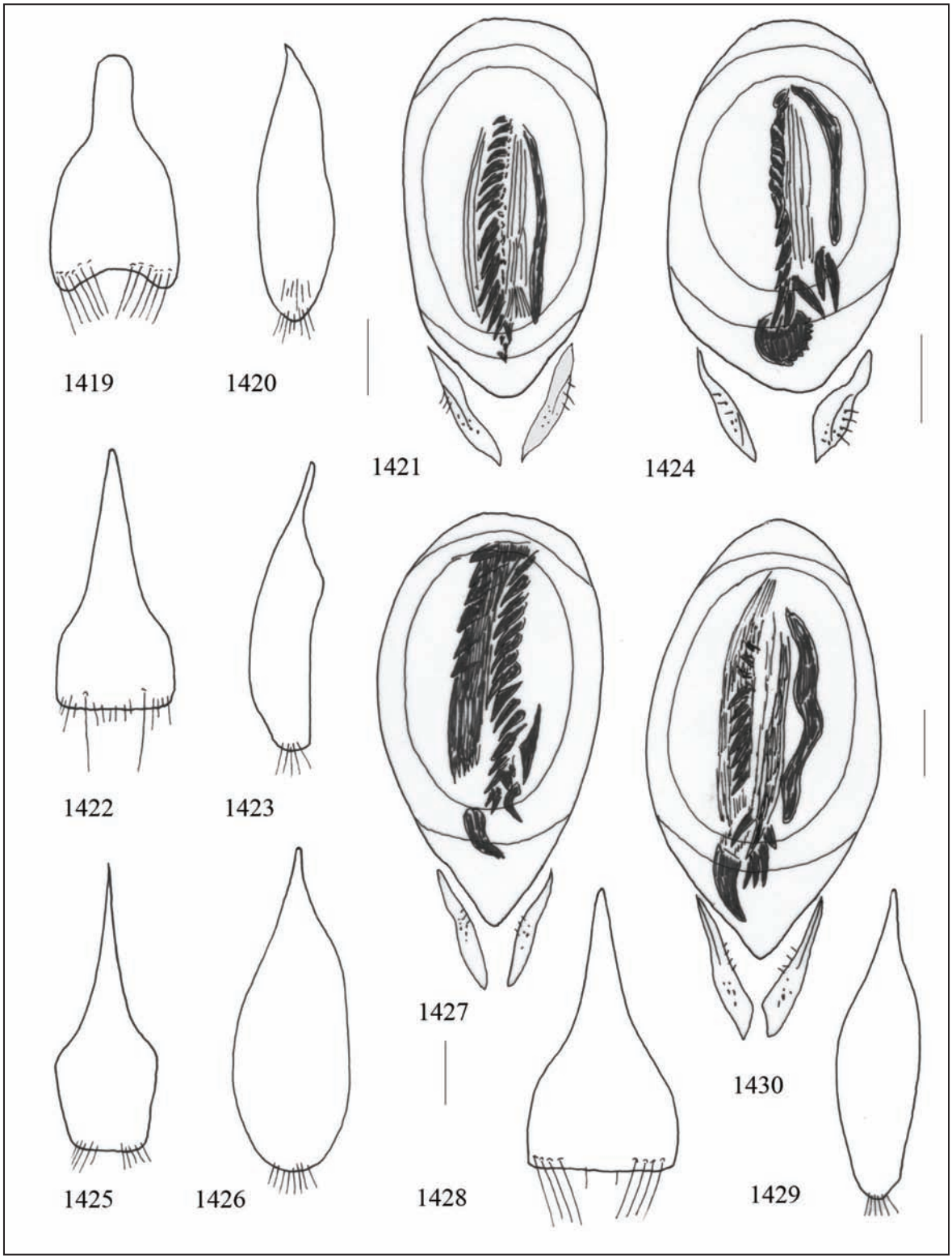
Figures 1391–1402. Fore-body of *Byziniella moruensis* n. sp. (Fig. 1391) and *B. abacta* (Fig. 1392) (bar scale: 0.5 mm). *Byziniella perforata*: maxillary and labial palpi (Figs. 1393, 1394), labrum (Fig. 1395), mandible (Fig. 1396), gular sutures (Fig. 1397), mesosternum (Fig. 1398), female genital segment (Fig. 1399). Tergite and sternite of the male genital segment, aedeagus of *B. nigromontis* n. sp. (Figs. 1400–1402) (bar scale: 0.1 mm).



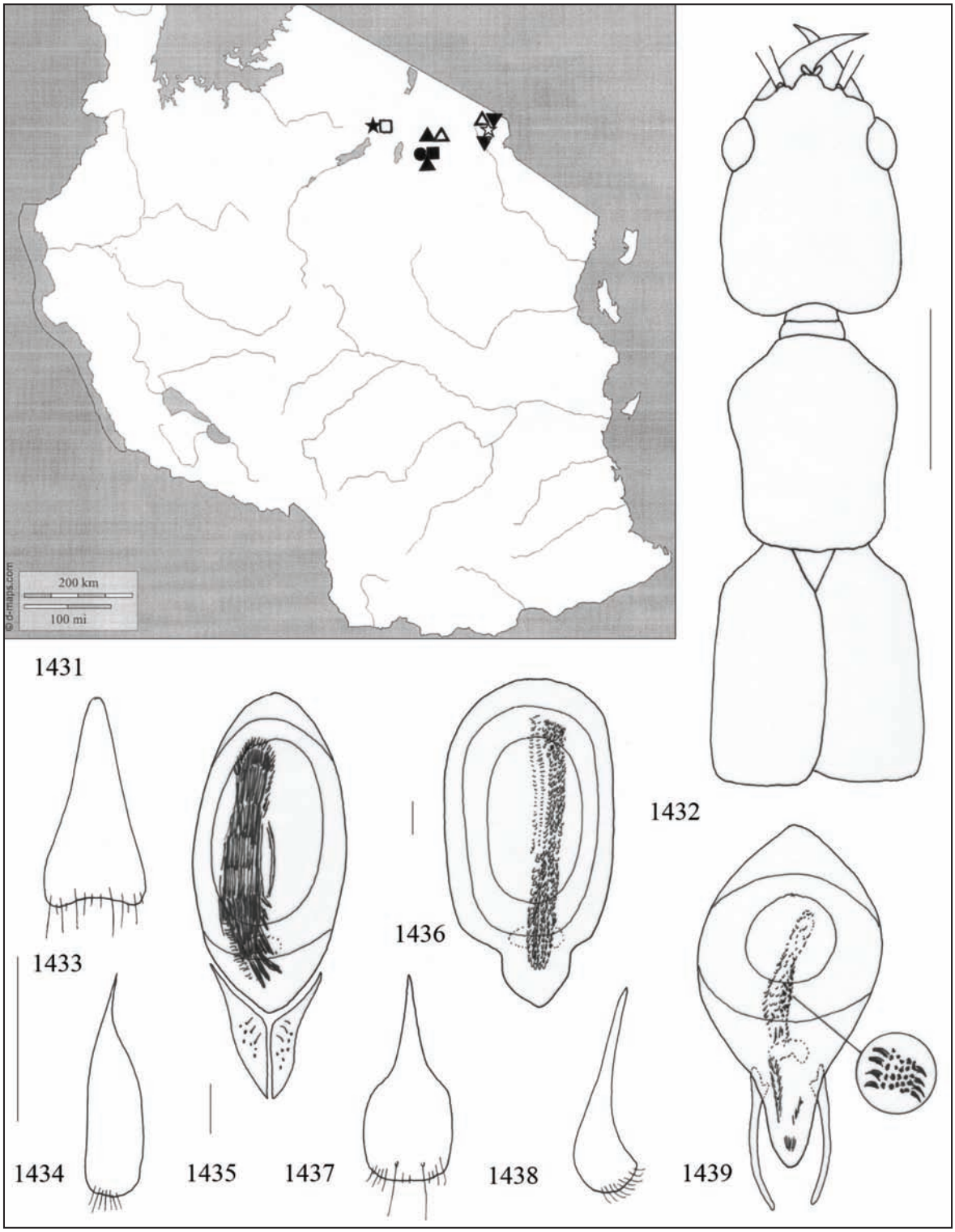
Figures 1403–1408. Fore-body of *Byziniella nigromontis* n. sp. (Fig. 1403), *B. olkokalaensis* n. sp. (Fig. 1404), *B. tanzanica* n. sp. (Fig. 1405) (bar scale: 0.5 mm), *B. kilimanjaroensis* n. sp. (Fig. 1406), *B. lupata* n. sp. (Fig. 1407), and *B. ngorongoro* n. sp. (Fig. 1408) (bar scale: 0.5 mm).



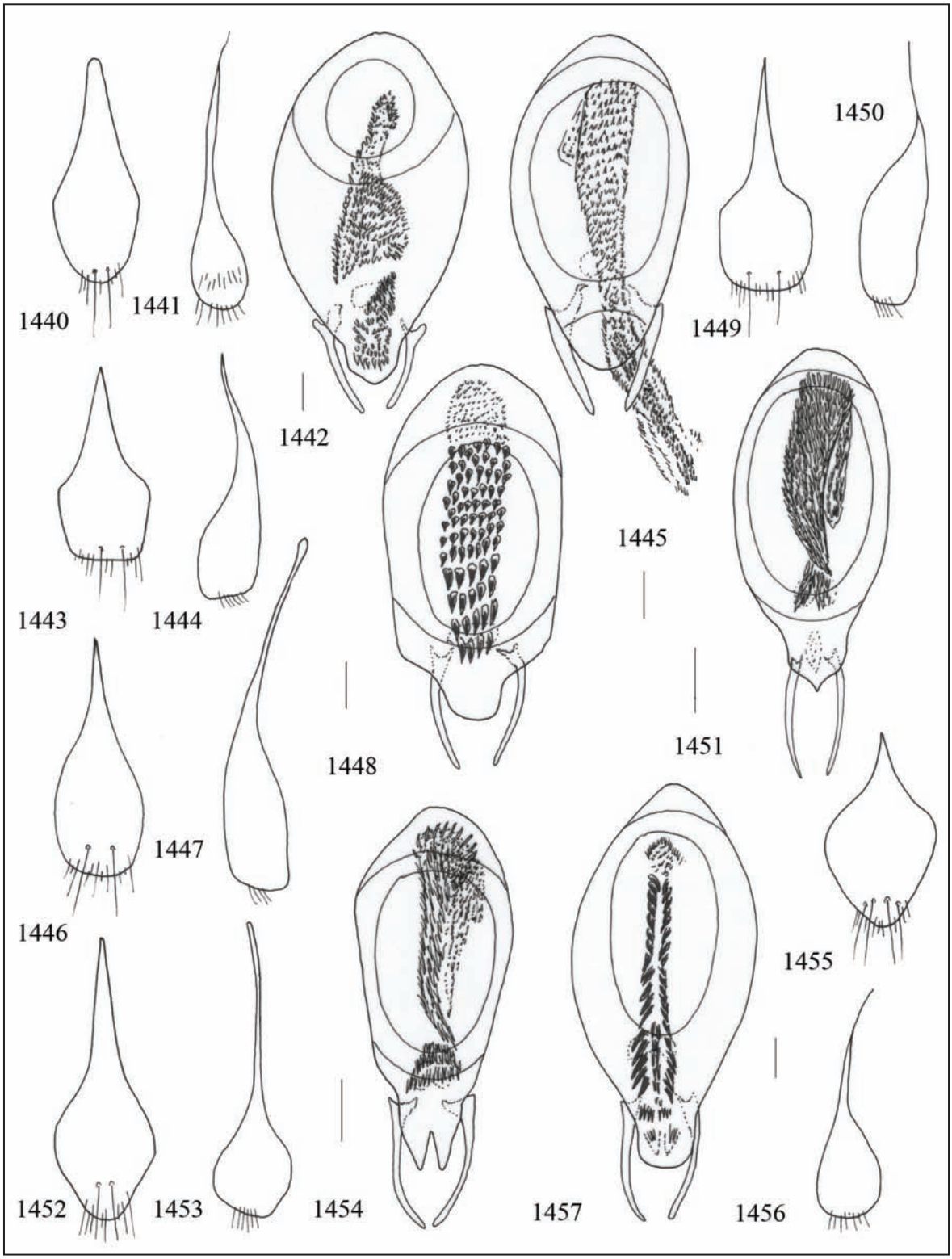
Figures 1409–1418. Tergite and sternite of the male genital segment, aedeagus of *Byziniella olkokaloensis* n. sp. (Figs. 1409–1411), *Byziniella tanzanica* n. sp. (Figs. 1412–1414), and *Byziniella kilimanjaroensis* sp. n. (Figs. 1415–1417, with paramere in lateral view (Fig. 1418) (bar scale: 0.1 mm).



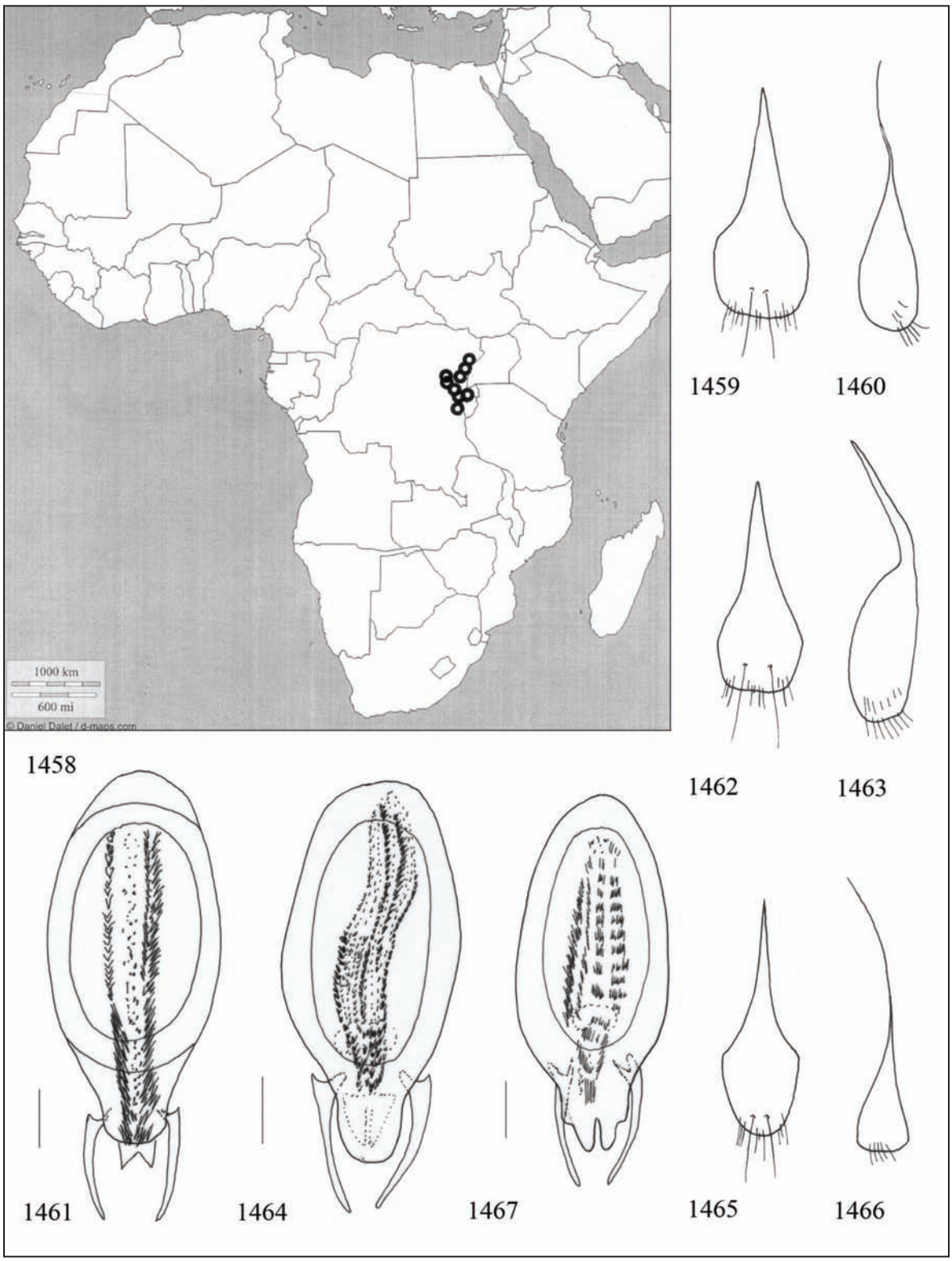
Figures 1419–1430. Tergite and sternite of the male genital segment, aedeagus of *Byziniella meruensis* n. sp. (Figs. 1419–1421), *B. lupata* n. sp. (Figs. 1422–1424), *B. ngorongoro* n. sp. (Figs. 1425-1427), and *B. hageniana* n. sp. (Figs. 1428–1430) (bar scale: 0.1 mm).



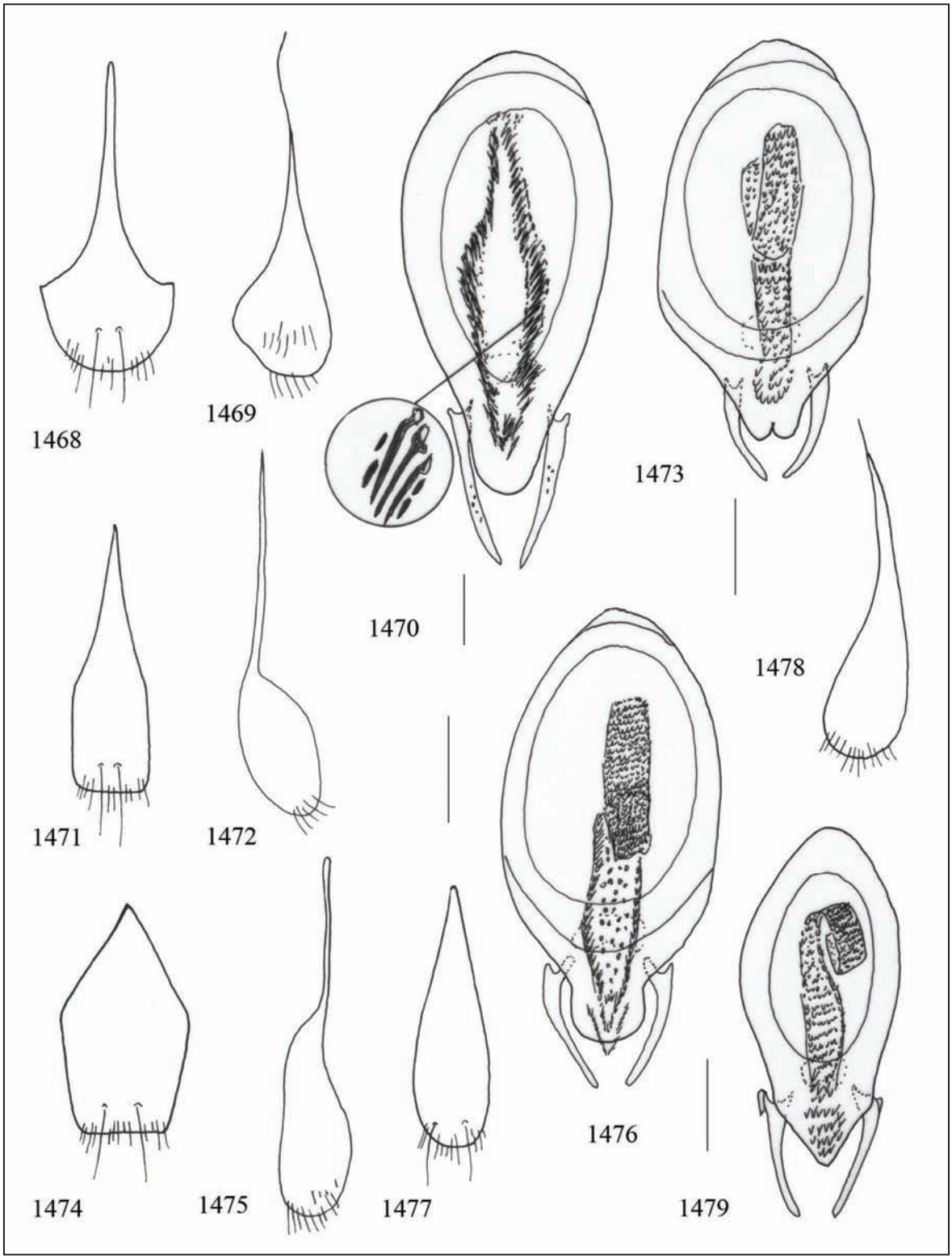
Figures 1431–1439. Fig. 1431: distribution of *Byziniella nigromontis* group in Tanzania: *B. nigromontis* n. sp. (filled triangle), *B. olkokaloensis* n. sp. (filled square), *B. tanzanica* n. sp. (filled star), *B. kilimanjaroensis* n. sp. (inverted filled triangle), *B. meruensis* n. sp. (circle), *B. lupata* n. sp. (open triangle), *B. ngorongoro* n. sp. (open square), *B. hageniana* n. sp. (open star). *Byziniella tronqueti* n. sp.: fore-body (bar scale: 0.5 mm) (Fig. 1432). Tergite and sternite of the male genital segment, aedeagus of *B. tronqueti* n. sp. (Figs. 1433–1435) and *B. sobrina* (Figs. 1437–1439) (bar scale: 0.1 mm); aedeagus of *B. rugege* n. sp. (Fig. 1436).



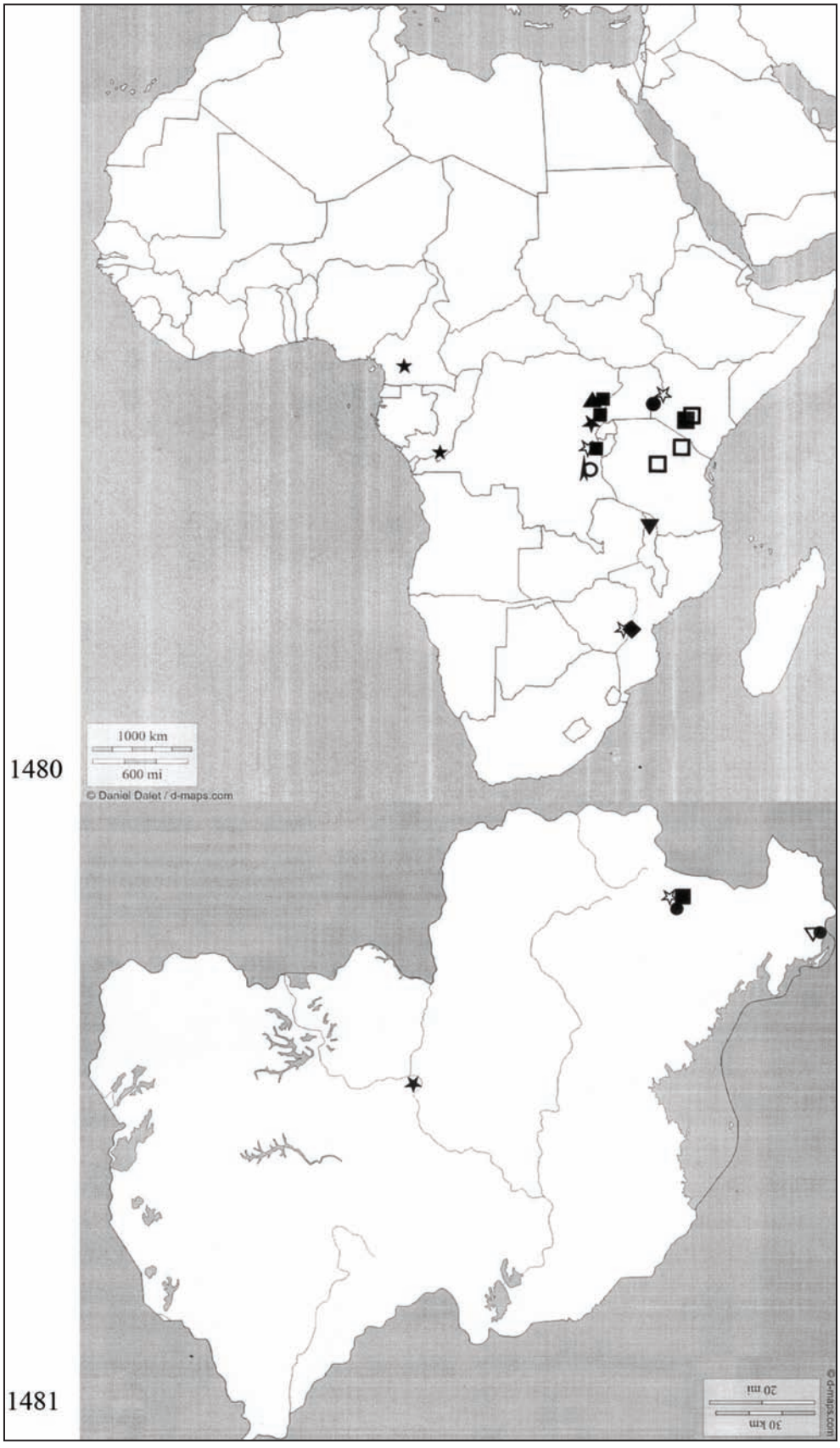
Figures 1440–1457. Tergite and sternite of the male genital segment, aedeagus of *Byziniella chirinda* n. sp. (Figs. 1440–1442), *B. kiymbiana* n. sp. (Figs. 1443–1445), *B. crepitans* (Figs. 1446–1448) (bar scale: 0.1 mm), *B. abacta* (Figs. 1449–1451), *B. bugera* n. sp. (1452–1454), and *B. malawiana* n. sp. (Figs. 1455–1457) (bar scale: 0.1 mm).



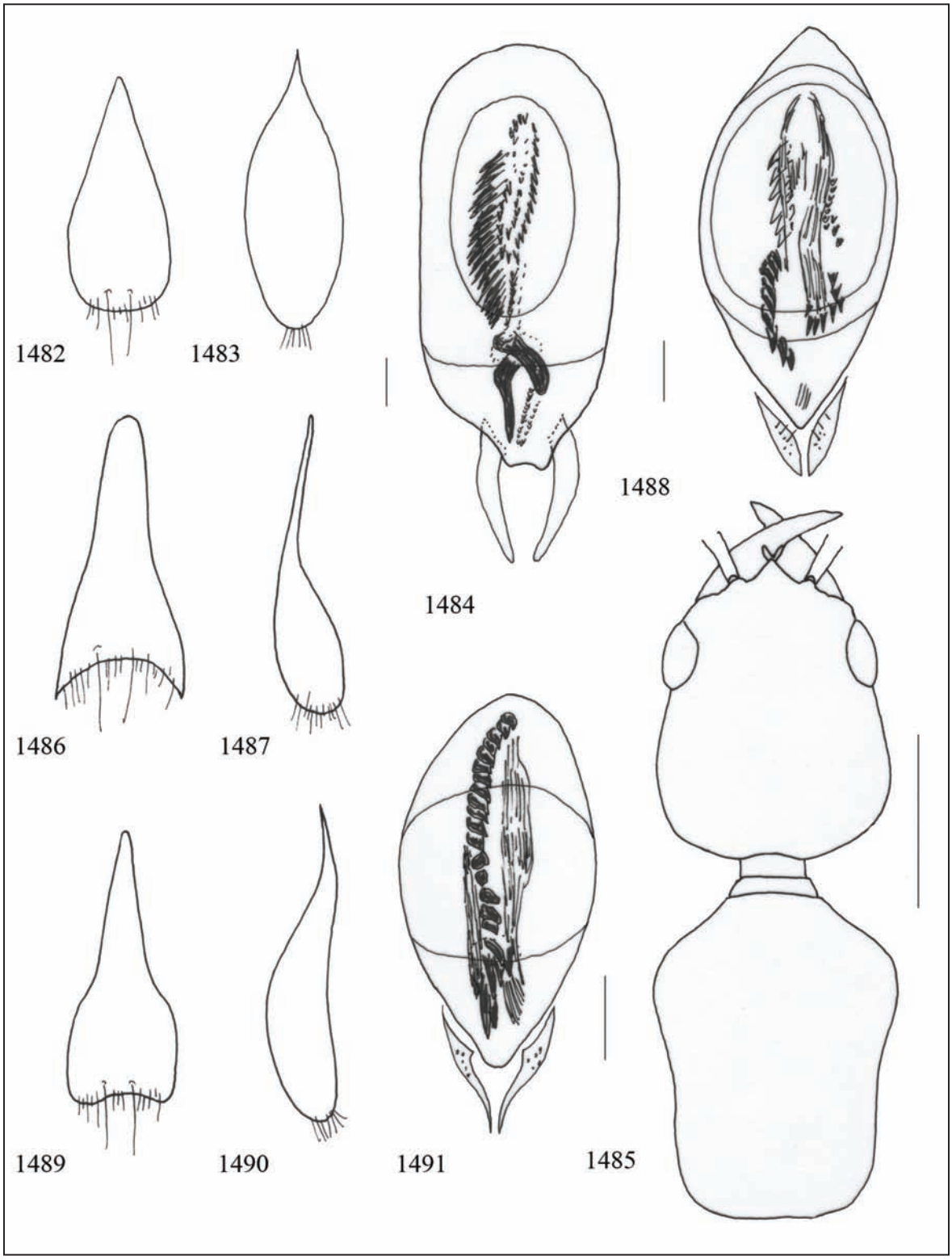
Figures 1458–1467. Fig. 1458: distribution of *Byziniella abacta*. Tergite and sternite of the male genital segment, aedeagus of *B. cyangugu* n. sp. (Figs. 1459–1461), *B. hypsibatha* (Figs. 1462–1464), *B. kareniana* n. sp. (Figs. 1465–1467) (bar scale: 0.1 mm).



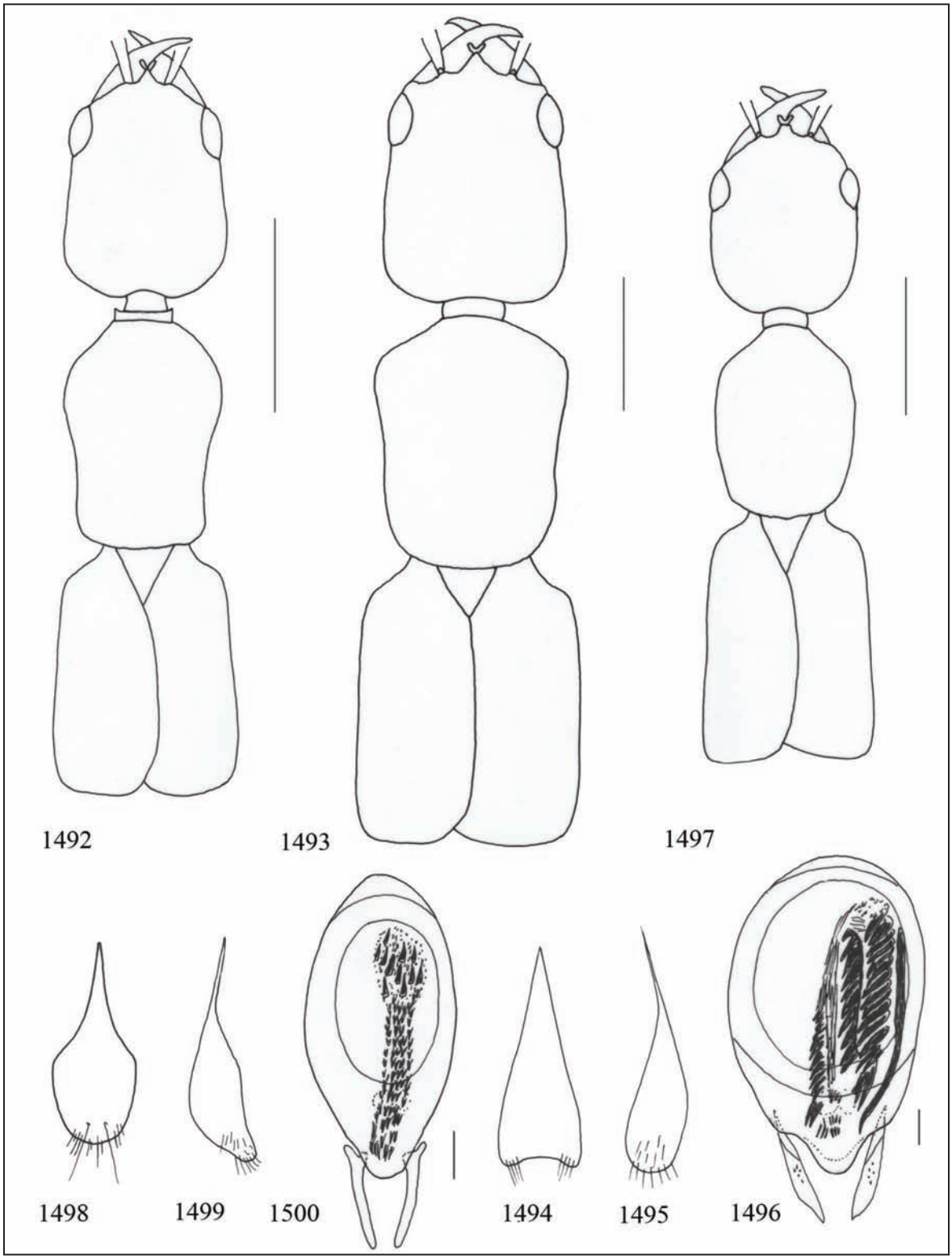
Figures 1468–1479. Tergite and sternite of the male genital segment, aedeagus of *Byziniella kiymbi* n. sp. (Figs. 1468–1470), *B. minutissima* n. sp. (Figs. 1471–1473), *B. forestalis* n. sp. (Figs. 1474–1476), and *B. debilis* (Figs. 1477–1479 (bar scale: 0.1 mm).



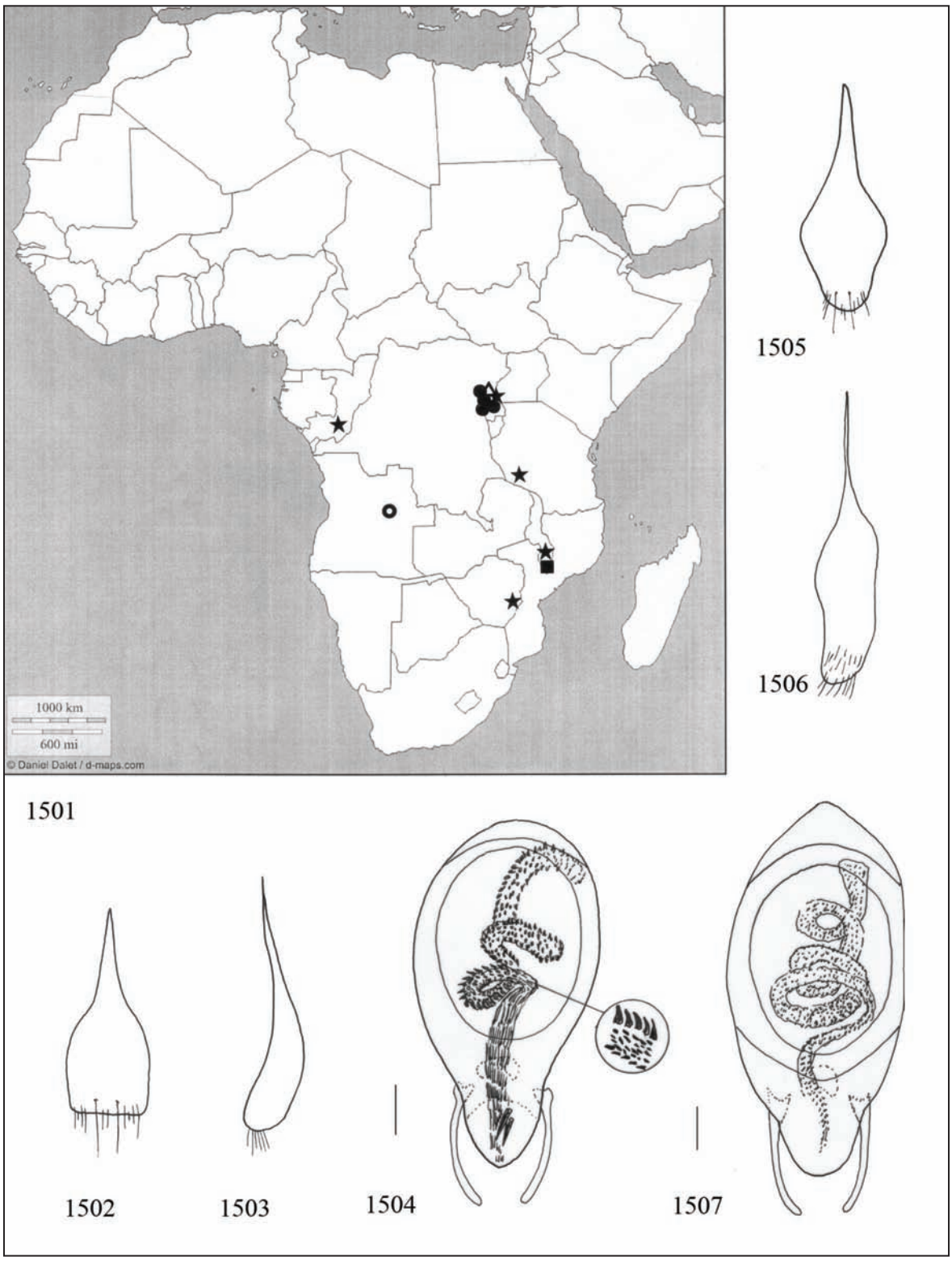
Figures 1480, 1481. Figure 1480: distribution of *Byziniella crepitans* sub-group: *B. tronqueti* n. sp. (small filled star), *B. sobrina* (big filled star), *B. chirinda* n. sp. (open star), *B. kiymbiana* n. sp. (oper circle), *B. bugera* n. sp. (filled triangle), *B. malawiana* n. sp. (inverted filled triangle), *B. hypsibatha* (circle), *B. kareniana* n. sp. (open square), *B. kiymbi* n. sp. (arrow), *B. minutissima* n. sp. (rhombus), *B. forestalis* n. sp. (big filled square), *B. debilis* (small filled square).
Figure 1481: distribution of *B. crepitans* subgroup in Rwanda: *B. rugege* n. sp. (filled square), *B. sobrina* (filled star), *B. crepitans* (open star), *B. cyangugu* n. sp. (open triangle); *B. abacta* (filled circle).



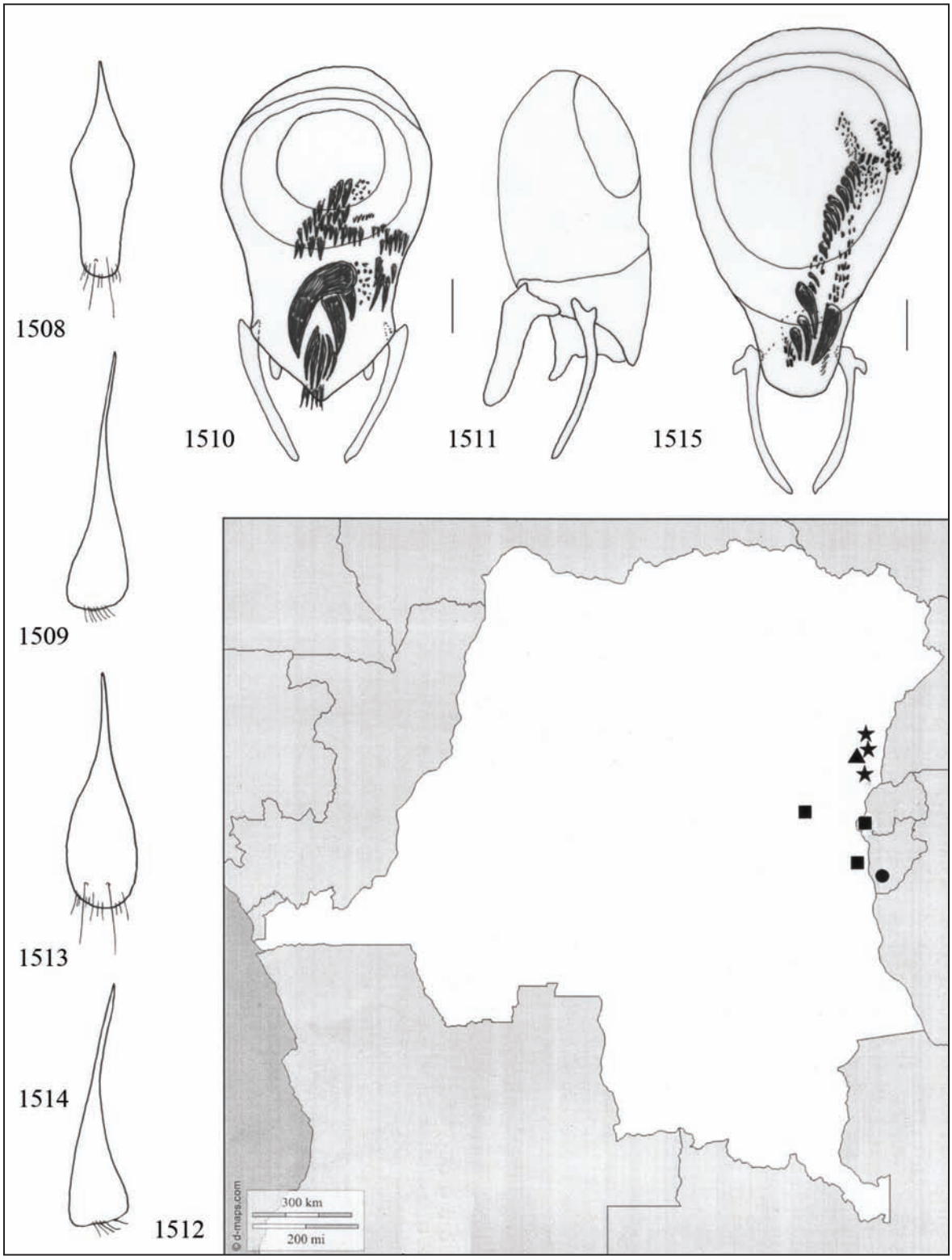
Figures 1482–1491. Tergite and sternite of the male genital segment, aedeagus of *Byziniella machadoi* (Figs. 1482–1484). *B. dilatata* n. sp.: head and pronotum (bar scale: 0.5 mm) (Fig. 1485), tergite and sternite of the male genital segment, aedeagus (Figs. 1486–1488). Tergite and sternite of the male genital segment, aedeagus of *B. schoutedeni* (Figs. 1489–1491) (bar scale: 0.1 mm).



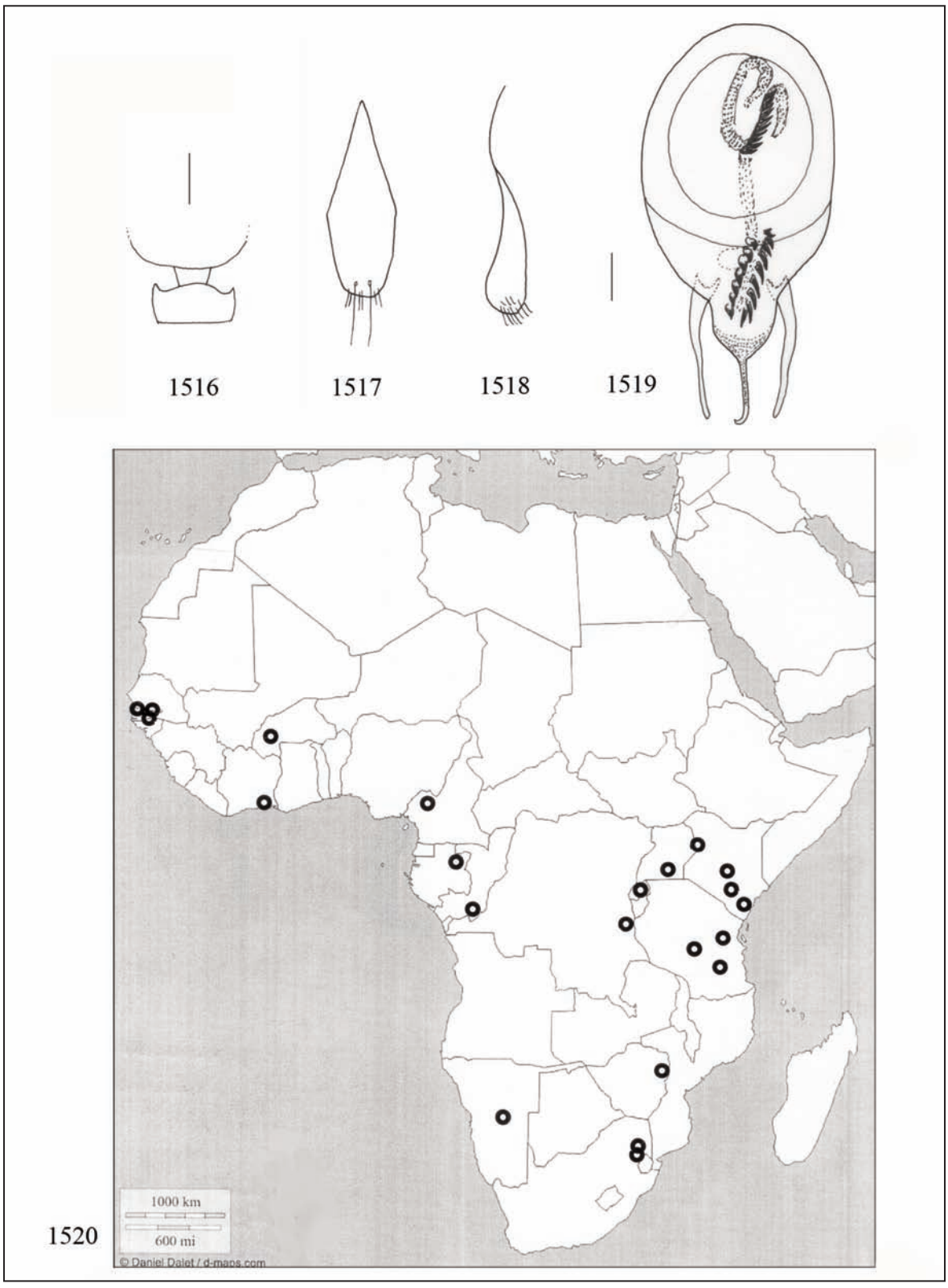
Figures 1492–1500. Fore-body of *Byziniella schoutedeni* (Fig. 1492) and *B. wittei* (Fig. 1493). Tergite and sternite of the male genital segment, aedeagus of *B. wittei* (Figs. 1494–1496). *Byziniella cuocoi* n. sp.: fore-body (bar scale: 0.5 mm) (Fig. 1497), tergite and sternite of the male genital segment, aedeagus (Figs. 1498–1500) (bar scale: 0.1 mm).



Figures 1501–1507. Fig. 1501: distribution of *Byziniella schoutedeni* sub-group: *B. machadoi* (open circle), *B. dilatata* n. sp. (open triangle), *B. schoutedeni* (filled circle), *B. wittei* (strar), *B. cuocoi* n. sp. (square). Tergite and sternite of the male genital segment, aedeagus of *B. nyakabuye* n. sp. (Figs. 1502–1504), tergite and sternite of the male genital segment, aedeagus of *B. perforata* (Figs. 1505–1507),



Figures 1508–1515. Tergite and sternite of the male genital segment, aedeagus of *Byziniella abnormis* n. sp. (Figs. 1508–1510, with aedeagus in lateral view (Fig. 1511) (bar scale: 0.1 mm). Fig. 1512: distribution of *B. perforata* sub-group in Congo: *B. nyakabuye* n. sp. (square), *B. perforata* (circle), *B. abnormis* n. sp. (triangle), *B. montana* n. sp. (star). Tergite and sternite of the male genital segment, aedeagus of *B. montana* n. sp. (Figs. 1513–1515).



Figures 1516–1520. *Byziniella africana*: neck (Fig. 1516), tergite and sternite of the male genital segment, aedeagus (Figs. 1517–1519) (bar scale: 0.1 mm). Fig. 1520: distribution of *B. africana*.

29. Genus ***Chaetocinus*** Clark, Clutterbuck, Cole, Fawcett, Green, Howcroft, Kingston, Niedbala, Theobaldo et Tobias, 1972 (Figs. 1521–1665; 1738–1740)

Chaetocinus - Clark et al., 1972: 483; Coiffait, 1968: 130 and 135 (subgen. of *Leptacinus*: nom. nudum); Herman, 2001a: 3665 (all as subgen. of *Leptacinus*)

TYPE SPECIES. *Leptacinus* (*Chaetocinus*) *oculatus* Coiffait, 1968, was fixed by designation by Clark et al., 1972.

DESCRIPTION. Similar in external features (Fig. 1521) to *Leptacinus* from which it differs in a few external characters: eyes usually very large and prominent (apart *C. ruwenzori* n. sp.), tergite of the male genital segment with concave posterior margin (Figs. 1533, 1566, 1572), female genital segment with longer sternite and smaller additional sclerites (Fig. 1523). It differs from *Leptacinus* especially in the shape of the aedeagus, which is furnished large, thick parameres, with long, numerous setae on the internal sides (Figs. 1526, 1557); inner sac normally shaped, with large spines and scales. The distal portion of the basal bulb is devoid of the particular sclerites of different shape present in the species of *Leptacinus* that, in my opinion, is confined to the Palaearctic Region. *Chaetocinus* includes both apterous and fully winged species.

DISTRIBUTION. Africa, mostly at low and intermediate altitudes (Figs. 1548, 1565, 1665).

REMARKS. In the description Coiffait (1968) failed to designate a type species so *Chaetocinus* was nomen nudum. Clark et al. (1972) designated *C. oculatus* as type species, so they are the authors of the sub-genus that is here considered to be a separate genus.

Due to the outward similarity of the species, all shiny and more or less brown (winged species) or yellowish (apterous species), I omit useless detailed descriptions; I therefore only give the characters that I consider useful for identification.

The species of this genus can be divided into two groups. The first group at present only includes one apterous species (*C. ruwenzori* group) and the second fully winged species (*C. oculatus* group). This second group can be divided in three subgroups: species with inner sac large, ribbon-like, with scales and at most with small spines (*C. major* sub-group); species with inner sac more or less ribbon-like, more or less broad, with evident spines (*C. testaceipennis* sub-group); species with inner sac furnished with more or fewer numerous large spines (*C. anommatophilus* sub-group).

KEY TO THE SPECIES-GROUPS

1. Apterous species, more or less yellowish orange, eyes very small, elytra short.....1. *C. ruwenzori* group
-. Winged species, more or less reddish brown, more or less paler or darker, eyes large, sometimes very prominent, elytra more or less long.....2. *C. oculatus* group

1. *Chaetocinus ruwenzori* group

1. ***Chaetocinus ruwenzori*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Massif Ruwenzori, Kalonge, 2210 m, P. Vanschuytbroeck and J. Kekenbosch, 7.VIII.1952 (MRAC); paratypes: same data, Ruiss. Karambura, affl. Katauleko, 2060 m, P. Vanschuytbroeck and J. Kekenbosch, 30.I–21.II.1953, 2 males (MRAC); same data, Nyamwnga-Ihongero terr., 2480 m, P. Vanschuytbroeck and J. Kekenbosch, 25–29.VIII.1952, 1 male (cB); same data, gite Ruwenzori, 2080 m, P. Vanschuytbroeck and J. Kekenbosch, 24.IX–4.X.1052, 1 female (cB); same data, Kalonge, 2210 m, P. Vanschuytbroeck and J. Kekenbosch, 23.VIII.1952, 1 female (MRAC); Face N Ruwenzori, Kilindera, Musoso, 2750–2950 m, R.P.M. Lejeun, VII–VIII.1974, 1 male (cB).

DESCRIPTION. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Apterous. Body shiny. Head dark brown, pronotum, elytra and abdomen yellowish. Head large, sub-rectangular, a little dilated posteriad, with sub-rectilinear and sub-parallel sides and fine, dense punctures on entire surface. Eyes small and almost flat. Pronotum clearly shorter than head, strongly dilated anteriorly where it is as wide as head; dorsal series of 6, 7 deep punctures and lateral series of 3 anterior punctures. Elytra very short, sub-rectangular, shorter and narrower than

pronotum, with obsolete humeral angles and fine sparse punctures arranged in a few series. Abdomen with traces of more or less polygonal microreticulation and fine and sparse punctures. Tergite and sternite of the male genital segment as in figures 1524, 1525. Aedeagus sub-rectangular (Figs. 1526, 1527), large, 1.2 mm long, with short broad parameres furnished with evident setae on the inner side; inner sac with some large distal and median spines; the proximal portion enlarged and covered with scales.

ETYMOLOGY. The specific epithet refers to Ruwenzori, as a noun in apposition.

DISTRIBUTION. The species is known from the Ruwenzori range in Congo (Fig. 1565).

BIONOMICS. The specimens were collected in "*humus en fort*", "*bambous"*, "*terreau, berge, source*".

2. *Chaetocinus oculatus* group
(all species with large prominent eyes)

KEY TO THE SUB-GROUPS

1. Species with inner sac broad, ribbon-like, with scales and at most with small spines.....1. *C. major* sub-group
-. Species with inner sac more or less ribbon-like, more or less broad, with evident spines.....2. *C. testaceipennis* sub-group
-. Species with inner sac furnished with more or less numerous large spines.....2. *C. anommatophilus* sub-group

1. *Chaetocinus major* sub-group

1. Body larger, 8–9 mm long, brown, with darker head; head sub-rectangular, long; eyes large and prominent; elytra dilated posteriad. Aedeagus as in figure 1531; inner sac with an elongate mass of fine, much thickened spinules. Gabon, Cameroon.....1. *C. major*
-. Body smaller.....2

2. Body 6.5–7.5 mm long.....3
-. Body less than 6.5 mm long.....5
3. Body more or less light reddish brown.....4
-. Body dark brown with more or less reddish elytra, about 7 mm long. Aedeagus as in figure 1535; inner sac long and variably narrow, covered with minute scales; a proximal short broad spine before a series of spines beneath a surface covered with long spinules. Congo....2. *C. silvestris* n. sp.

4. Body similar to that of *C. major*, but paler and with the last 2 abdominal segments pale, 7 mm long. Aedeagus as in figure 1538; inner sac ribbon-like, long and narrow, covered with small thin scales. Gabon.....3. *C. brunneus*
-. Body 7 mm long, brown, but sometimes with yellowish elytra. Aedeagus with short broad parameres (Fig. 1541); inner sac with a small distal surface covered with scales, followed by a broad median and proximal tape-like surface, covered with sparse fine scales. Congo.....4. *C. spectabilis*
-. Body 6.5 mm long, reddish. Aedeagus as in figure 1544; inner sac similar to that of *C. spectabilis*, but with 3 median spines. Congo.....5. *C. lemniscatus* n. sp.

5. Body about 6 mm long, more or less dark reddish brown; elytra long; eyes more or less prominent.....6
-. Body less than 6 mm long; eyes very prominent.....8

6. Head longer; elytra sub-rectangular not dilated posteriad; body reddish brown, with darker head and lighter elytra, about 6 mm long; tergite of the male genital segment with deep posterior emargination (Fig. 1545). Aedeagus as in figure 1547; inner sac with a large mass of very thickened, fine spinules, before a distal group of spines. Malawi.....6. *C. mirandus* n. sp.
-. Head shorter; elytra dilated posteriad.....7

7. Body more robust, broader, entirely dark brown, 5.6 mm long; head broad; eyes less prominent; pronotum more massive. Aedeagus (Fig. 1551); inner sac broad, covered with scales and spinules, with a median series of small spines and a distal series of larger spines. Cameroon.....7. *C. camerunensis* n. sp.

-. Body less robust, narrower, reddish brown, 6 mm long; head narrower; eyes more prominent; pronotum less massive. Aedeagus as in figure 1554; inner sac tape-like, more or less wide, coiled, covered with scales, with a distal sub-spherical surface with minute spines. Ghana.....8. *C. ghanensis* n. sp

8. Body about 5 mm long.....9
-. Body less than 5 mm long.....11

9. Body entirely reddish brown; dorsal series of pronotum of 5 punctures.....10
-. Body reddish brown, with darker head and yellowish elytra and abdomen; head broad; pronotum wide; dorsal series of pronotum of 8 punctures. Aedeagus with acute distal portion (Fig. 1557); inner sac broad, tape-like, covered with fine spinules before 4 unequal distal spines. Central African Rep.....9. *C. novus* n. sp.

10. Head less dilated posteriad; elytra narrower, less dilated posteriad. Aedeagus narrow in the distal portion (Fig. 1561); inner sac tape-like, relatively narrow, coiled in a spiral, covered with fine scales in the median and proximal portion and with dense spinules in the distal portion. Cameroon, Congo.....10. *C. persalsus* n. sp.
-. Head more dilated posteriad; elytra broader, more dilated posteriad. Aedeagus rounded in the distal portion (Fig. 1564); inner sac composed of some apparently separate surfaces covered with long fine spinules. Congo.....11. *C. katanganus* n. sp.

11. Body narrower, shorter, 4.2 mm long; head smaller and narrower; pronotum narrower; elytra shorter. Aedeagus with sub-acute distal portion (Fig. 1568); inner sac complex, with some surfaces covered with scales and spines. Congo.....12. *C. fizianus* n. sp.
-. Body broader, longer, 4.5 mm long; head larger and wider; pronotum wider; elytra longer. Aedeagus with sub-truncate distal portion (Fig. 1571); inner sac broad, coiled once in a spiral, covered with scales arranged in several series. Congo.....13. *C. meya* n. sp.

1. ***Chaetocinus major*** (Coiffait, 1968) comb. n.

Leptacinus (*Chaetocinus*) *major* - Coiffait, 1968: 143; 1982: 240; Herman, 2001a: 3677

TYPE MATERIAL. The Muséum national d'Histoire naturelle in Paris preserves the male holotype of this species, labelled "*Belinga / 25.1.63 / H. Coiffait*", "*Mission Biologique / au Gabon / P. P. Grassé Directeur*", "*Holotype*" (printed on red label), "Leptacinus (Chaetocinus) / major *Coiff. / H. Coiffait 1967*".

EXAMINED MATERIAL. Gabon, 1 male (DEI); Gabon, Mocquerys, 1 ex. (cB).
Kamerun, Joko, 2 exx. (MNB).

DESCRIPTION. Length of body: 8–9 mm; from anterior margin of head to posterior margin of elytra: 4–4.5 mm. Fully winged; shiny. Characterized by the large size, by sub-rectangular head (Fig. 1528) with rounded sides from eyes to posterior narrowly rounded angles, and by large prominent eyes. Body reddish brown with head darker, elytra, abdomen, antennae and legs lighter. Head narrow anteriorly and dilated posteriad, with coarse and partly shallow punctation. Pronotum as long as head, strongly dilated anteriorly where it is slightly wider than head, with oblique anterior margins, broadly rounded anterior angles and sinuate sides; dorsal series of 5 large, very widely spaced punctures and lateral oblique series of 3 widely spaced punctures. Elytra large, dilated posteriad, much longer and wider than pronotum, with marked humeral angles and large but shallow punctures arranged in three series, one juxtasutural, one median and one lateral. Tergite and sternite of the male genital segment as in figures 1529, 1530. Aedeagus oval (Figs. 1531, 1532), very large, 1.85 mm long, with small parameres furnished with evident setae on the inner sides; inner sac long and narrow, completely covered in fine, small, very tickened spinules.

DISTRIBUTION. Gabon, Cameroon (Fig. 1548).

2. ***Chaetocinus silvestris*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Terr. Lubero, 2200 m, N. Leleup, 29.XI.1951 (MRAC); paratypes: same data, 1 male (cB); same data, Mt Kibatsiro, Visiki, 2080 m, R.P.M.J. Celis, XII.1954, 11 males, 7 females (MRAC), 9 males, 6 females (cB); same data, Route Kihemba-Masereka, 2200 m, R. Bergmans, 10.IX.1952, 1 female (cB); Kivu, Terr. Lubero, 2200 m, N. Leleup, XI.1951, 1 male (MRAC); same data, Mulo, 1950 m, R.R.P.P. Celis-Bergmans, 16.II.1954, 1 male

(cB); same data, Mont Bugera, 2000–2100 m, R.P.M.J. Celis, X-XI.1964, 1 male (MRAC), 2 males (cB); Elisabetville, Seydel, 1 male (NMW).

Description of Holotype. Male. Length of body: 7.3 mm; from anterior margin of head to posterior margin of elytra: 3.6 mm. Fully winged; shiny. Head black, pronotum dark reddish brown, elytra and abdomen reddish brown. Head sub quadrate, with narrowly rounded posterior angles. Eyes very large and prominent. Surface of head with numerous large and very deep lateral punctures behind the eyes, and other larger ones on the posterior half. Pronotum longer than head, anteriorly as wide as head; dorsal series of 5 large widely spaced punctures and lateral series of 2, 3 anterior punctures. Elytra dilated posteriad, longer and wider than pronotum, with marked humeral angles and very fine punctures arranged in four series. Tergite and sternite of the male genital segment as in figures 1533, 1534. Aedeagus oval (Figs. 1535, 1793), very broad, 1.35 mm long, with small short parameres furnished with evident setae on the inner sides; inner sac narrow and long, covered with widely spaced spinules under which is a series of short thickened spines; in the proximal portion are two sub-triangular dark surfaces.

Variability. The paratypes have no substantial morphological differences with the holotype described. Length of body: 7–7.5 mm; from anterior margin of head to posterior margin of elytra: 3.5–3.8 mm.

Etymology. The specific epithet refers to the Latin *silvestris -e* (silvan).

Distribution. The species is known from the Lubero region in Congo (Fig. 1565).

Bionomics. The specimens were collected in "*humus for. montane*", "*terreau*", "*humus* Dracaena afromontana", "*humus for. mont. avec bambous*", "*nids* Myrmicaria eumenoides *Herst.*".

Remarks. Some specimens have a larger inner sac covered with longer spinules, under which is a longer series of spines, sometimes with a long, distal spine.

3. ***Chetocinus brunneus*** (Coiffait, 1968) comb. n.

Leptacinus (*Chaetocinus*) *brunneus* - Coiffait, 1968: 142; Herman, 2001a: 3671

Type Material. The Muséum national d'Histoire naturelle in Paris preserves the male holotype of this species labelled "*Belinga / 25.1.68 / H. Coiffait*", "*Mission Biologique / au Gabon / P. P. Grassé Directeur*", "*Holotype*" (printed on red label), "Leptacinus (Chaetocinus) / brunneus *Coiff. / H. Coiffait 1967*".

Description. Length of body: 7 mm; from anterior margin of head to posterior margin of elytra: 3.5 mm. Fully winged, shiny. Similar to *C. major*, with lighter colouration, elytra less yellowish, last two visible abdominal segments pale. Head less dilated posteriad, with larger eyes. Pronotum and elytra with similar punctation. Pronotum more robust, with less sinuate sides and elytra broader. Tergite and sternite of the male genital segment as in figures 1536, 1537. Aedeagus smaller (Fig. 1538) than that of *C. major*, more dilated, 1.22 mm long; parameres large; inner sac long and broad, ribbon-like, covered with small thin little scales.

Distribution. Gabon (Fig. 1548).

Remarks. Female unknown.

4. ***Chaetocinus spectabilis*** (Bernhauer, 1929) comb. n.

Leptacinus spectabilis - Bernhauer, 1929: 118; Scheerpeltz, 1933: 1303; Herman, 2001a: 3685

Type Material. The Musée royal de l'Afrique centrale in Tervuren preserves 2 specimens, one labelled "*TYPE*" (printed on orange label with black border), "*Musée du Congo / Haute Uele / Watsa, XI.1919 / L. Burgeon*", "Lepta. / spectabilis / *Brnh. Typ*", the other with the same locality but without the last label. The first is a male that I choose as lectotype of the species; it now bears the label "*Lectotypus* Leptacinus spectabilis *Bh., Bordoni des. 2006*"; the second is a female that I choose as paralectotype; it bears the label "*Paralectotypus* Leptacinus spectabilis *Bh., Bordoni des. 2006*". Both have the identification label "Chaetocinus spectabilis *(Bh.), Bordoni det. 2006*".

Examined Material. Congo, Yangambi, A. Tilli, VII.2000, 1 male (cB); Terr. Kalehe, Irangi, N. Leleup, 20.VIII.1960, 1 male (MRAC); Terr. Kalehe, Bunyakiri, 1050 m, N. Leleup, IX.1953, 1 male (cB).

Description. Length of body: 7 mm; from an-

terior margin of head to posterior margin of elytra: 4 mm. Fully winged. Body shiny, narrow, cylindrical, robust. Reddish brown with elytra yellowish in the middle. Head large, elongate, dilated posteriad, with slightly rounded sides and broadly rounded posterior angles. Eyes large and prominent. Surface of head with some large widely spaced punctures on the sides. Pronotum a little longer than head, dilated anteriorly where it is as wide as head, with oblique anterior margins and well rounded anterior angles; dorsal series of 5 widely spaced punctures and lateral series of 3 punctures, all smaller than those of head. Elytra broad, much longer and wider than pronotum, dilated posteriad, with less marked humeral angles. Surface with three series of punctures, one juxtasutural, one median and one lateral. Abdomen with fine, dense, transverse micro-striation and very fine, moderately dense punctures. Tergite and sternite of the male genital segment as in figures 1539, 1540. Aedeagus large (Figs. 1541, 1794), dilated, 1.7 mm long, with median lobe narrow and acute; inner sac broad, long, more or less coiled, covered in small thin, scales.

DISTRIBUTION. Congo (Fig. 1565).

BIONOMICS. Some specimens were collected in "*humus en forêt*".

5. ***Chaetocinus lemniscatus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Terr. Fizi, Bas Itombwe, Gal. For. Mukera, 1000 m, N. Leleup, II.1962 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.5 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Fully winged, shiny. Similar to *C. spectabilis*, but more slender, with fore-body reddish brown, head broader, with larger and more prominent eyes. Pronotum with dorsal series of 5 punctures and lateral series of 3 punctures. Elytra relatively longer and narrower, with sparser punctation. Tergite and sternite of the male genital segment as in figures 1542, 1543. Aedeagus oval (Fig. 1544), very broad, 1.48 mm long, with small and short parameres furnished with evident setae on the inner sides; inner sac translucent, ribbon-like, with a distal sub-rectangular surface covered in fine scales, followed by a long portion, coiled several times, covered with very fine and sparse scales.

ETYMOLOGY. The specific epithet is the Latin *lemniscatus -a -um* (with ribbon).

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1565).

REMARKS. Female unknown.

6. ***Chaetocinus mirandus*** n. sp.

EXAMINED MATERIAL. Holotype male: Malawi, Mulanje Mts env., Bezdëk, 22–26.XII.2001 (cJ).

DESCRIPTION. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Fully winged. Body shiny, reddish brown with darker head. Similar to *C. kitutu* n. sp., but larger and pale. Head larger and elongate, eyes larger, pronotum broader and more dilated anteriorly; dorsal series of only 3 large punctures and lateral series of 2 median punctures. Elytra very long, slightly dilated posteriad, with marked humeral angles and fine and sparser punctures arranged in a few series. Tergite with concave posterior margin, and sternite of the male genital segment as in figures 1545, 1546. Aedeagus oval (Fig. 1547), broad, 1.3 mm long, with long parameres furnished with evident setae on the inner sides; inner sac with three distal spines followed by a large portion covered with fine scales.

ETYMOLOGY. The specific epithet is derived from to the Latin *mirandus -a -um* (admired).

DISTRIBUTION. The species is only known from the type locality in Malawi.

REMARKS. Female unknown.

7. ***Chaetocinus camerunensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Kamerun, Moheli, S. Voeltzkow (MNB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.6 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Fully winged, shiny. Body reddish brown with head black and pronotum brownish black. Similar to *C. dorylophilus* n. sp., but much smaller, of darker colouration. Head with more broadly rounded posterior angles and slightly denser punctation on the sides. Eyes proportionately larger. Pronotum narrow, longer than head, slightly dilated anteriorly where it is a little narrower than head, with less oblique anterior mar-

gins; dorsal series of 5 large punctures and lateral oblique series of 3 punctures, all widely spaced. Elytra with much finer and sparser punctures those that of *C. dorylophilus* n. sp., arranged in three series, one juxtasutural, one median and one lateral. Tergite and sternite of the male genital segment as in figures 1549, 1550. Aedeagus oval (Fig. 1551), 1.1 mm long, with large parameres furnished with evident setae on the inner sides; inner sac with one distal and one median series of little spines near very fine spinulae.

ETYMOLOGY. The specific epithet refers to Cameroon.

DISTRIBUTION. The species is only known from the type locality in Cameroon (Fig. 1548).

REMARKS. Female unknown. The specimen is in poor condition (pierced by micro-pin and remounted on card). I was not able to find the locality Moheli in Cameroon.

8. ***Chaetocinus ghanensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Ghana, Ashanti region, Abofour, Opro river, 320 m, 7.07N, 1.48W, Endrödy-Younga, 7.IV.1966 (MTM).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Fully winged. Body shiny, reddish brown with darker head. Similar to *C. mirandus* n. sp., but with smaller, proportionately shorter and narrower head. Eyes smaller. Surface of head with sparser punctation. Pronotum shorter, with dorsal series of 5 punctures and lateral series of 3 punctures. Elytra longer and dilated posteriad, with more marked humeral angles and denser punctation. Tergite and sternite of the male genital segment with concave posterior margin as in figures 1552, 1553. Aedeagus oval (Figs. 1554, 1795), 1.1 mm long, with long broad parameres furnished with evident setae on the inner sides; inner sac long and narrow, coiled, covered in fine scales and with some small spines.

ETYMOLOGY. The specific epithet refers to Ghana (Fig. 1548).

DISTRIBUTION. The species is only known from the type locality in Ghana.

REMARKS. Female unknown.

9. ***Chaetocinus novus*** n. sp.

EXAMINED MATERIAL. Holotype male: Rep. Centrafricane, La Makobe, P. Teocchi, 21.VI.1968 (MNHNP); paratype: same data, 1 ex. (without genital segment) (MNHNP).

DESCRIPTION OF HOLOTYPE. Male. Length of body 5 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Fully winged. Body shiny. Head brown dark, pronotum reddish brown, elytra and abdomen yellowish; antennae and legs brown light. Similar to *C. dorylophilus* n. sp., but larger and of different colouration. Head and pronotum larger. Head wider, with larger and denser punctation. Pronotum wider, anteriorly dilated; dorsal series of 8 punctures and lateral oblique series of 6 punctures. Elytra narrower, with much less prominent humeral angles and much coarser punctation arranged in several series. Tergite and sternite of the male genital segment as in figures 1555, 1556. Aedeagus oval (Fig. 1557), with triangular distal portion, 1 mm long, with short broad parameres furnished with evident setae on the inner sides; inner sac with some characteristic distal structures, followed by a large portion furnished with spinules.

VARIABILITY. The paratype has no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is the Latin *novus -a -um* (new).

DISTRIBUTION. The species is only known from the type locality in the Central African Rep. (Fig. 1548).

REMARKS. Levasseur (*in litteris*) determined these specimens as "*gen. ?, sp. ?*".

10. ***Chaetocinus persalsus*** n. sp.

EXAMINED MATERIAL. Holotype male: Camerun, Yaounde, leg. ?, X.1956 (MNHNP); paratypes: Congo, Libenge, R. Cremer and M. Neuman, 12.I.1948, 1 male (IRSNB); same data, 17.I.1948, 1 female (cB); Congo, Yangambi, A. Tilli, VII.2000, 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to pos-

terior margin of elytra: 2.7 mm. Fully winged. Body shiny, reddish brown with lighter abdomen. Similar to *C. novus* n. sp., but of darker colouration, subrectangular head (Fig. 1558) with more narrowly rounded posterior angles and sparser punctation. Pronotum with more sinuate sides; dorsal series of 5 punctures and lateral oblique series of 4 punctures. Elytra much broader than in *C. novus* n. sp., dilated posteriad, with more marked and prominent humeral angles. Surface with punctures arranged in three series, one juxtasutural, one median and one lateral. Tergite and sternite of the male genital segment as in figures 1559, 1560. Aedeagus oval (Fig. 1561), broad, 1.22 mm long, with small short parameres furnished with evident setae on the inner sides; inner sac long and narrow, with distal portion characterized by particular protrusions on the margins; proximal portion covered in fine scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the Latin *persalsus -a -um* (graceful).

DISTRIBUTION. The species is known from Cameroon and Congo (Figs. 1548, 1565).

BIONOMICS. One specimen was collected in "*excréments humains*".

REMARKS. The specimen from Cameroon was determined "*Holotype in litt.,* Afroleptacinus yaoundensis *n. sp., L. Levasseur det. 1968*".

11. ***Chaetocinus katanganus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Katanga, Kolwezi, V. Allard, 30.IV.1962 (MNHNP); paratype: same data, 1 female (MNHNP).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Fully winged. Body shiny. Reddish brown. Head elongated, posteriad dilated, with protruding eyes. Pronotum shorter than head, with rounded anterior angles. Surface of head with sparse, small, deep punctures. Pronotum with dorsal series of 5 widely spaced punctures and lateral series of 4 anterior punctures, and one small puncture near the postero-lateral margin. Elytra very large, much longer and wider than pronotum, dilated posteriad, with rounded humeral angles. Surface with large punctures arranged in three series, one juxtasutural, one median and one lateral. Tergite and sternite of the male genital segment as in figures 1562, 1563. Aedeagus 1.2 mm long (Fig. 1564), with large, characteristic parameres furnished with evident setae on the inner sides; inner sac with some areas covered in fine thickened spines.

VARIABILITY. The paratype have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Katanga.

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1565).

BIONOMICS. The specimens were collected in "*crottin*".

12. ***Chaetocinus fizianus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Terr. Fizi, Bas Itombwe, 800–900 m, N. Leleup, IV.1951 (MRAC); paratype: same data, 1 male (cB); Congo, Malungu, A. Emerson, 28.III.1948, 1 male (FMNH).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.2 mm. Fully winged. Body shiny, reddish brown with head a little darker and elytra slightly lighter. Head sub-rectangular, with narrowly rounded posterior angles and feebly rounded sides. Eyes large and prominent. Surface of head with fine and very sparse punctation. Pronotum as long as head, dilated anteriorly where it is as wide as head, with broadly rounded anterior angles; dorsal series of 5, 6 very fine punctures and lateral series of 3 widely spaced punctures. Elytra as long as pronotum, slightly wider, with rounded humeral angles and fine punctures arranged in several series. Tergite and sternite of the male genital segment as in figures 1566, 1567. Aedeagus oval (Figs. 1568, 1796), small, 0.8 mm long, with short broad parameres furnished with evident setae on the inner sides; inner sac translucent, covered with very fine and very sparse scales; within this is a long portion covered in dense small scales and three series of unequal lenghts, composed of scales of unequal shape.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality.

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1565).

BIONOMICS. The specimens were collected in "*humus for. scleroph.*".

REMARKS. The holotype is in poor condition. Female unknown

13. ***Chaetocinus meya*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Brazzaville, Kinbamba, Méya, Luolo river, Balogh and Zicsi, 10.XI.1963 (MTM); paratypes: same data, 4 females (MTM), 3 females (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.5 mm; from anterior margin of head to posterior margin of elytra: 2.2 mm. Fully winged. Body shiny. Head and pronotum very dark reddish brown, elytra and abdomen lighter; antennae and legs testaceous. Head sub-rectangular, with slightly rounded sides and broadly rounded posterior angles. Eyes very large and prominent. Surface of head with a few large deep punctures. Pronotum as long and wide as head, dilated anteriorly, with sinuate sides; dorsal series of 5 punctures and lateral series of 3 punctures. Elytra longer and wider than pronotum, dilated posteriad, with marked humeral angles. Surface with irregular large but shallow punctures arranged in three series, one juxtasutural, one median and one lateral, surrounded by a few other punctures. Tergite and sternite of the male genital segment as in figures 1569, 1570. Aedeagus oval (Figs. 1565, 1571), 1.1 mm long, with short broad parameres furnished with evident setae on the inner surfaces; inner sac large, coiled, covered in scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is only known from the type locality in Rep. Congo (Fig. 1548).

2. *Chaetocinus testaceipennis* sub-group

KEY TO THE SPECIES

1. Body larger, about 7 mm long; body yellowish brown; head narrowed anteriorly; eyes a little prominent; elytra sub-rectangular. Aedeagus as in figure 1574; inner sac narrow, covered with scales in the proximal portion and with some spines in the distal portion. Kenya.....1. *C. kenyanus* n. sp.
-. Body less than 7 mm long.....2

2. Body 6 mm long, light reddish brown; head not dilated posteriad. Aedeagus as in figure 1577; inner sac with numerous large spines. Congo.....2. *C. nizianus* n. sp.
-. Body 5.5 mm long.....3
-. Body about 5 mm long.....7
-. Body less than 5 mm long.....8

3. Body brown.....4
-. Body brown, with partially almost yellowish elytra.....5

4. Body light brown with yellowish abdomen; body narrow; eyes relatively small and a little prominent; dorsal series of pronotum of 5 punctures. Aedeagus as in figure 1578; inner sac covered with scales and with 3 distal spines. Gabon..... .....3. *C. lipposus*
-. Body dark brown, of normal shape; dorsal series of pronotum of 6, 7 punctures. Aedeagus as in figure 1581; inner sac narrow and arcuate, covered with scales and spines on the margins and with one distal spine. Gabon.....4. *C. grassei*

5. Dorsal series of pronotum of 5 punctures. Aedeagus (Fig. 1584); inner sac covered with fine scales and with some spines. Congo..... .....5. *C. brevisulcatus*
-. Dorsal series of pronotum of 7, 8 punctures.....6

6. Body light brown; pronotum smaller. Aedeagus as in figure 1587; inner sac with 2 series of large scales before 2 other distal large scales. Gabon.....6. *C. oculatus*
-. Body brown with darker head, pronotum reddish and elytra with yellowish margins: pronotum larger. Aedeagus as in figure 1589; inner sac

covered in fine scales, with a series of large scales on the right, before a distal series of small spines. Senegal.....7. *C. rufoterminatus*

7. Body dark brown with reddish elytra and abdomen: head sub-rectangular, not dilated posteriad; pronotum shorter. Aedeagus as in figure 1592; inner sac covered with scales and with 5 separated, large spines. Congo.....8. *C. kitutu* n. sp.
-. Body brown, with reddish pronotum and yellowish abdomen; head less rectangular, with larger eyes; pronotum longer. Aedeagus as in figure 1595; inner sac tape-like, coiled once in the proximal portion, covered with spinules and with charateristic median and distal portion. Congo.....9. *C. amoenus* n. sp.
-. Body light brown with yellowish elytra; head sub-rectangular, but a little dilated posteriad. Aedeagus as in figure 1598; inner sac covered with small scales, with 2 sub-parallel, proximal series of small spines, before a large, distal spine. Congo.....10. *C. testaceipennis*

8. Body about 4.5 mm long.....9
-. Body shorter.....10

9. Body light reddish brown with darker head and elytra; elytra with more series of punctures. Aedeagus as in figure 1602; inner sac complex, with some spines and large scales. Cameroon.....11. *C. notabilis* n. sp.
-. Body reddish brown, with paler elytra and abdomen; elytra with 3 series of punctures. Aedeagus as in figure 1604; inner sac with 2 long arcuate distal spines, followed by a large mass composed of numerous, thickened, parallel spines. Gabon.....12. *C. delicatulus*

10. Body a little longer, about 4 mm long.....11
-. Body shorter, 3,2 mm long; brown light; squared head; eyes a little protruberent; dorsal series of pronotum of 5 punctures. Aedeagus as in figure 1608; inner sac of particular structure, with series of little scales and some widely separated very large scales. Gabon.....13 *C. paulus*

11. Head sub-rectangular, longer; body dark reddish brown with black head; eyes smaller and less protruberent; dorsal series of pronotum of 5, 6 punctures. Aedeagus as in figure 1615; inner sac everted in the studied males, with some, long spines. Ethiopia.....14. *C. aethiopicus* n. sp.
-. Head subquadrate, shorter.....12

12. Body reddish brown. Aedeagus as in figure 1611; inner sac with a large distal spine, followed by a series of large scales. Congo.....15. *C. gerardi*
-. Body brown, with slightly darker head. Aedeagus as in figure 1617; inner sac with 2 distal series of small thin, spines followed by a surface covered with scales, between which is a long spine. Congo.....16. *C. cameroni*

1. ***Chaetocinus kenyanus*** n. sp.

EXAMINED MATERIAL. Holotype male: Kenya, Mt Kenya, Chogaria, 1520 m, 0.15S, 37.34E, G. Bernon, 27.III.1974 (cB).

DESCRIPTION OF HOLOTYPE. Male. 7 mm; from anterior margin of head to posterior margin of elytra: 4 mm. Fully winged. Body shiny, reddish brown. Head slightly narrowed anteriorly, with narrowly rounded posterior angles. Eyes medium-sized and a little protruberent. Surface of head with fine and sparse punctation, including some larger punctures, especially on the middle of head. Pronotum as long as head, dilated anteriorly where it is narrower than head; dorsal series of 3 large widely spaced punctures and lateral series of 2 smaller punctures. Elytra sub-rectangular, longer and slightly wider than pronotum, with less marked humeral angles. Surface with fine widely spaced punctures arranged in several series. Abdomen with fine and very sparse punctures. Tergite of the male genital segment, with very indented U-shaped posterior margin, and sternite as in figures 1572, 1573. Aedeagus large (Fig. 1574), 1.48 mm long, with short broad parameres; inner sac with some large spines and covered with fine spinules in the proximal portion.

ETYMOLOGY. The specific epithet refers to Kenya.

DISTRIBUTION. The species is only known from the type locality in Kenya (Fig. 1619).

BIONOMICS. The specimen was collected in "*bovine dung*".

REMARKS. The elytra and abdomen of this specimen are badly damaged. Female unknown.

2. ***Chaetocinus nizianus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Nizi, Blukwa, A. Collart, 23.XI.1928 (NHML).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Fully winged, shiny. Similar to *C. brevisulcatus* with which it was confused (cf. REMARKS) but of paler colouration and longer, with longer head not dilated posteriorly, with almost rectilinear sides, smaller eyes, their diameter about equal to the combined lengths of antennomeres 2 and 3, and half of 4; head with uniformly coarser punctation, with deep, evident and sub-parallel frontal sulci; pronotum scarcely longer than head, scarcely dilated anteriorly, with dorsal series of 5 larger punctures and oblique lateral series of 3 punctures; elytra longer. Tergite and sternite of the male genital segment as in figures 1575, 1576. Aedeagus oval (Fig. 1577), about 1 mm long, smaller than in *C. brevisulcatus*, with the distal portion acuminate rather than quadrate, with much narrower parameres furnished with very long setae and with a differently shaped inner sac.

ETYMOLOGY. The specific epithet refers to the type locality.

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1618).

REMARKS. The specimen was part of the series of *C. brevisulcatus*. Female unknown.

3. ***Chaetocinus lipposus*** (Herman, 2001) comb. n.

Leptacinus (*Chaetocinus*) *microps* - Coiffait, 1968: 139; Herman, 2001: 45

Leptacinus lipposus - Herman, 2001: 45 (n. n. for *L. microps* Coiff., n. preocc.); 2001a: 3677

TYPE MATERIAL. The Muséum national d'Histoire naturelle in Paris preserves the male holotype of this species, labelled "*Belinga / 22.2.63 / H. Coiffait*", "*Mission Biologique/ au Gabon / P. P. Grassé Directeur*", "*Holotype*" (printed on red label), "Leptacinus (Chaetocinus) / microps *Coiff. / H. Coiffait 1967*".

DESCRIPTION. Length of body: 5.5 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Fully winged. Body shiny, light brown with abdomen yellowish. Body smaller and much narrower than those of *C. major* and *C. brunneus*. Head oval, a little dilated posteriad. Eyes medium-sized and slightly protruberent. Pronotum dilated anteriorly, with dorsal series of 5 fine punctures and lateral series of 5 fine punctures. Elytra narrow, with three series of punctures, one juxtasutural, one median and one lateral. Tergite and sternite of the male genital segment not present on the mounting card. Aedeagus smaller (Fig. 1578) than that of *C. major* and *C. brunneus*, 0.96 mm long; parameres long; inner sac broad, covered with scales and spinules, with a median dark area and some distal spines.

DISTRIBUTION. The species is only known from the type locality in Gabon (Fig. 1619).

REMARKS. Female unknown.

4. ***Chaetocinus grassei*** (Coiffait, 1968) comb. n.

Leptacinus (*Chaetocinus*) *grassei* - Coiffait, 1968: 140; Herman, 2001a: 3675

TYPE MATERIAL. The Muséum national d'Histoire naturelle in Paris preserves two specimens, the first labelled "*Belinga / 25.1.63 / H. Coiffait*", "*Mission Biologique / au Gabon / P. P. Grassé Directeur*", "*Holotype*" (printed on red label), "Leptacinus (Chaetocinus) / grassei *H. Coiffait 1967*", the second labelled "*29.3.63*", and "*Paratype*" (printed on red label).

DESCRIPTION. Length of body: 5.5 mm; from anterior margin of head to posterior margin of elytra: 3.2 mm. Fully winged, shiny. Similar to *C. major* and *C. brunneus* but shorter, with broad head of similar shape. Surface with dense and deep punctures. Eyes large and prominent. Pronotum a little longer than head, dilated anteriorly where it is almost wider than head; dorsal series of 6, 7 punctures and lateral series of 3 punctures. Elytra large, much longer and wider than pronotum, with less marked humeral angles. Surface with more shallower punctures than those of pronotum, arranged in several widely spaced series. Tergite and sternite of the male genital segment as in figures 1579, 1580. Aedeagus robust (Fig. 1581), 1.22 mm long; parameres thick, furnished with dense setae; inner sac coiled and covered with spinules.

DISTRIBUTION. Gabon (Fig. 1619).

5. ***Chaetocinus brevisulcatus*** (Cameron, 1933) comb. n.

Leptacinus brevisulcatus - Cameron, 1933: 41; Cameron, 1950: 28; Herman, 2001a: 3670

TYPE MATERIAL. The Musée royal de l'Afrique centrale in Tervuren preserves 1 specimen labelled "*Holotype*" (printed on orange label with black border), "*Musée du Congo / Ituri: Blukwa: / Nizi - 23.XI.1928 / A. Collart*", "*Nizi: Blukwa / 23.XI.28 / A. Collart*", "Leptacinus / brevisulcatus / *Paratype Cam.*" (in pencil). It is a male that I choose as lectotype of the species; it now bears the label "*Lectotypus* Leptacinus brevisulcatus *Cam., Bordoni des. 2006*" and the determination label "Chaetocinus brevisulcatus *(Cam.), Bordoni det. 2006*"."

CITED MATERIAL (not examined). Congo, Gitebe (volc. Nyamuragira), 2324 m (Cameron, 1950, sub *Leptacinus*).

DESCRIPTION. Length of body: 5.5 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Fully winged. Body shiny, reddish brown with lighter elytra. Head dilated posteriad, with slightly rounded sides and broadly rounded posterior angles. Eyes large and prominent. Antennae with segments 5–11 subquadrate. Head with less visible ocular grooves. Surface with irregular and very sparse punctation composed of small and large punctures. Pronotum longer than head, strongly dilated anteriorly where it is as wide as head, with slightly oblique anterior margins and prominent, broadly rounded anterior angles and strongly sinuate sides; dorsal series of 5 punctures and lateral series of 3 punctures. Elytra narrow, sub-rectangular, with sub-parallel sides and marked humeral angles. Surface with fine punctures arranged in a few series. Abdomen with transverse micro-striation and very fine and sparse punctures. Tergite and sternite of the male genital segment as in figures 1582, 1583. Aedeagus oval (Fig. 1584), 1.14 mm long with quadrate median lobe; parameres large; inner sac with some areas covered with scales and with some large median and distal spines.

DISTRIBUTION. Congo (Fig. 1618).

REMARKS. Female unknown.

6. ***Chaetocinus oculatus*** (Coiffait, 1968) comb. n.

Leptacinus (*Chaetocinus*) *oculatus* - Coiffait, 1968: 136; Herman, 2001a: 3680
Leptacinus (*Chaetocinus*) *vicinus* - Coiffait, 1968: 137; Herman, 2001a: 3687, syn. n.

TYPE MATERIAL. The Muséum national d'Histoire naturelle in Paris preserves the holotype male of this species, labelled "*Belinga / 7.3.63 / H. Coiffait*", "*Mission Biologique / au Gabon / P. P. Grassé Directeur*", "*Holotype*" (printed on red label), "Leptacinus (Chaetocinus) / oculatus *Coiff. / H. Coiffait 1967*"; the other is labelled "*Paratype*" (printed on red label).

The Museum also preserves 3 females labelled "*Belinga / 29.3.63*", "*Belinga / 18.3.63*" e "*Belinga / 23.3.63*", respectively "*Holotype*" and "*Paratype*" (printed on red label), "Leptacinus (Chaetocinus) / vicinus *H. Coiffait 1967*", which are identical with *C. oculatus*. These specimens bear the label "Chaetocinus oculatus *(Coiff.), Bordoni det. 2006*".

DESCRIPTION. Length of body: 4.5–5.5 mm; from anterior margin of head to posterior margin of elytra: 2.5–2.6 mm. Fully winged, shiny. Similar to *C. lipposus* but broader and more robust. Head more dilated, rounded, with large prominent eyes and dense punctation. Pronotum shorter, with dorsal series of 7–10 punctures and lateral series of 10–15 punctures. Elytra long, longer than those of *C. lipposus*, with three series of punctures, one juxtasutural, one median and one lateral, with some punctures between these. Tergite and sternite of the male genital segment as in figures 1585, 1586. Aedeagus smaller (Fig. 1587) smaller than that of *C. lipposus*, 0.85 mm long, with long median lobe; parameres small; inner sac with two opposed series of large spines and two distal widely spaced spines.

DISTRIBUTION. Gabon (Fig. 1619).

7. ***Chaetocinus rufoterminatus*** (Cameron, 1951) comb. n.

Leptacinus rufoterminatus - Cameron, 1951: 126; Tottenham, 1961: 203; Herman, 2001a: 3684

TYPE MATERIAL. The Natural History Museum in London preserves 1 specimen labelled "*IFAN 1949 / Linguère / Senegal / A. Villiers*", "*Syntype*" (on rounded label with light blue border), "Lepta-

cinus / rufoterminatus / *Cotype Cam.*", "Leptacinus / rufoterminatus *Cam. / P. M. Hammond det. 1981 / Syntype male*". It is a male that now bears the label "Chaetocinus rufoterminatus *(Cam.), Bordoni det. 2006*".

CITED MATERIAL (not examined). Senegal, Parc National Niokolo-Koba: Badi (Tottenham, 1961).

DESCRIPTION. Length of body: 5.5 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Fully winged. Body shiny, brown with paler head, pronotum reddish and elytra with yellowish margins. Ocular and frontal grooves deep. Head with coarse punctation on the sides. Pronotum with very broadly rounded anterior angles, not sinuate sides; dorsal series of 7, 8 large punctures and lateral series of 4, 5 smaller punctures. Elytra broad, much longer and wider than pronotum. Surface with coarse but shallow punctures arranged in three series, one juxtasutural, one median and one lateral. Tergite of the male genital segment as in figure 1588. Sternite too damaged to be figured. Aedeagus probably as in figure 1589 (cf. REMARKS); inner sac with a series of spines on the right and with a group of a few broad, very thickened spines in the distal portion.

DISTRIBUTION. Senegal (Fig. 1619).

REMARKS. The sixth visible abdominal segment, genital segment and aedeagus were glued on the mounting card with the specimen, which is in poor conditions. The basal bulb of the aedeagus divided in half, was separated by the inner sac (probably removed from the bulb) and without parameres.

In the description Cameron (1951) cites two specimens, but I did not find the second one.

8. ***Chaetocinus kitutu*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Terr. Mwenga, Kitutu, 650 m, N. Leleup, 1.IV.1958 (MRAC).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2 mm. Fully winged. Body shiny. Head and pronotum dark brown, elytra and abdomen light reddish brown. Head sub-rectangular with sub-rectilinear and sub-parallel sides and marked posterior angles. Eyes large and prominent. Surface of head with fine, deep and very sparse punctation. Pronotum longer than head, anteriorly as wide as head, with broadly rounded anterior angles; dorsal series of 5 very widely spaced punctures and lateral series of 4 punctures. Elytra as long as and wider than pronotum, with marked humeral angles. Surface with fine and dense punctures arranged in numerous series. Tergite and sternite of the male genital segment as in figures 1590, 1591. Aedeagus oval (Fig. 1592), small, 0.77 mm long, with large parameres furnished with evident setae on the inner sides; inner sac large, covered with scales and spinules and with two large spines.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1618).

BIONOMICS. The specimen was collected in "*humus*".

REMARKS. Female unknown.

9. ***Chaetocinus amoenus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Massif Ruwenzori, riv. Kakalari, affl. Bombi, 1725 m, P. Vanschuytbroeck and H. Syave, 10.IV.1954 (MRAC); paratype: same data, 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.5 mm. Fully winged; shiny. Similar to *C. kitutu* n. sp., but smaller, pronotum reddish and abdomen yellowish; eyes larger. Head with slightly denser punctation. Pronotum more elongate, less dilated anteriorly; dorsal series of 7 closely punctures and lateral series of 5 punctures. Elytra with shallower punctures. Tergite and sternite of the male genital segment as in figures 1593, 1594. Aedeagus oval (Fig. 1595), 1 mm long, with sub-acute distal lobule; parameres large, with evident setae on the inner sides; inner sac coiled in the proximal portion, covered with scales, with characteristic distal structure and some spines on the margins.

VARIABILITY. The paratype female has no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is the Latin adjective *amoenus -a -um* (nice).

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1618).

10. ***Chaetocinus testaceipennis*** (Bernhauer, 1929) comb. n.

Leptacinus testaceipennis - Bernhauer, 1929: 119; Herman, 2001a: 3686

TYPE MATERIAL. The Musée royal de l'Afrique centrale of Tervuren preserves 3 specimens labelled "*TYPE*" (printed on orange label with black edge), "*Musée du Congo/ Ituri: / La Moto: Madyu / L. Burgeon*", "Leptacinus / testaceipennis / *Bernh. Typ*" (handwritten by Bernhauer). The first is a male that I choose as lectotype of the speies; it now bears the label "*Lectotypus* Leptacinus testaceipennis *Bh., Bordoni des. 2006*"; the others are females that I choose as paralectotypes; these bear the label "*Paralectotypus* Leptacinus testaceipennis *Bh., Bordoni. des. 2006*". All three have the determination label "Chaetocinus testaceipennis *(Bh.), Bordoni det. 2006*".

DESCRIPTION. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Fully winged. Body shiny, narrow, cylindrical. Light brown with slightly darker head and yellowish elytra. Head sub-rectangular, slightly dilated posteriad, with narrowly rounded posterior angles. Eyes medium-sized and protruberent. Surface of head with very fine and sparse punctation, especially on the sides and posteriad. Pronotum longer than head, dilated anteriorly where it is as wide as head, with oblique anterior margins, well rounded anterior angles and sinuate sides; dorsal series of 5 small widely spaced punctures and lateral oblique series of 3 punctures. Elytra long and matt, dilated posteriad, with less marked humeral angles. Surface with very fine punctation, arranged in some series. Tergite and sternite of the male genital segment as in figures 1596, 1597. Aedeagus robust (Fig. 1598), sub-rectangular, 1 mm long; parameres long; inner sac with two series of short spines and a distal area of similar spines, alongside a big spine.

DISTRIBUTION. Congo (Fig. 1618).

REMARKS. The species was described as *Leptacinus testaceipennis* by Bernhauer (1929), but this name was preoccupied by *L. testaceipennis* Fauvel, 1863 from Cuba, now attributed to the genus *Neoxantholinus*. According to Article 23.9.5 of the ICZN, a junior homonymic species name that is still in use cannot automatically be replaced if the senior name was in another genus before 1900. As the Fauvel name has been in other genera since 1878 and is currently in *Neoxantholinus*, one should refer the junior name and the situation to the Commission (Herman, pers. comm.).

11. ***Chaetocinus notabilis*** n. sp.

EXAMINED MATERIAL. Holotype male: Cameroun, Nkolbisson, Yaoundé, X.1966 (MNHNP).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.4 mm; from anterior margin of head to posterior margin of elytra: 2.1 mm. Fully winged. Body shiny, reddish brown with head and elytra darker. Similar to *C. persalsus*, but much smaller and narrower. Head and pronotum as in Fig. 1599. Head quadrate and shorter than that of *C. persalsus*. Eyes more large. Pronotum narrower, with more rounded anterior angles. Elytra with finer punctures arranged in more series. Tergite and sternite of the male genital segment as in figures 1600, 1601. Aedeagus oval (Fig. 1602), small, 0.6 mm long, with long broad parameres furnished with evident setae on the inner sides; inner sac with very set of spines and scales.

ETYMOLOGY. The specific epithet refers to the Latin *notabilis -e* (notable).

DISTRIBUTION. The species is only known from the type locality in Cameroon (Fig. 1619).

REMARKS. The specimen was determined as "*Holotype in litt.,* Afroleptacinus *n. g.,* camerunensis *n. sp., L. Levasseur det. 1968*". Female unknown.

12. ***Chaetocinus delicatulus*** (Coiffait, 1968) comb. n.

Leptacinus (*Chaetocinus*) *delicatulus* - Coiffait, 1968: 142; Herman, 2001a: 3672

TYPE MATERIAL. The Muséum national d'Histoire naturelle in Paris preserves 3 specimens, the first labelled "*Holotype*" (printed on red label), "*Belinga 15.I.63, H. Coiffait*", "*Préparation microscopique*" (on grey label), "L. (Chaetocinus) delicatulus *Coiff. / H. Coiffait 1967*"; the others have the same labels and "*Paratype*" (printed on red label).

DESCRIPTION. Length of body: 4.4 mm; from anterior margin of head to posterior margin of elytra: 2.3 mm. Fully winged. Body shiny, reddish brown with elytra and abdomen lighter. Head quadrate, slightly narrow anteriorly, with broadly rounded posterior angles, and fine and very sparse punctation. Eyes large and protruberent. Pronotum a little longer than head, strongly dilated anteriorly where it is as wide as head, with strongly sinuate sides; dorsal series of 5 widely spaced punctures and lateral series of 2 anterior punctures. Elytra large, longer and wider than pronotum, dilated posteriad, with rounded humeral angles. Surface with fine punctures arranged in three series, one juxtasutural, one median and one lateral. Tergite and sternite of the male genital segment as in figures 1603, 1604. Aedeagus oval (Fig. 1605), 0.92 mm long, with long broad parameres furnished with evident setae on the inner sides; inner sac with two large distal spines directed to the left; the median and proximal portion narrow, furnished with numerous, slender thickened spines.

DISTRIBUTION. The species is only known from the type locality in Gabon (Fig. 1619).

13. ***Chaetocinus paulus*** (Herman, 2001) comb. n.

Leptacinus (*Chaetocinus*) *minutus* - Coiffait, 1968: 138

Leptacinus paulus - Herman, 2001: 45 (n. n. for *L. minutus* Coiffait, 1968, n. preocc.); 2001a: 3679

TYPE MATERIAL. The Muséum national d'Histoire naturelle in Paris preserves 2 males labelled "*Belinga / 25.1.63 / H. Coiffait*", "*Mission Biologique / au Gabon / P. P. Grassé Directeur*", "*Holotype*" (printed on red label), "Leptacinus (Chaetocinus) / minutus *Coiff. / H. Coiffait 1967*", and the other "*12.2.63*", "*Paratype*" (printed on red label). Both bear the determination label "Chaetocinus paulus *(Herman), Bordoni det. 2006*".

DESCRIPTION. Length of body: 3.2 mm; from anterior margin of head to posterior margin of elytra: 1.9 mm. Fully winged; shiny. Similar to *C. oculatus* but with more quadrate, less rounded head, less protruberent eyes and sparse punctation. Pronotum with larger punctures than that of *C. oculatus*, arranged in dorsal series of 5 punctures and lateral series of 4 punctures. Elytra with widely spaced punctures arranged in three series, one juxtasutural, one median and one lateral. Tergite and sternite of the male genital segment as in figures 1606, 1607. Aedeagus small (Fig. 1608), 0.55 mm long, with median lobe narrow; parameres long; inner sac with some areas furnished with spinules and with a broad median spine.

DISTRIBUTION. Gabon (Fig. 1619).

REMARKS. Female unknown.

14. ***Chaetocinus aethiopicus*** n. sp.

EXAMINED MATERIAL. Holotype male: Ethiopia, Shoa prov., Lake Langano, 1600 m, K.K. Werner, XII.1990 (DEI); paratype: same data, 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Fully winged. Body shiny, dark reddish brown with head black and elytra lighter; antennae and legs testaceous. Similar to C. *dorylophilus* n. sp. in the shape of fore-body. Head (Fig. 1612) more elongate, sub-rectangular, with almost sub-rectilinear and sub-parallel sides and narrowly rounded posterior angles. Eyes smaller and less protruberent. Surface with denser punctation. Pronotum with dorsal series of 5-6 large widely spaced punctures and lateral series of 2 anterior punctures. Elytra narrow, long, sub-rectangular, with a slightly rounded sides and less marked humeral angles. Surface with fine and sparse punctures arranged in three series, one juxtasutural, one median and one lateral. Tergite and sternite of the male genital segment as in figures 1613, 1614. Aedeagus oval (Fig. 1615), small, 0.6 mm long, with long narrow parameres, furnished with evident setae on the inner sides; inner sac everted in the studied males, with a few long spines.

VARIABILITY. The paratype male has no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Ethiopia.

DISTRIBUTION. The species is only known from the type locality in the Rift valley of Ethiopia (Fig. 1619).

REMARKS. Female unknown.

15. ***Chaetocinus gerardi*** (Bernhauer, 1932) comb. n.

Leptacinus gerardi - Bernhauer, 1932: 143; Scheerpeltz, 1933: 1301; Herman, 2001a: 3674

TYPE MATERIAL. The Musée royal de l'Afrique centrale in Tervuren preserves 4 specimens labelled "*TYPE*" (printed on orange label with black edge), "*Musée du Congo / Katanga: Katombe / 1–15.VI.1930 / Dr. P. Gérard*". One of these, a male, also has the label "Leptacinus / Gerardi *Brh / sp. n.*" (handwritten by Bernhauer); I choose this specimen as lectotype of the species; it now bears the label "*Lectotypus* Leptacinus Gerardi *Bh., Bordoni des. 2006*"; I choose the others as paralectotypes of the species; these bear the label "*Paralectotypus* Leptacinus Gerardi *Bh., Bordoni des. 2006*". All have the determination label "Chaetocinus gerardi *(Bh.), Bordoni det. 2006*".

DESCRIPTION. Length of body 4 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Fully winged. Body shiny, reddish brown. Similar to *C. testaceipennis* but smaller, darker, with shorter and wider head, with more broadly rounded posterior angles. Surface with much finer and slightly denser punctation. Eyes slightly larger. Pronotum less slender, less dilated anteriorly, with less oblique anterior margins; dorsal series of 7 deep punctures and lateral oblique series of 4 punctures. Elytra shorter, more quadrate, with punctures arranged in three series, one juxtasutural, one median and one lateral and some other punctures between these series. Abdomen with traces of transverse micro-striation and fine and sparse punctures. Tergite and sternite of the male genital segment as in figures 1609, 1610. Aedeagus small (Fig. 1611), 0.8 mm long, with median lobe elongate with rounded apex; parameres short; inner sac with a long series of short spines, and with one long distal spine.

DISTRIBUTION. Congo (Fig. 1618).

16. ***Chaetocinus cameroni*** (Steel, 1949) comb. n.

Leptacinus aethiops - Cameron, 1933: 41
Leptacinus cameroni - Steel, 1949: 270, (n. nov. for *Leptacinus aethiops* Cameron, n. preoc.); Cameron, 1950: 29; Herman, 2001a: 3671

TYPE MATERIAL. The Natural History Museum in London preserves 1 specimen labelled "*Cotype*" (printed on round label with yellow border), "*Nizi: Blukwa / 17.XII.28 / A. Collart*", "L. / aethiops / *Cotype Cam.*", "*Syntype* Leptacinus aethiops *Cam., det. R. G. Booth 2006*". It is a male that I choose as lectotype of the species; it now bears the label "*Lectotypus* Leptacinus aethiops *Cam., Bordoni des. 2006*" and the determination label "Chaetocinus cameroni *(Steel), Bordoni det. 2006*".

CITED MATERIAL (not examined). Congo, Kanyabayongo (Kabasha), 1760 m; Gitebe (volc. Nyamuragira), 2324 m; Shamuheru (volc. Nyamuragira), 1820 m; Rutshuru, 1285 m (Cameron, 1950, sub *Leptacinus*).

DESCRIPTION. Length of body: 4 mm; from anterior margin of head to posterior margin of elytra: 2.3 mm. Fully winged. Body shiny, narrow and cylindrical. Brown with slightly darker head and lighter abdomen. Similar to *C. testaceipennis* in size, but of much darker colouration, more quadrate head, with sub-rectilinear and sub-parallel sides. Eyes larger and prominent. Pronotum narrower and elytra broader. Tergite of the male genital segment as in figure 1616; sternite damaged and not figurable. Aedeagus with slightly elongate and rounded median lobe, 0.9 mm long (Fig. 1617); parameres thick; inner sac (partially everted) with three proximal dark areas and with two median and distal series of opposed spines.

DISTRIBUTION. Congo (Fig. 1619).

REMARKS. Female unknown.

3. *Chaetocinus anommatophilus* sub-group

This sub-group is composed of species often collected in nests of small mammals and ants.

KEY TO THE SPECIES

1. Body larger, with very long, sub-rectangular, narrow elytra.....2
-. Body smaller, with elytra broad, dilated posteriad.....3

2. Head broader, dilated posteriad, with broadly rounded posterior angles; pronotum wider, more

dilated anteriorly; body about 6 mm long, reddish brown with black head, elytra lighter and first 4 visible abdominal segments yellowish. Aedeagus as in figure 1624. Kenya.....1. *C. theiba* n. sp.
-. Head narrower, not dilated posteriad, with less broadly rounded posterior angles; pronotum narrower, less dilated anteriorly; body 6.3 mm long, reddish brown with darker head, and paler elytra and abdomen. Aedeagus as in figure 1627. Kenya.....2. *C. elgonicus* n. sp.

3. Body about 6 mm long; head sub-rectangular.....4
-. Body less than 6 mm long.....5

4. Body yellowish, with darker head, 5.6 mm long; head longer and narrower, with dense punctation; eyes smaller; pronotum narrower. Aedeagus as in figures 1630, 1797. Congo.....3. *C. kivuensis* n. sp.
-. Body reddish brown, with darker head, elytra and first 3 visible abdominal segments yellowish, 5.8 mm long; head broader and shorter, with sparse punctation; eyes larger. Aedeagus as in figure 1633. Kenya.....4. *C. nidorum* n. sp.

5. Body about 5 mm long.....6
-. Body less than 5 mm long.....9

6. Body robust, massive, entirely brown, 5.3 mm long; head large, wide; eyes almost flat; pronotum massive; elytra sub-rectangular, relatively short. Aedeagus as in figure 1636. Congo.....5. *C. heterocephalophilus* n. sp.
-. Body slender and narrow.....7

7. Eyes larger and very prominent.....8
-. Eyes smaller and less prominent; body less broad; head less dilated posteriad and not narrowed anteriorly; eyes smaller; elytra longer; body light reddish brown, with the first 4 visible abdominal segments yellowish. Aedeagus as in figure 1639. Uganda.....6. *C. bugalensis* n. sp.

8. Elytra very long, sub-rectangular; head and pronotum wide; body light brown with the first 3 visible abdominal segments pale yellowish. Aedeagus as in figure 1644. Gabon .....7. *C. asymetricus* n. sp.
-. Elytra shorter, less rectangular; head and pronotum narrower; body reddish brown, with the first 3 visible abdominal segments yellowish. Aedeagus as in figure 1647. Liberia.....8. *C. liberianus* n. sp.
9. Body about 4.8 mm long.; body broader; head wider; pronotum very dilated anteriorly; elytra longer; body entirely reddish brown. Aedeagus as in figure 1650. Fernando Po Isl .....9. *C. insularis* n. sp.
-. Body about 4.5 mm long.....10
-. Body less than 4.5 mm long.....11

10. Body reddish brown; head massive, convex, oval; eyes prominent; dorsal series of pronotum of 6 punctures; elytra sub-rectangular, long and narrow. Aedeagus as in figure 1655. Ivory Coast.....10. *C. anommatophilus* n. sp.
-. Body dark brown; head of normal thickness, sub-rectangular; eyes almost flat; dorsal series of pronotum of 5 punctures; elytra broad, dilated posteriad, shorter. Aedeagus as in figure 1658. Rep. Congo.....11 *C. sibitiensis* n. sp.

11. Body yellowish brown, 4.3 mm long; head a little narrowed forward, with eyes large and slightly prominent; elytra long, sub-rectangular, not dilated posteriad, with small scutellum. Aedeagus as in figures 1661, 1798. Tanzania, Congo.....12. *C. dorylophilus* n. sp.
-. Body entirely brown, about 3 mm long; head dilated anteriorly, with proportionately very large and slightly prominent eyes; elytra long, dilated posteriad, with large scutellum. Aedeagus as in figure 1664. Guinea.....13. *C. guineanus* n. sp.

1. ***Chaetocinus theiba*** n. sp.

Examined Material. Holotype male: Kenya, Mt Kenya, Theiba Forest, 8000', G. Cunningham-Van Someren, 2–3.V.1969 (FMNH).

Description of Holotype. Male. Length of body: 6 mm; from anterior margin of head to posterior margin of elytra: 3.1 mm. Fully winged, shiny. Head black, pronotum dark reddish brown, elytra dark testaceous, abdomen brown with the first three visible segments lighter; antennae and legs testaceous. Fore-body as in figure 1620. Head with sparse, deep, clearly visible punctures. Pronotum with dorsal series of 5 punctures and lateral series of 3 punctures. Elytra sub-rectangular, long and narrow, a little dilated posteriad, longer and a

little wider than pronotum, with less marked humeral angles. Surface with very fine and sparse punctures arranged in few series. Tergite with concave posterior margin, and sternite of the male genital segment as in figures 1622, 1623. Aedeagus oval (Fig. 1624), large, 1.1 mm long, with rounded median lobe; parameres long, with evident setae on the inner sides; inner sac with two large distal spines, followed by a long large spine, between series of small spines.

ETYMOLOGY. The specific epithet refers to the type locality, as a noun in apposition.

DISTRIBUTION. The species is only known from the type locality in Kenya (Fig. 1665).

BIONOMICS. The specimen was collected in "*debris piles nest*".

REMARKS. Female unknown.

2. ***Chaetocinus elgonicus*** n. sp.

EXAMINED MATERIAL. Holotype male: Kenya, Mt Elgon Nat. P., near Chepnyalli Cave, 2500 m, P. Merkl and G. Varkonyi, 24–28.I.1992 (MTM).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 6.3 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Fully winged. Body shiny. Characterized by the shape of the fore-body (Fig. 1621). Head brownish black, pronotum dark brown, elytra testaceous, abdomen light brown; antennae and legs yellowish brown. Head with fine sparse punctation. Pronotum with dorsal series of 6–8 punctures and lateral series of 4 anterior punctures. Elytra with fine shallow punctures arranged in a few series. Tergite and sternite of the male genital segment as in figures 1625, 1626. Aedeagus oval (Fig. 1627), broad, 1.3 mm long, with acute median lobe; parameres long and broad, with evident setae on the inner sides; inner sac with four large, distal spines, followed by a coiled proximal portion, densely covered in scales.

ETYMOLOGY. The specific epithet refers to Mt Elgon.

DISTRIBUTION. The species is only known from the type locality in Kenya (Fig. 1665).

BIONOMICS. The specimen was collected in "*dry evergreen montane forest*".

REMARKS. Female unknown.

3. ***Chaetocinus kivuensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Kivu, Terr. Lubero, 2200 m, N. Leleup, 29.XI.1951 (MRAC); paratypes: same data, 27.XI.1951, 1 female (cB); same data, 2700 m, N. Leleup, 27.XI.1951, 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.6 mm; from anterior margin of head to posterior margin of elytra: 3.5 mm. Fully winged. Body shiny, light brown with darker head and yellowish pronotum. Head sub-rectangular, with subrectilinear and sub-parallel sides and very marked posterior angles. Eyes medium-sized and prominent. Surface of head with deep, coarse and dense punctation. Pronotum sub-rectangular, shorter and narrower than head, with less oblique anterior margins, very marked anterior angles and slightly sinuate sides; dorsal series of 4, 5 punctures and lateral series of 5, 6 punctures. Elytra long, longer and wider than pronotum, with rounded humeral angles. Surface with fine sparse punctures arranged in several series. Tergite with concave posterior margin, and sternite of the male genital segment as in figures 1628, 1629. Aedeagus oval (Figs. 1630, 1797), 0.85 mm long, parameres large, furnished with evident setae to the inner surfaces; inner sac with some large distal spines, one median and very arcuate, followed by a broad proximal portion covered with scales and with some thin spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Kivu region.

DISTRIBUTION. The species is only known from the type locality in Congo (Fig. 1665).

BIONOMICS. Some specimens were collected in "*for. mont. avec bambous*".

4. ***Chaetocinus nidorum*** n. sp.

EXAMINED MATERIAL. Holotype male: Kenya, Karen, D. and A. Kistner and R. Banfill, 7.VIII.1970 (FMNH); paratype: same data, G. Cunningham-Van Someren, V.1962, 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.8 mm; from anterior margin of head to posterior margin of elytra: 2.7 mm. Fully winged. Body reddish brown with elytra and first three visible abdominal segments yellowish, and head and elytra darker. Head sub-rectangular, with large prominent eyes. Surface of head with very sparse deep punctures. Pronotum a little longer than head, feebly dilated anteriorly where it is as wide as head, with rounded anterior angles; dorsal series of large widely spaced punctures and lateral oblique series of 3 anterior punctures. Elytra broad, dilated posteriad, with broadly rounded humeral angles. Surface with fine punctures arranged in several series. Tergite and sternite of the male genital segment as in figures 1631, 1632. Aedeagus oval (Fig. 1633), 0.8 mm long, with rounded median lobe; parameres long and broad, furnished with evident setae on the inner sides; inner sac with some large unequal spines.

VARIABILITY. The paratype has no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is derived from the Latin *nidus -i* (nest), in reference to the habitat in which the specimen was collected.

DISTRIBUTION. The species is only known from the type locality in Kenya (Fig. 1665).

BIONOMICS. The specimens was collected in "*debris pile nest*".

5. ***Chaetocinus heterocephalophilus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, R. Mubale (Albert National Park), 1480 m, G. de Witte, 14.V.1947 (MRAC); paratypes: same data, 3 males, 3 females (MRAC), 4 males, 2 females (cB); Kalungwa, 1740 m, G. de Witte, 12.VII.1947, 1 male, 1 female (MRAC), 1 male, 1 female (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5.6 mm; from anterior margin of head to posterior margin of elytra: 3.5 mm. Fully winged. Body shiny, reddish brown. Characterized by the head broad and dilated, the pronotum massive and broad, elytra sub-rectangular (Fig. 1521). Head strongly dilated, with very rounded sides and broadly rounded posterior angles. Eyes medium-sized, slightly prominent. Surface with deep coarse punctation, finer and sparser on the sides. Pronotum with dorsal series of 2 anterior and 3 posterior punctures and lateral series of 5 finer punctures. Elytra sub-rectangular, a little dilated posteriad, with narrowly rounded humeral angles and sub-rectilinear sides. Surface with fine punctures arranged in three series, one juxtasutural, one median and one lateral. Abdomen with fine and dense transverse microstriation and fine and dense punctures. Tergite with concave posterior margin, and sternite of the male genital segment as in figures 1634, 1635. Aedeagus oval (Fig. 1636), broad, 1.3 mm long, with elongate median lobe; parameres broad and long, furnished with evident setae on the inner surfaces; inner sac with some large distal spines and some other spines, one very arcuate, in the median portion, followed by a broad proximal portion covered in scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to *Heterocephalus glaber* Ruppel, 1842 (Rodentia, Bathyergidae), in the nests of which the species was found.

DISTRIBUTION. The species is known from the cited localities in Congo (Fig. 1665).

BIONOMICS. The specimens were collected in "*nids de rat-taupe*" (*H. glaber*) . It may be a pholeophilous species.

6. ***Chaetocinus bugalensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Uganda, Victoria Nyanza, Arcip. di Sesse, Bugala, E. Bayon, 1908 (MVSNG); paratypes: same data, 1 female (MCSNG), 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.4 mm. Fully winged. Body shiny, reddish brown with darker head; pronotum lighter, visible abdominal segments 1 and 2 yellowish. Head elongate-oval, a little narrowed anteriorly, with broadly rounded posterior angles. Eyes large and prominent. Surface of head with fine and large, not sparse punctures, except on a median band. Pronotum slightly longer and narrower than head, even anteriorly where it is dilated, with sinuate sides and broadly rounded anterior angles; dorsal series of 5 punctures and lateral series of 3 anterior punctures. Elytra long, sub-rectangular,

with sub-rectilinear and sub-parallel sides and marked humeral angles. Surface with shallow punctures arranged in a few series. Tergite with concave posterior margin, and sternite of the male genital segment as in figures 1637, 1638. Aedeagus oval (Fig. 1639), small, 0.7 mm long, with a small elongate median lobe; parameres broad and long, furnished with evident setae on the inner surfaces; inner sac with two small distal spines, followed by a series of large subquadrate scales next to a large, arcuate spine; proximal portion enlarged and covered in scales.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the type locality.

DISTRIBUTION. The species is only known from the type locality in Uganda (Fig. 1665).

REMARKS. The type locality is Bugala island in Lake Victoria, Ssese islands, Kalangala Distr.

7. ***Chaetocinus asymetricus*** n. sp.

EXAMINED MATERIAL. Holotype male: Gabon, Belinga, H. Coiffait leg., 11.II.1963 (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.3 mm. Fully winged. Body shiny, light brown with the first 3 visible abdominal segment pale yellow. Similar to *C. delicatulus*, but head with less rounded sides (Fig. 1640), slightly denser punctation, especially on the sides; eyes larger. Pronotum shorter, much less dilated anteriorly, with less marked anterior angles; dorsal series of 6 punctures and lateral series of 5 punctures. Elytra much narrower than in *C. delicatulus*, long, with two series of punctures near the suture, one median and one lateral, and some punctures between these series. Tergite of the male genital segment of characteristic shape (Fig. 1642), with concave posterior margin and lateral angles prolonged, hook shaped; sternite as in figure 1643. Aedaegus oval (Fig. 1644), small, 0.74 mm long, with median lobe prolonged into an acute apex; parameres thin; inner sac with different areas, furnished with spinules and with three long median and distal spines.

ETYMOLOGY. The specific epithet alludes to the asymmetry of the structures of the inner sac of the aedeagus.

DISTRIBUTION. The species is only known from the type locality in Gabon (Fig. 1665).

REMARKS. Female unknown.

8. ***Chaetocinus liberianus*** n. sp.

EXAMINED MATERIAL. Holotype male: Liberia, Charlsville, D. and A. Kistner, 14.VI.1962 (FMNH); paratypes: same data, 1 male, 1 female (cB); Angola, Parc Dr. Carrisso, nr. Dundo, D.H. Kistner and R.J. Swift, 6.XI.1972, 2 females (FMNH), 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 5 mm; from anterior margin of head to posterior margin of elytra: 2.2 mm. Fully winged; shiny. Similar to *C. dorylophilus* n. sp., but body larger, head larger and longer, eyes larger (Fig. 1641) than in *C. dorylophilus* n. sp. Surface of head with finer and denser punctation. Pronotum a little longer and anteriorly a little wider than head, with more oblique anterior margins, more broadly rounded anterior angles and more sinuate sides; dorsal series of 5 punctures and lateral oblique series of 4 punctures. Elytra more massive and quadrate, a little shorter and wider than pronotum, with very marked humeral angles. Surface with dense shallow punctures arranged in numerous series. Tergite with concave posterior margin, and sternite of the male genital segment as in figures 1645, 1646. Aedeagus oval (Fig. 1647), small, 0.77 mm long; parameres long and narrow, with evident setae on the inner surfaces; inner sac with some more or less large and long spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to Liberia.

DISTRIBUTION. The species is known from Liberia and Angola (Fig. 1665).

BIONOMICS. All the specimens were collected in "*debris piles nest*".

9. ***Chaetocinus insularis*** n. sp.

EXAMINED MATERIAL. Holotype male: Island Fernando Po, Musola, 500–800 m, L. Fea, 1–

III.1902 (MCSNG); paratype: same data, X–XI.1901, 1 female (MCSNG).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.8 mm; from anterior margin of head to posterior margin of elytra: 2.7 mm. Fully winged, shiny. Reddish brown. Head oval, a little narrowed anteriorly, with rounded sides and broadly rounded posterior angles. Eyes large and prominent. Surface of head broad, with very sparse punctures only on the sides. Pronotum as long and anteriorly as wide as head, strongly dilated anteriorly, with sinuate sides and well rounded anterior angles; dorsal series of 2 anterior and 3 posterior punctures and lateral series of 2 anterior punctures. Elytra long, longer and wider than pronotum, dilated posteriad, with marked humeral angles. Surface with very fine punctures arranged in a few series. Tergite with concave posterior margin; sternite of the male genital segment as in figures 1648, 1649. Aedeagus oval (Fig. 1650), 0.85 mm long; parameres short and narrow, furnished with evident setae on the inner surfaces; inner sac wide, coiled several times, covered with very fine, sparse scales; the distal portion contains a surface covered with dense, fined, much thickened spinules.

VARIABILITY. The paratype female has no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet is the Latin *insularis -e* (insular).

DISTRIBUTION. The species is only known from the type locality in Equatorial Guinea (Fig. 1665).

REMARKS. Fernando Po, now Bioko, is an island of Equatorial Guinea covered in tropical frainforest. The holotype is in poor condition.

10. ***Chaetocinus anommatophilus*** (Cameron, 1948) comb. n.

Leptacinus anommatophilus - Cameron, 1948: 228; Herman, 2001a: 3666

TYPE MATERIAL. The Muséum national d'Histoire naturelle in Paris preserves 2 males and 1 female labelled "*Muséum Paris / Côte d'Ivoire / Reserve du Banco / R. Paulian & R.C. Delamaire*", "*avec* Anomma / nigricans", "Leptacinus / anommatophilus / *Cam. / Type*", "*Type*" (printed on red label). I choose the first as lectotype and the others as paralectotypes of the species; the first is labelled "*Lectotypus* Leptacinus anommatophilus *Cam., Bordoni des. 2006*" and the others "*Paralectotypus* Leptacinus anommatophilus *Cam., Bordoni des. 2006*". All bear the determination label "Chaetocinus anommatophilus *(Cam.), Bordoni det. 2006*".

The Natural History Museum in London preserves 1 specimen labelled "*Cotype*" (on round label with yellow border), "*Musèum Paris / Côte d'Ivoire / Rèserve du Banco / R. Paulian & R.C. Delamaire*", "*avec* Anomma / nigricans", "Leptacinus / anommatophilus / *Cotype* (red ink) *Cam.*". I choose this specimen as paralectotype that now bears the labels "*Paralectotypus* Leptacinus anommatophilus *Cam., Bordoni des. 2009*" and "Chaetocinus anommatophilus *(Cam.), Bordoni det. 2009*".

DESCRIPTION. Length of body: 4.5 mm; from anterior margin of head to posterior margin of elytra: 2.3 mm. Fully winged. Body shiny, reddish brown. Head very convex, massive, oval, with slightly rounded sides and broadly rounded posterior angles. Eyes large and prominent. Surface of head with deep but very sparse punctures. Pronotum longer than head, dilated anteriorly where it is as wide as head, with broadly rounded anterior angles and sinuate sides; dorsal series of 6 fine punctures and lateral series of 4 punctures. Elytra sub-rectangular, narrow and long, much longer than and as wide as pronotum, with less marked humeral angles. Surface with sparse punctures arranged in a few series. Abdomen with transverse micro-striation and fine and very sparse punctures. Tergite and sternite of the male genital segment as in figures 1653, 1654. Aedeagus small (Fig. 1655), 0.77 mm long, with median lobe narrow; parameres stout; inner sac with some large distal spines and with some proximal structures.

DISTRIBUTION. The species is only known from the type locality in Ivory Coast (Fig. 1665).

BIONOMICS. The specimens were collected "*with* Anomma nigricans" (*Dorylus*), in "*réserve forestale*".

11. ***Chaetocinus sibitiensis*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Brazzaville, Sibiti IRHO, Endrödy-Younga, 23.XI.1963 (MTM).

DESCRIPTION OF HOLOTYPE. Male. Length of

body: 4.5 mm; from anterior margin of head to posterior margin of elytra: 2.6 mm. Fully winged. Body shiny, reddish brown with darker head and elytra. Head oval (Fig. 1651), with slightly rounded sides and broadly rounded posterior angles. Surface with large, deep and sparse punctures. Eyes large and prominent. Pronotum a little shorter than head, dilated anteriorly where it is as wide as head; dorsal series of 5 large punctures and lateral series of 3 punctures. Elytra large, long and wide, dilated posteriad, with marked humeral angles. Surface with shallow punctures arranged in three series, one juxtasutural, one median and one lateral. Tergite and sternite of the male genital segment as in figures 1656, 1657. Aedeagus oval (Fig. 1658), small, 0.74 mm long; parameres short, furnished with evident setae on the inner surfaces; inner sac with some unequal large spines.

ETYMOLOGY. The specific epithet refers to the type locality.

DISTRIBUTION. The species is only known from the type locality in Rep. Congo (Fig. 1665).

BIONOMICS. The specimen was collected in "*fruits, oil palm plantation*".

REMARKS. The specimen is in poor condition. Female unknown.

12. ***Chaetocinus dorylophilus*** n. sp.

EXAMINED MATERIAL. Holotype male: Congo, Yangambi, D.H. and A.C. Kistner and R. Banfill, 2.VII.1960 (FMNH); paratypes: same data, 1 male (cB); same data, 4.VII.1960, 1 female (FMNH); Congo, Kivu, T. Lubero, Biena, 1800 m, P.P.M.J. Celis, 24.VII.1954, 1 male (MRAC); Central African Rep., Bozo, 5.10N, 18.30E, N. Degallier, VII.1981, 2 males, 4 females (FMNH); 1 male, 2 females (cB); Tanzania, Tanga Distr., Amani, D. and A. Kistner, 21.IV.1966, 1 male (FMNH), 1 male (cB); Tanganyika, D. O. Afrika, Amani, S. Vossler, 27.IX.1904, 1 male, 1 female (MNB); same data, 20.IX.1904, 1 male (cB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 4.3 mm; from anterior margin of head to posterior margin of elytra: 2.2 mm. Fully winged. Body shiny, entirely light brown. Head sub-rectangular (Fig. 1652), with slightly rounded sides. Eyes large and prominent. Surface of head with more or less wide and sparse punctation. Pronotum as long as and anteriorly as wide as head, more dilated anteriorly, with more oblique anterior margins; dorsal series of 5 punctures and lateral series of 3 punctures. Elytra sub-rectangular, with sub-rectilinear and sub-parallel sides, more marked humeral angles and sparser punctation. Tergite and sternite of the male genital segment as in figures 1659, 1660. Aedeagus oval (Figs. 1661, 1798), 0.8 mm long; parameres long and narrow, furnished with evident setae on the inner sides; inner sac with some large unequal spines.

VARIABILITY. The paratypes have no substantial morphological differences with the holotype described.

ETYMOLOGY. The specific epithet refers to the habitat in which specimens were collected, with army ants of the genus *Dorylus* Fabricius, 1793.

DISTRIBUTION. The species is at present known from the Central African Rep., Congo and Tanzania (Fig. 1665).

BIONOMICS. The specimens were collected in "*debris pile of* Dorylus sp.", in "*column, and nest*" and in "*debris piles nest*". It seems possible that this species is a myrmecophile.

REMARKS. The species is very variable in size (some paratypes from Bozo are almost 5 mm long), and in colouration (some specimens are dark brown with black head), size of eyes (more or less large and prominent) and the shape of head, but the inner sac of the aedeagus (variable in size) is identical in all the studied males.

13. ***Chaetocinus guineanus*** n. sp.

EXAMINED MATERIAL. Holotype male: Rep. Guinea, Seredou, Zott, 4.IV.1975 (MNB).

DESCRIPTION OF HOLOTYPE. Male. Length of body: 3.1 mm; from anterior margin of head to pos-terior margin of elytra: 1.8 mm. Fully winged. Body with more or less polygonal micro-reticulation on head and pronotum. Reddish brown. Head short, subquadrate, a little dilated anteriorly, with slightly rounded sides and broadly rounded posterior angles. Eyes very large and prominent. Surface of head with fine and very sparse punctures. Pronotum a little longer than head, dilated anteriorly where it is as wide as head, with very oblique anterior margins and less marked anterior

angles; dorsal series of 7 large punctures and lateral series of 3 large and widely spaced punctures. Elytra proportionately very long and broad, much longer and wider than pronotum, dilated posteriad, with less marked humeral angles. Surface with very fine and sparse punctures arranged in four series, two near the suture, one median and one lateral. Tergite and sternite of the male genital segment as in figures 1662, 1663. Aedeagus oval (Fig. 1664), small, 0.6 mm long, with sub-acute median lobe; parameres long and broad, with evident setae to the inner sides; inner sac with some large unequal spines.

ETYMOLOGY. The specific epithet refers to Guinea.

DISTRIBUTION. The species is only known from the type locality in Guinea (Fig. 1665).

REMARKS. Female unknown.

Below I cite here two species described on the basis of females. Only the study of males can establish their systematic position in the genus. I have not included these species in the key to species.

Chaetocinus niger (Cameron, 1949) comb. n.

Leptacinus niger - Cameron, 1949: 319; Herman, 2001a: 3679

TYPE MATERIAL. The Natural History Museum in London preserves 1 specimen labelled "*IFAN 1946 / Mt. Nimba / 500-700 m / A. Villiers*", "*Syntype*" and "*Cotype*" (on rounde label with blue border), "*Forest prim. / V.20.IX*", "*Dr. M. Cameron det. 1948 /* Leptacinus / niger *Cam. / Cotype*", "Leptacinus / niger *Cam. / P.M. Hammond det. 1981 / Syntype female*". It is a female with the determination label "Chaetocinus niger *(Cam.), Bordoni det. 2012*". I choose this specimen as lectotype of the species; it now bears also the label "*Lectotypus* Leptacinus niger *Cam., Bordoni des. 2012*".

DESCRIPTION. Female. Length of body: 7 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Very dark reddish brown with black head. Body robust. Head large, dilated posteriad, with prominent eyes, deep ocular and frontal grooves, and irregular punctation, deep on the sides. Pronotum short, broad, with broadly rounded posterior angles and slightly rounded sides; dorsal series of 5, 6 punctures and lateral series of 3, 4 smaller punctures. Elytra sub-rectangular, broad, a little longer than pronotum, with less marked humeral agles. Surface with fine punctures arranged in three series, one juxtasutural, one median and one lateral. Abdomen shiny, rugose on the sides, with fine and very sparse punctures and evident pubescence.

DISTRIBUTION. Ivory Coast.

REMARKS. Male unknown. Mount Nimba, the largest mountain of West Africa, is situated at the borders of Ivory Coast, Guinea and Liberia, with slopes covered in dense forests. This is one of the few places in Africa south of Sahara on which was conducted recently entomological research (Lovett & Wasser, 1993; Lamotte & Roy, 2003).

Cameron (1949) did not designate a holotype, and I found two specimens with the same labels. The first, a female, corresponds to the original description and is named *Chaetocinus niger*; the second does not correspond to the description and belongs to another genus (see *Phacophallus bangoranus* n. sp.). For these reasons I designate the lectotype of *C. niger*.

The species was cited also from Congo (Herman, 2001a), but I did not find this record.

Chaetocinus congoensis (Bernhauer, 1929) comb. n.

Leptacinus congoensis - Bernhauer, 1929: 120; Scheerpeltz, 1933: 1301; Cameron, 1950: 29; Herman, 2001a: 3671

TYPE MATERIAL. The Musée royal de l'Afrique centrale in Tervuren preserves 3 specimens, two of which are labelled "*Haute Uele/ Watsa, XI.1919 / L. Burgeon*"; one of these also has the label "Leptacinus / congoensis / *Brnh. typ.*" (handwritten by Bernhauer), and the other with "*vue par Cameron / en XI.32*"; the third is labelled "*Elisabethville / Pweto 1918 / Dr. Gérard*"; all have an orange label with black border "*TYPE*" (printed). All are females. I choose the specimen with Bernhauer's determination label as lectotype of the species; it now bears the label "*Lectotypus* Leptacinus congoensis *Bh., Bordoni des. 2006*"; I choose the others as

paralectotypes of the species; these have the label "*Paralectotypus* Leptacinus congoensis *Bh., Bordoni des. 2006*". All bear the determination label "Chaetocinus congoensis *(Bh.), Bordoni det. 2006*".

CITED MATERIAL (not examined). Congo, Kanyabayongo (Kabasha), 1760 m; Rutshuru, 1285 m; Rutshuru (riv. Fuku), 1250 m (Cameron, 1950, as *Leptacinus*).

DESCRIPTION. Length of body 3.5–4 mm; from anterior margin of head to posterior margin of elytra: 2.1 mm. Light brown with yellowish elytra. Head dilated posteriad, with medium-sized, prominent eyes and with large and dense punctation except on a broad median band. Pronotum strongly dilated anteriorly, with very oblique anterior margins and broadly rounded anterior angles; dorsal series of 5, 6 punctures and lateral series of 3, 4 punctures. Elytra slightly longer and wider than pronotum, with obsolescent humeral angles. Surface with fine punctures arranged in three series, one juxtasutural, one median and one lateral. Male unknown.

DISTRIBUTION. The species is at present known from Congo.

REMARKS. In his description Bernhauer (1929) wrote "*Haute-Uele, Moto, nov. 1923, Burgeon*" and "*Uganda: Bussu Busoga, 1910 E. Bayon*". I did not find specimens with these labels.

INCERTAE SEDIS

Xantholinus enigmaticus Coiffait, 1968

Xantholinus enigmaticus - Coiffait, 1968: 151; Herman, 2011a: 3794

TYPE MATERIAL. The Muséum National d'Histoire Naturelle in Paris preserves 1 specimen labelled "*Belinga 67 / 7.2.63 / H. Coiffait*", "*Mission Biologique / au Gabon / P. P. Grassé Directeur*", "*Holotype*"(printed on red label), "Xantholinus / enigmaticus *Coiff. / H. Coiffait 1967*". It is a female.

DISTRIBUTION. Gabon.

REMARKS. In the absence of a male I am not able to refer this specimen to a known genus, but it is not a *Xantholinus*, a genus which does not occur in Africa south of Sahara. For the external characters of the species I refer to the original description, emphasising only the following: body apterous, not flat, light brown with darker head, about 5 mm long; head shiny with deep and dense punctures apart from on a median band; eyes small and flat; pronotum with short dorsal and lateral series of punctures; elytra with sparse shallow punctures arranged in three series, one juxtasutural, one median, one lateral. It is instead interesting to point out the following characters: epipleural superior line of pronotum not meeting the inferior line, epistoma quadrate, ocular and frontal grooves shallow (and not deep as in the original description), anterior tarsi strongly dilated; maxillary and labial palpi with very long terminal segments; gular sutures widely separate; antesternal plate divided; metasternum very short; metatibiae with one ctenidium only.

Only the study of a male can clarify the systematic position of the species.

Leptacinus longipennis Cameron, 1951

Leptacinus longipennis - Cameron, 1951; 398; Herman, 2001a: 3677

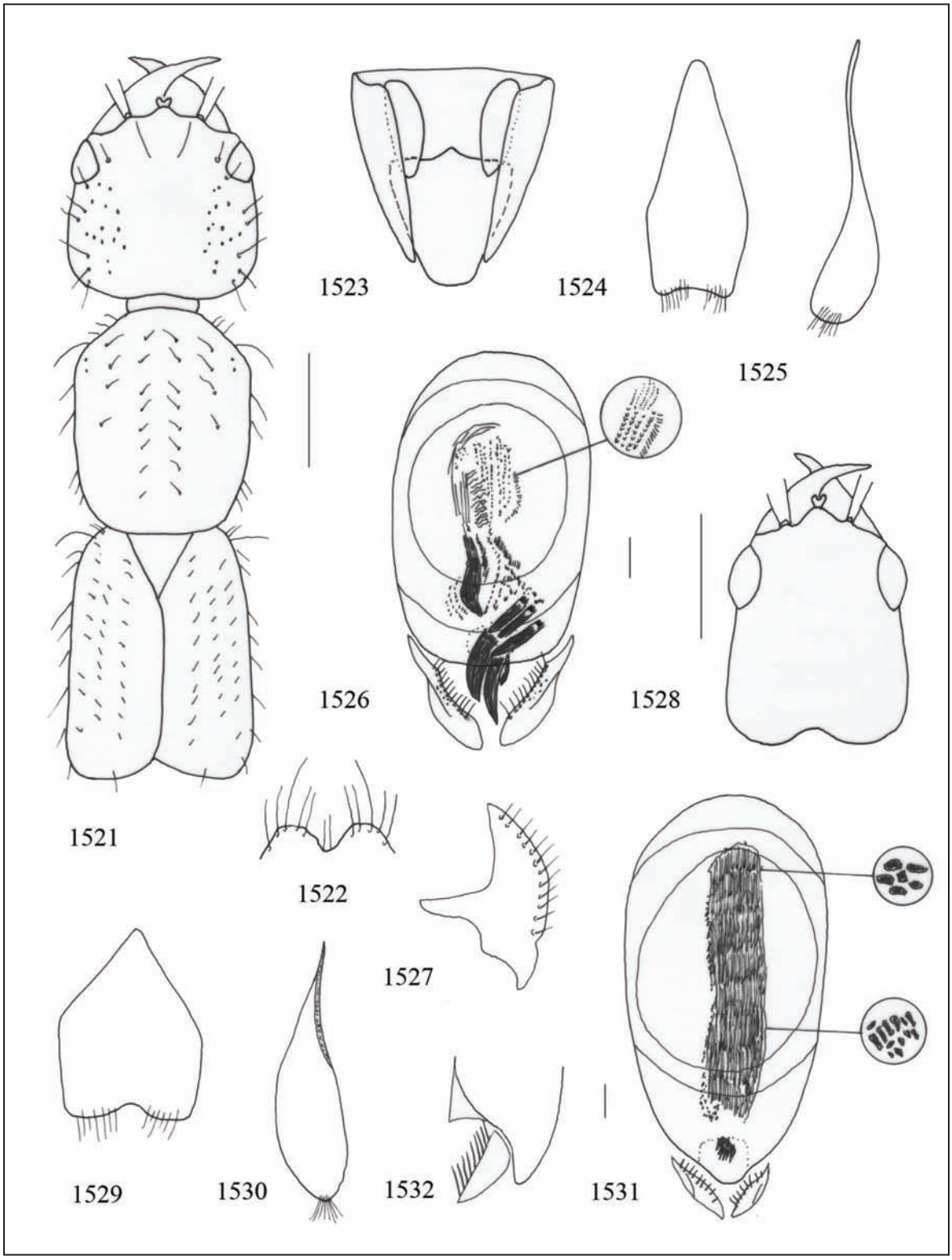
TYPE MATERIAL. The Natural History Museum in London preserves 1 specimen labelled "*Mac Innes 12-38/ Kabeta 5800 ft.*", "*Type*" (on round label with red border), "Leptacinus / longipennis / *Type Cam.*". It is a female.

DESCRIPTION. Female. Length of body: 5.5 mm; from anterior margin of head to posterior margin of elytra: 2.8 mm. Brown, with darker head; antennae and legs light brown. Body elongate, narrow, with very long, sub-rectangular elytra. Surface of head with deep and dense punctures; pronotum with dorsal series of 10, 11 punctures and lateral series of 6, 7 punctures. Scutellum large. Elytra with subrectilinear and sub-parallel sides and marked humeral angles. Surface with fine punctures arranged in several series.

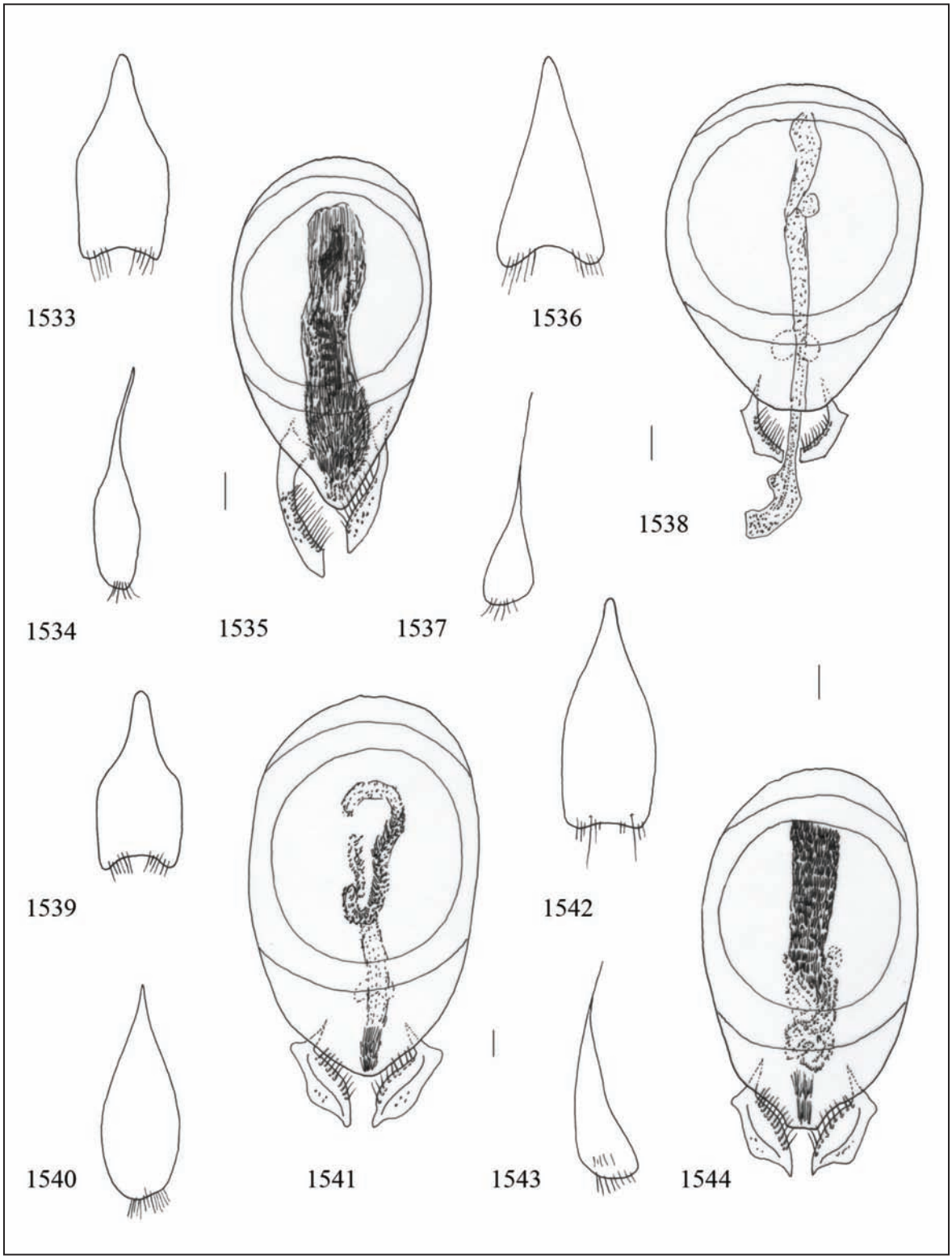
DISTRIBUTION. Kenya.

REMARKS. Male unknown. In the description Cameron wrote that the type is from Naivasha: I did not find this specimen.

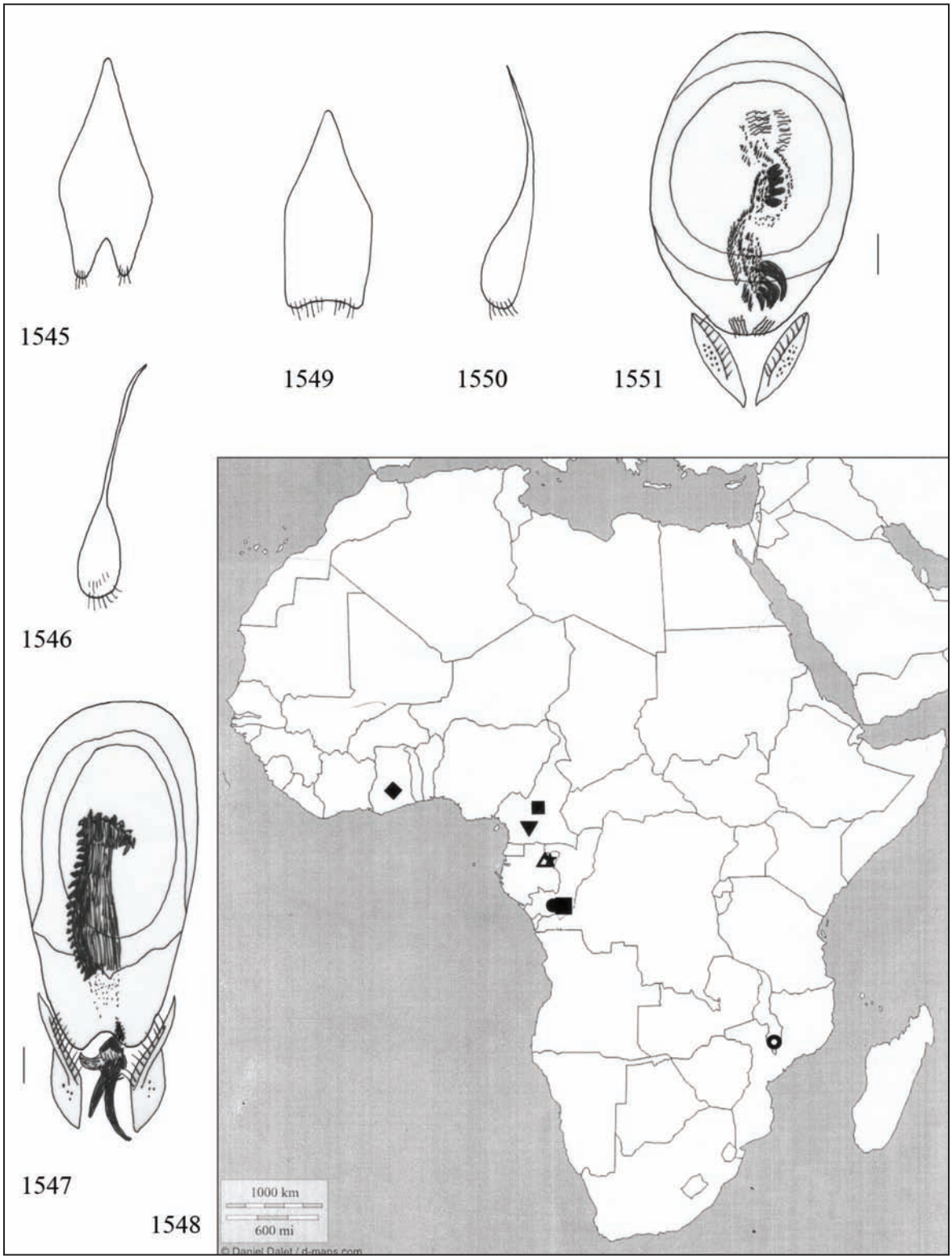
Only the study of a male can clarify the systematic position of the species.



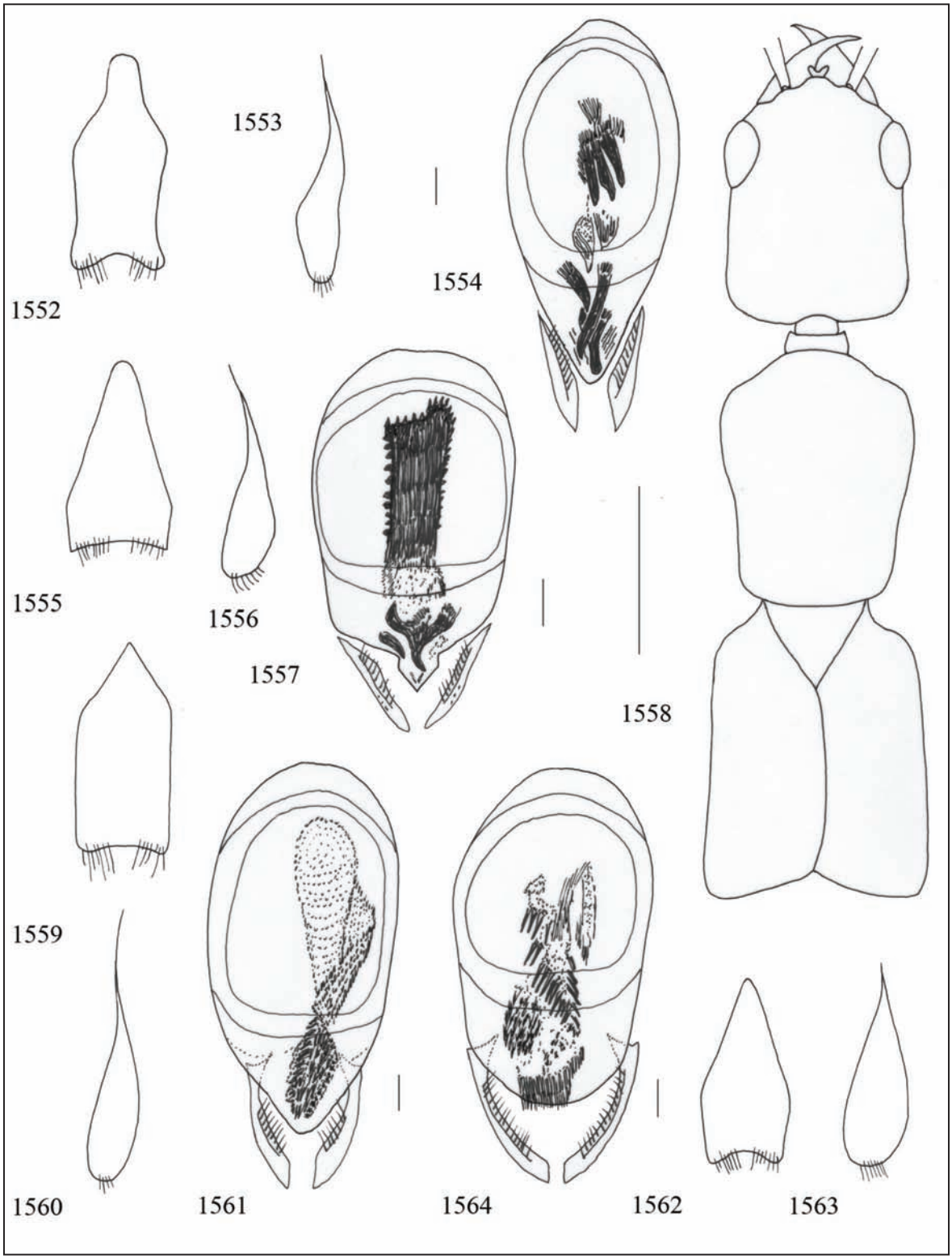
Figures 1521–1532. *Chaetocinus heterocephalophilus* n. sp.: fore-body (bar scale: 0.5 mm) (Fig. 1521), labrum (Fig. 1522), female genital segment (Fig. 1523). Tergite and sternite of the male genital segment, aedeagus (Figs. 1524–1526), with paramere in lateral view (Fig. 1527) (bar scale: 0.1 mm) of *C. ruwenzori* n. sp. Head (bar scale: 0.5 mm) (Fig. 1528), tergite and sternite of the male genital segment, aedeagus of *C. major* (Figs. 1529–1531), with distal portion of aedeagus in lateral view (Fig. 1532).



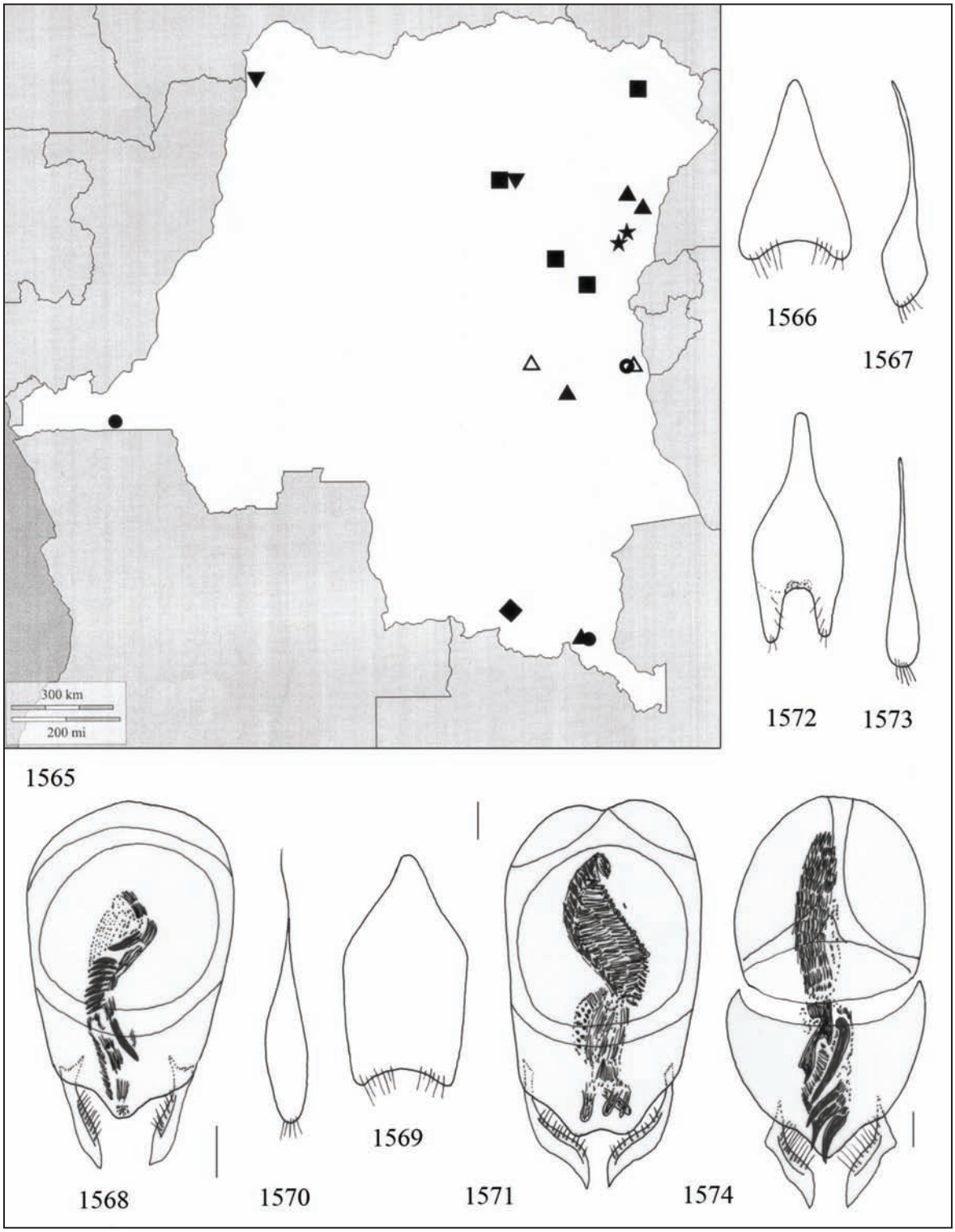
Figures 1533–1544. Tergite and sternite of the male genital segment, aedeagus of *Chaetocinus silvestris* n. sp. (Figs. 1533–1535) and *C. brunneus* (Figs. 1536-1538) (bar scale: 0.1 mm), tergite and sternite of the male genital segment, aedeagus of *C. spectabilis* (Figs. 1539–1541) and *C. lemniscatus* n. sp. (Figs. 1542–1544).



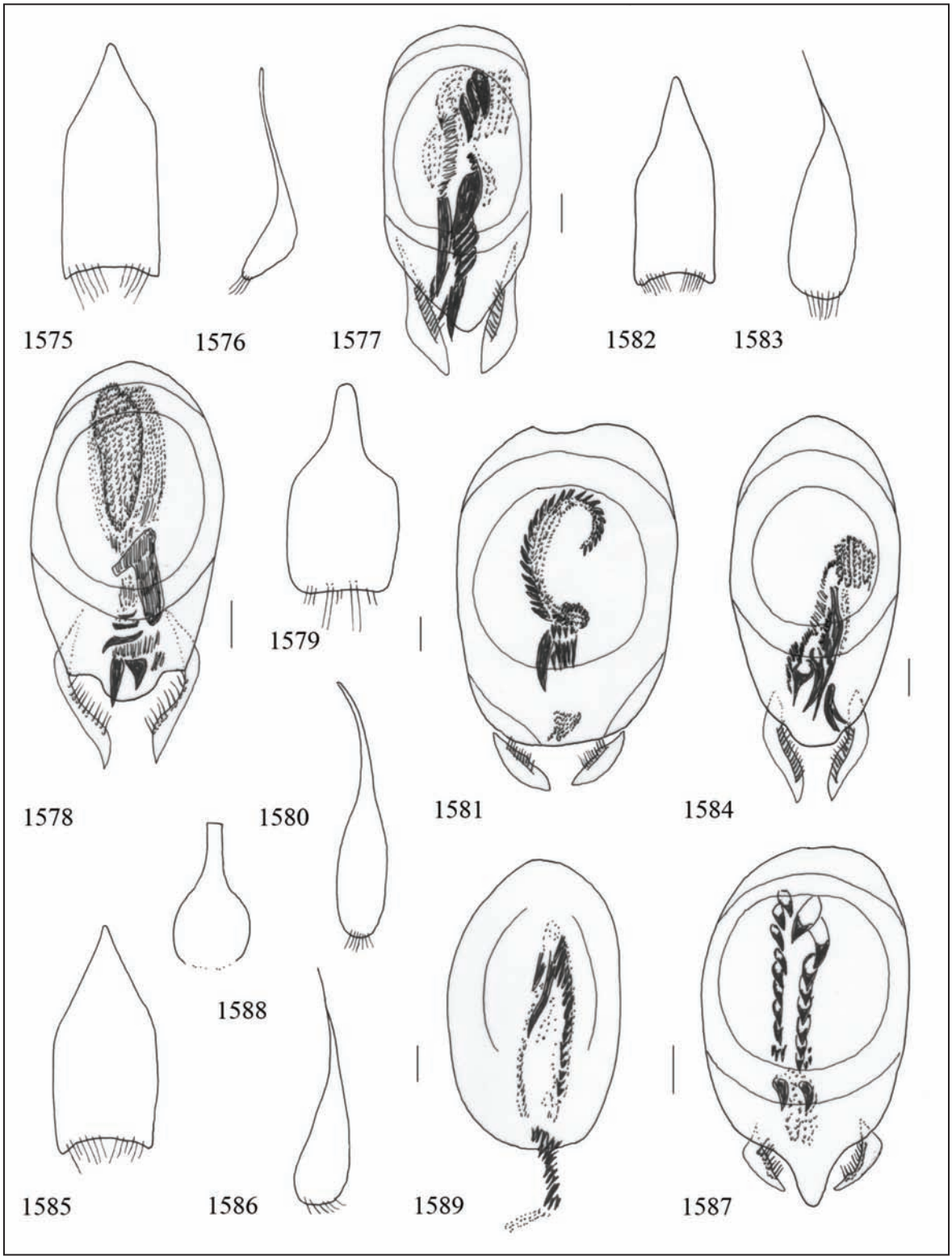
Figures 1545–1551 Tergite and sternite of the male genital segment, aedeagus of *Chaetocinus mirandus* n. sp. (Figs. 1545–1547) (bar scale: 0.1 mm) and *C. camerunensis* n. sp. (Figs. 1549–1551). Fig. 1548: distribution of the genus *Chaetocinus*: *C. major* sub-group: *major* (open triangle), *C. brunneus* (filled star), *C. mirandus* n. sp. (open circle), *C. camerunensis* n. sp. (small filled square), *C. novus* n. sp. (filled circle), *C. persalsus* n. sp. (inverted filled triangle), *C. meya* n. sp. (big filled square).



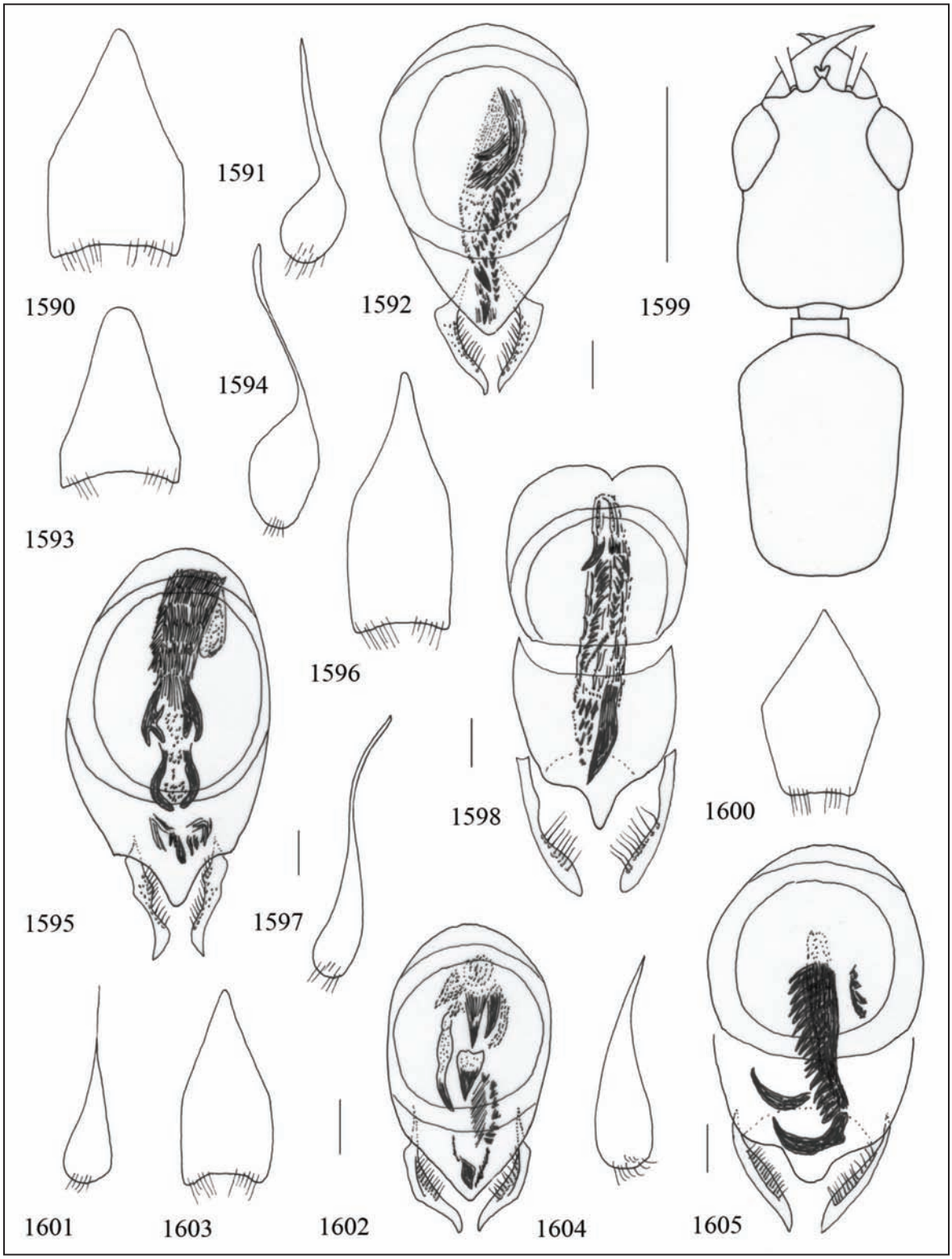
Figures 1552–1564. Tergite and sternite of the male genital segment, aedeagus of *Chaetocinus ghanensis* n. sp. (Figs. 1552–1554), and *C. novus* n. sp. (Figs. 1555–1557) (bar scale: 0.1 mm). Figs 1558–1564. *Chaetocinus persalsus* n. sp.: fore-body (bar scale: 0.5 mm) (Fig. 1558), tergite and sternite of the male genital segment, aedeagus (1559–1561), tergite and sternite of the male genital segment, aedeagus of *C. katanganus* n. sp. (Figs. 1562–1564) (bar scale: 0.1 mm).



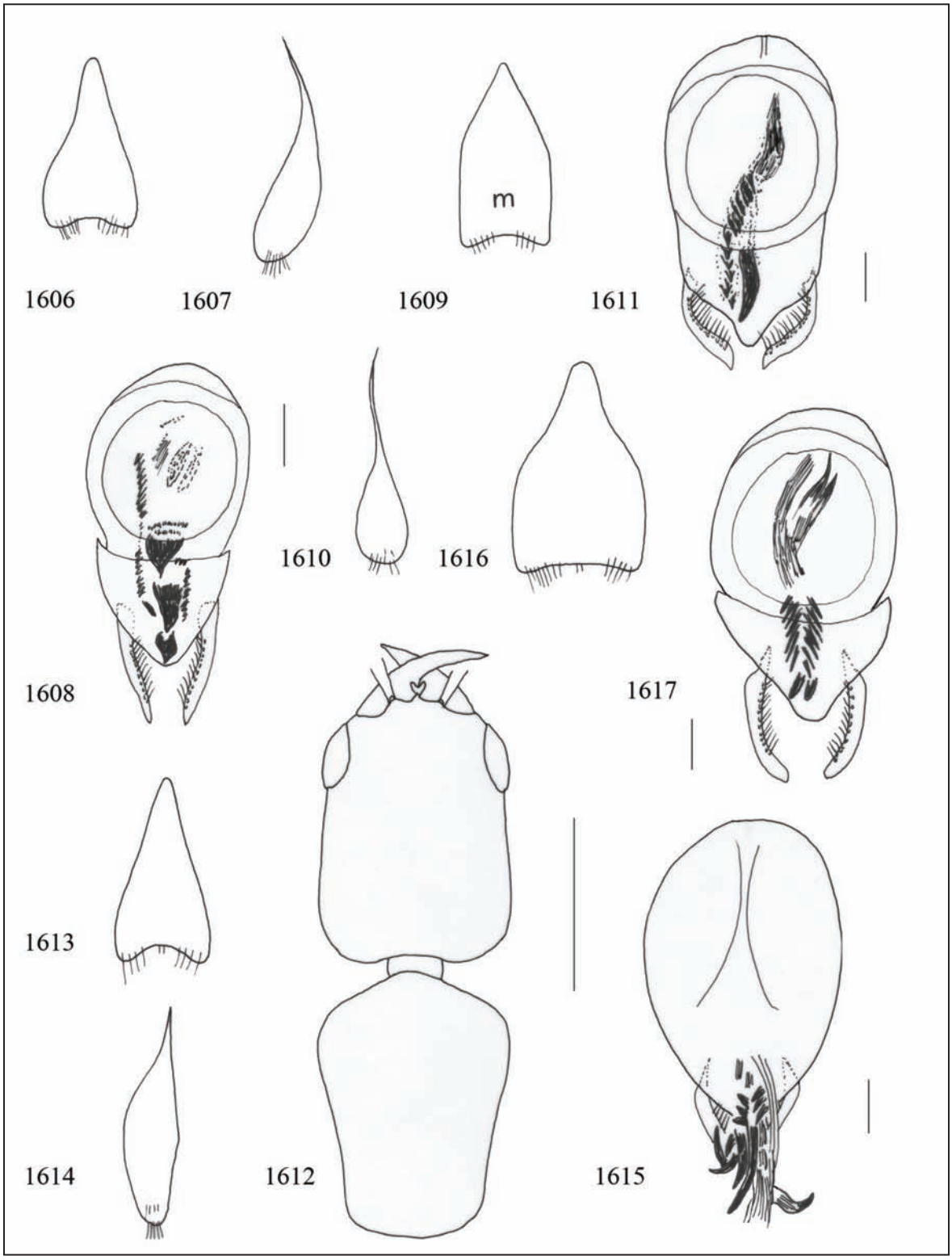
Figures 1565–1574. Fig. 1565: distribution of the genus *Chaetocinus* in Congo: *C. ruwenzori* n. sp. (star), *C. silvestris* n. sp. (filled triangle), *C. spectabilis* (filled square), *C. lemniscatus* n. sp. (open circle), *C. katanganus* n. sp. (rhombus), *C. fizianus* n. sp. (open triangle), *C. meya* n. sp. (filled circle), *C. persalsus* n. sp. (inverted filled triangle). Tergite and sternite of the male genital segment, aedeagus of *C. fizianus* n. sp. (Figs. 1566–1568), *C. meya* n. sp. (Figs. 1569–1571), and *C. kenyanus* n. sp. (Figs. 1572–1574) (bar scale: 0.1 mm).



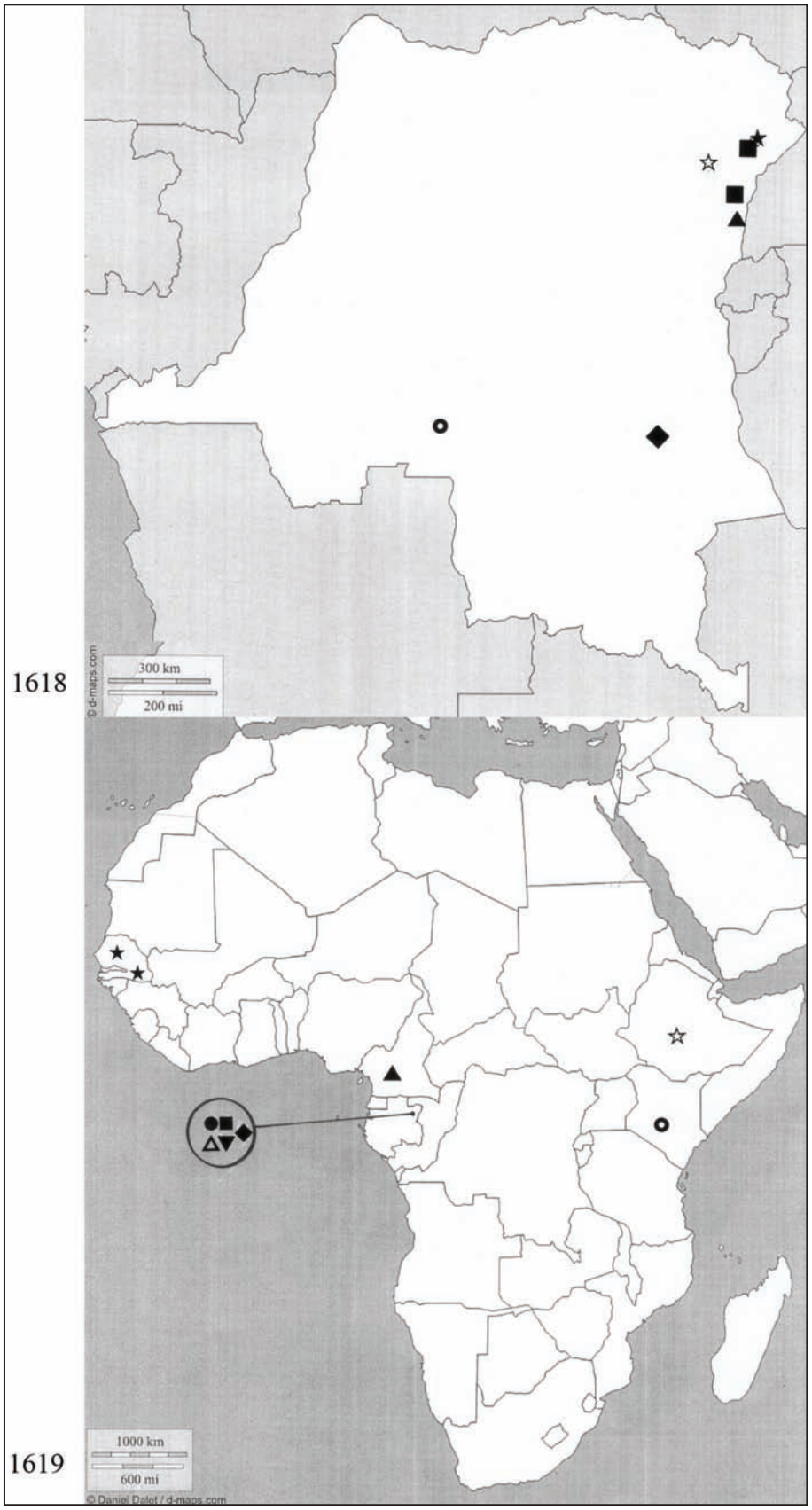
Figures 1575–1589. Tergite and sternite of the male genital segment, aedeagus of *Chaetocinus nizianus* n. sp. (Figs. 1575–1577), and aedeagus of *C. lipposus* (Fig. 1578). Tergite and sternite of the male genital segment, aedeagus (bar scale: 0.1 mm) of *C. grassei* (Figs. 1579–1581), *C. brevisulcatus* (Figs. 1582–1584), and *C. oculatus* (Figs. 1585–1587). *Chaetocinus rufoterminatus*: tergite of the male genital segment and aedeagus (damaged) (Figs. 1588, 1589) (bar scale: 0.1 mm).



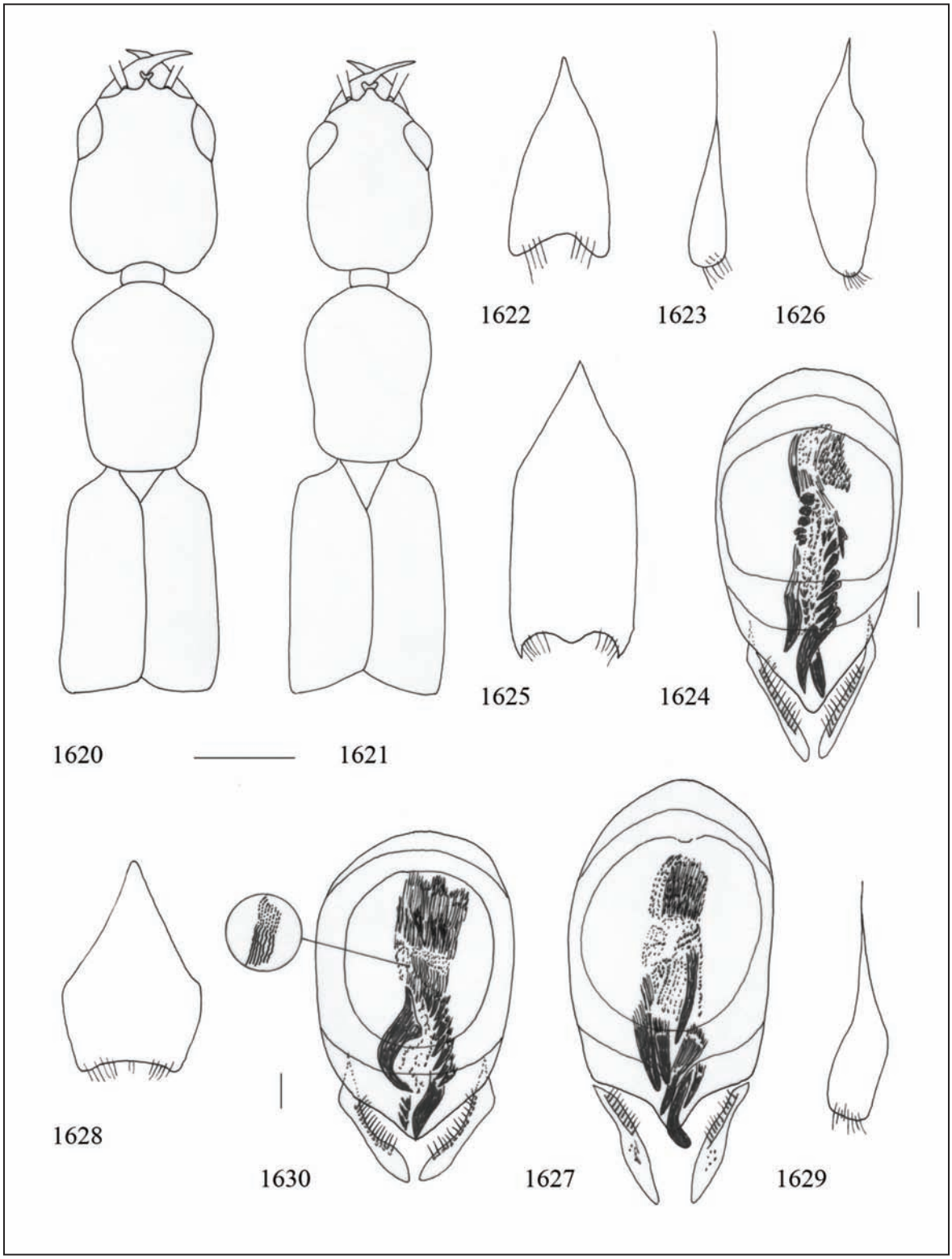
Figures 1590–1605. Tergite and sternite of the male genital segment, aedeagus of *Chaetocinus kitutu* n. sp. (Figs. 1590–1592), *C. amoenus* n. sp. (Figs. 1593–1595), and *C. testaceipennis* (Figs. 1596–1598) (bar scale: 0.1 mm). *Chaetocinus notabilis* n. sp. head and pronotum (bar scale: 0.5 mm) (Fig. 1599), tergite and sternite of the male genital segment, aedeagus (Figs. 1600–1602). Tergite and sternite of the male genital segment, aedeagus of *C. delicatulus* (Figs. 1603–1605),



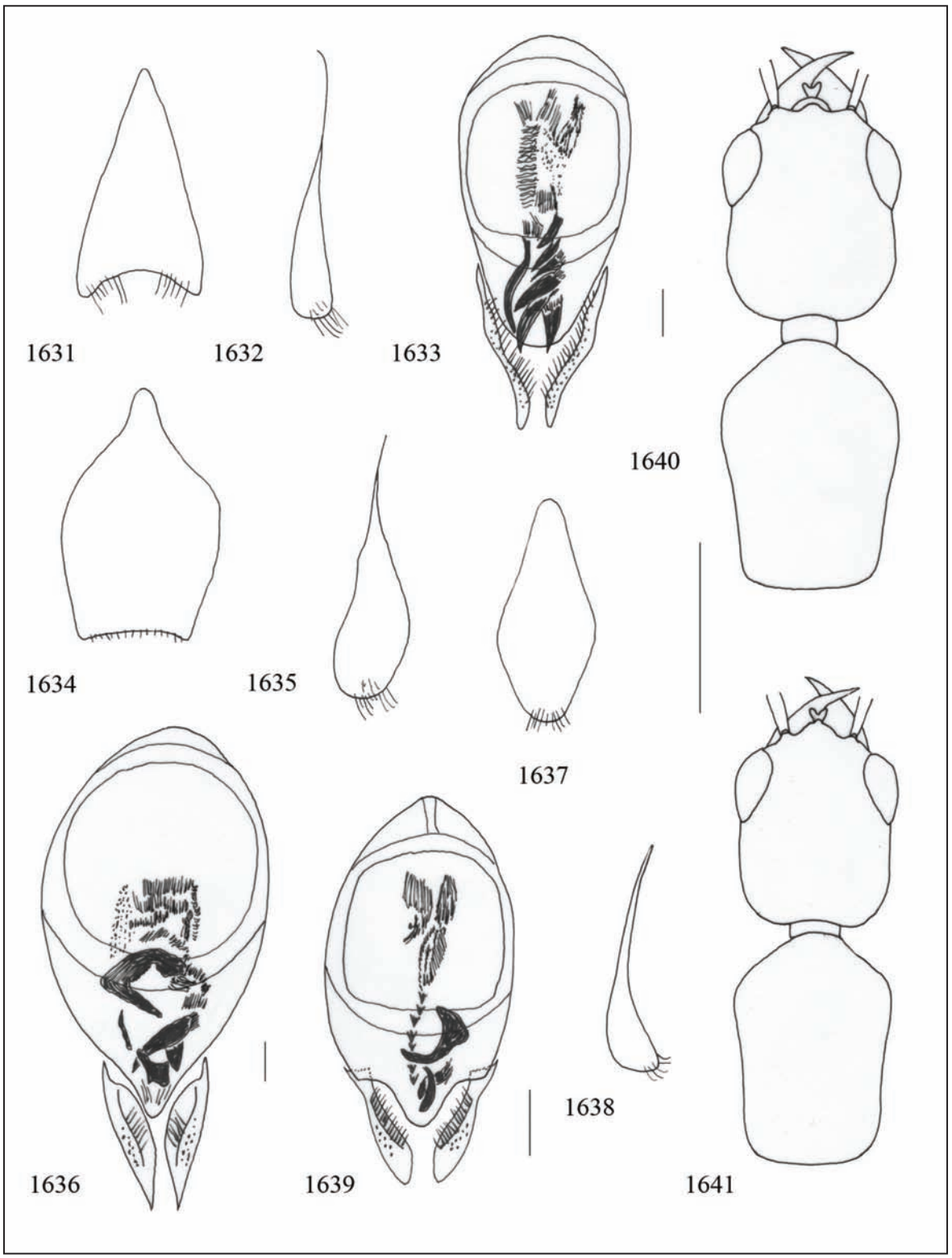
Figures 1606–1617. Tergite and sternite of the male genital segment, aedeagus of *Chaetocinus minutus* (Figs. 1606–1608) (bar scale: 0.1 mm), and *C. gerardi* (Figs. 1609–1611) (bar scale: 0.1 mm). *Chaetocinus aethiopicus* n. sp.: head and pronotum (bar scale: 0.5 mm) (Fig. 1612), tergite and sternite of the male genital segment, aedeagus (Figs. 1613–1615). Tergite of the male genital segment, aedeagus of *C. cameroni* (Figs. 1616, 1617) (bar scale: 0.1 mm).



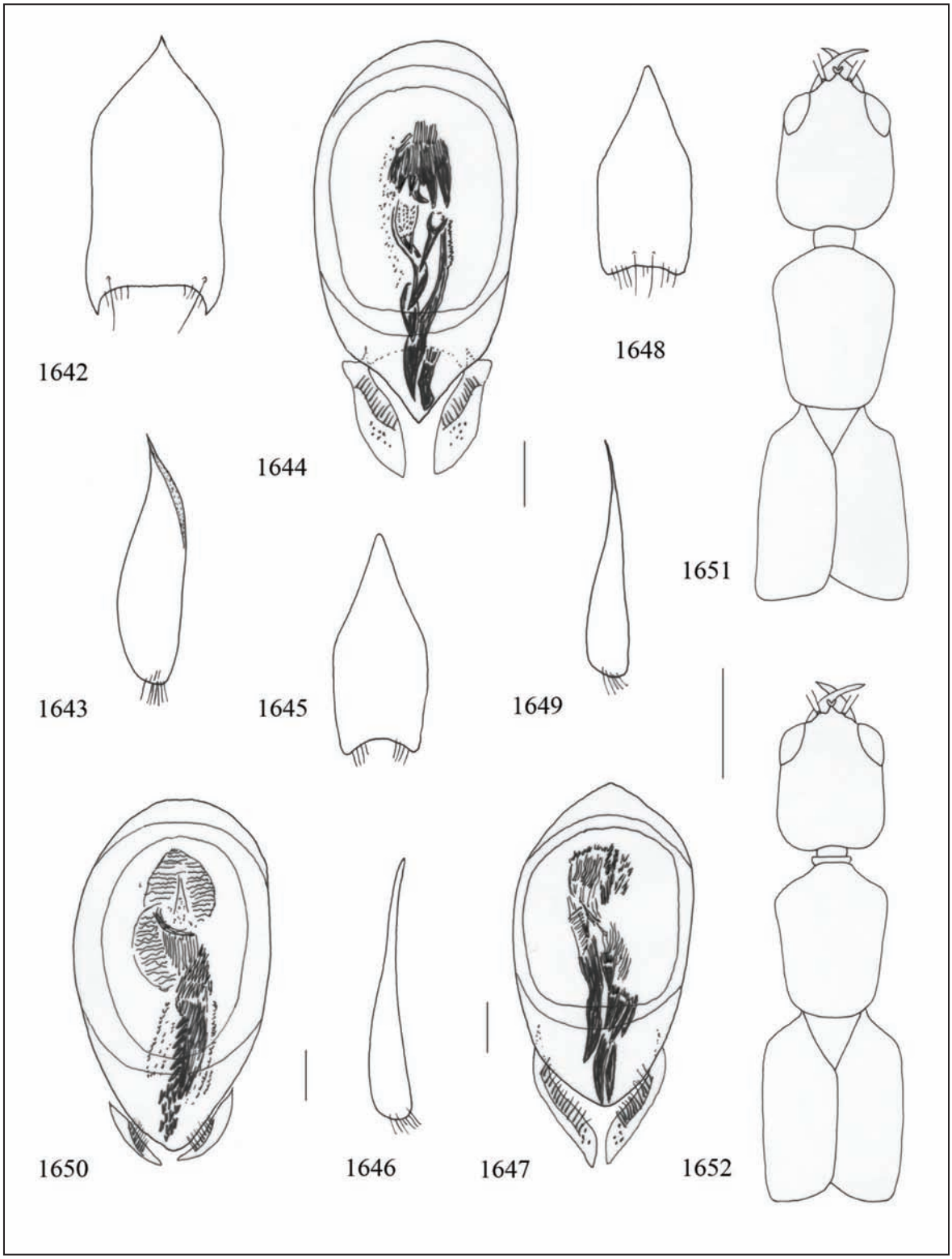
Figures 1618, 1619. Fig. 1618: distribution of *Chaetocinus testaceipennis* sub-group in Congo: *C. nizianus* n. sp. (filled star), *C. brevisulcatus* (square), *C. kitutu* (triangle), *C. testaceipennis* (open star), *C. gerardi* (open circle).
Fig. 1619: distribution of the genus *Chaetocinus*: *C. testaceipennis* subgroup: *C. kenyanus* n. sp. (open circle), *C. rufoterminatus* (filled star), *C. notabilis* n. sp. (filled triangle), *C. cameroni* (open star). Distribution of the genus *Chaetocinus* in Gabon: *C. lipposus* (filled circle), *C. grassei* (filled square), *C. oculatus* (open triangle), *C. delicatulus* (inverted filled triangle), *C. paulus* (rhombus).



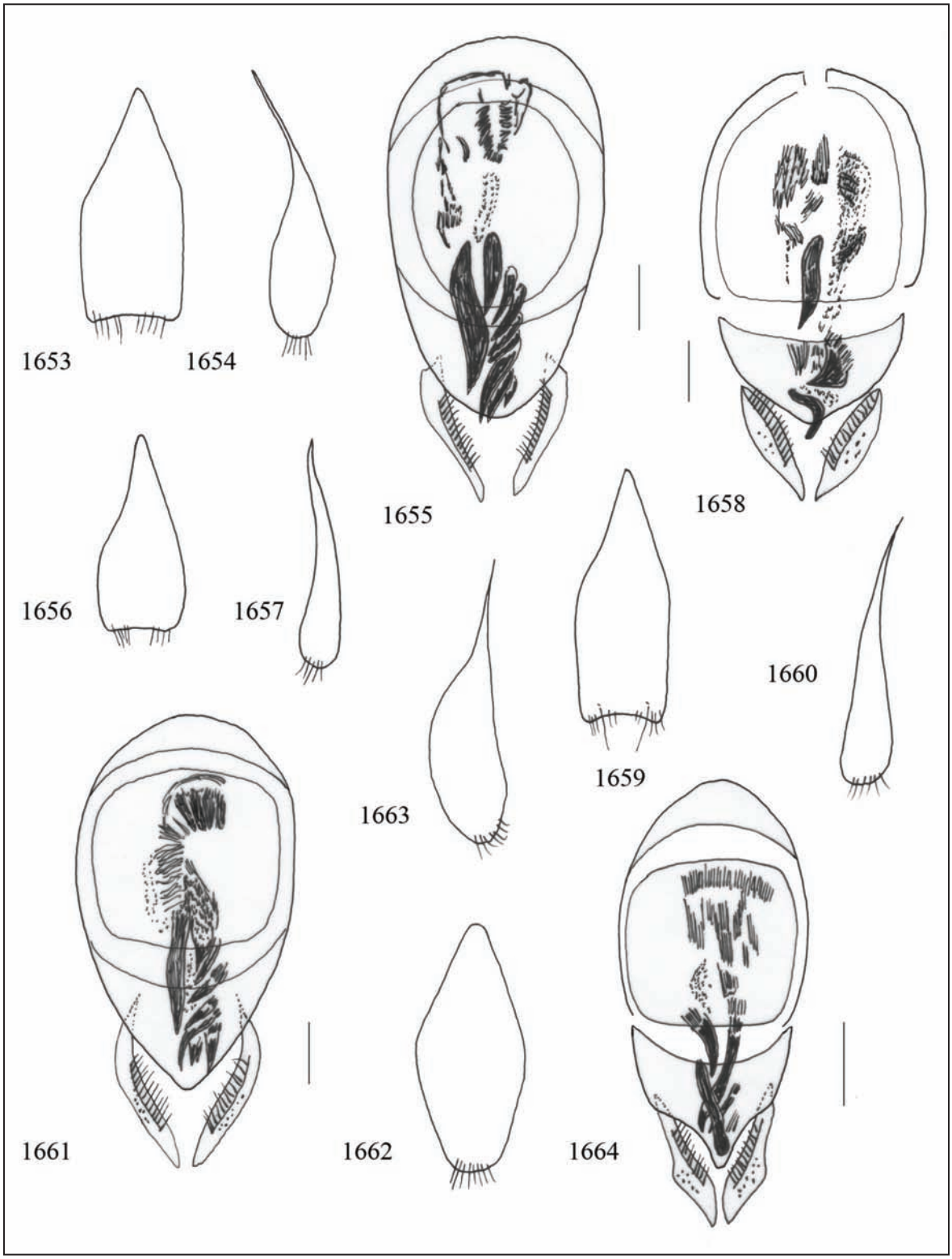
Figures 1620–1630. Fore-body of *Chaetocinus theiba* n. sp. (Fig. 1620) and *C. elgonicus* n. sp. (Fig. 1621) (bar scale: 0.5 mm). Tergite and sternite of the male genital segment, aedeagus of *C. theiba* n. sp. (Figs. 1622–1624), *C. elgonicus* n. sp. (Figs. 1625–1627), and *C. kivuensis* n. sp. (Figs. 1628–1630) (bar scale: 0.1 mm).



Figures 1631–1641. Tergite and sternite of the male genital segment, aedeagus of *Chaetocinus nidorum* n. sp. (Figs. 1631–1633), *C. heterocephalophilus* n. sp. (Figs. 1634–1636), and *C. bugalensis* n. sp. (Figs. 1637–1639) (bar scale: 0.1 mm). Fore-body of *C. asymetricus* n. sp. (Fig. 1640) and *C. liberianus* n. sp. (Figs. 1641) (bar scale: 0.5 mm).



Figures 1642–1652. Tergite and sternite of the male genital segment, aedeagus of *Chaetocinus asymetricus* n. sp. (Figs. 1642–1644), *C. liberianus* n. sp. (Figs. 1645–1647), and *C. insularis* n. sp. (Figs. 1648–1650) (bar scale: 0.1 mm). Fore-body of *C. sibitiensis* n. sp. (Fig. 1651) and *C. dorylophilus* n. sp. (Fig. 1652) (bar scale: 0.5 mm).



Figures 1653–1664. Tergite and sternite of the male genital segment, aedeagus of *Chaetocinus anommatophilus* (Figs. 1653–1655), *C. sibitiensis* n. sp. (Figs. 1656–1658), *C. dorylophilus* n. sp. (Figs. 1659-1661), and *C. guineanus* n. sp. (Figs. 1662–1664) (bar scale: 0.1 mm).

Figures 1665. Distribution of the genus *Chaetocinus*: *C. anommatophilus* sub-group: *C. theiba* n. sp. (filled star), *C. elgonicus* n. sp. (big filled square), *C. kivuensis* n. sp. (filled triangle), *C. nidorum* n. sp. (inverted triangle), *C. heterocephalophilus* n. sp. (filled circle), *C. bugalensis* (open triangle), *C. asymetricus* n. sp. (open square), *C. liberianus* n. sp. (open circle), *C. insularis* n. sp. (arrow), *C. anommatophilus* n. sp. (rhombus), *C. sibitiensis* n. sp. (open star), *C. dorylophilus* n. sp. (small filled square).

CONSIDERATIONS ON THE DISTRIBUTION OF AFROTROPICAL XANTHOLININI

For historical reasons the most thoroughly explored areas of the continent are ones that are former Belgian, British, French and German colonies, where scientific expeditions, such as those mounted by the MRAC in Congo, and in particular the Kivu region.

Vast areas that were outside these colonies, or that were thought to be less attractive for exploration by naturalists remained very poorly investigated; the few data available from them are for the most part results of occasional collections. These areas therefore offer ample opportunities for new discoveries of Xantholinini in this enormous continent; such areas include for example Liberia, Somalia, Ethiopia, the Republic of Congo, Central African Republic, Nigeria, Angola, Namibia, Botswana, Malawi and Mozambique.

The Xantholinini of Africa south of the Sahara are abundant because the species of this tribe belong to genera that prefer moist tropical and subtropical environments.

The genera can be divided into a number of groups according to distribution, ignoring species introduced by man and excluding, except for one case, the Neotropical Region, because the Xantholinini there are still too little known.

Palaearctic genera

Stenistoderus is a Palaearctic genus which has a single representative in North America.

The material of this genus studied, in contrast to other genera, provides no data on habitats, but it is known that the species live in damp environments.

Nudobius occurs in the Palaeactic Region (where it is quite common) eastward to China and Japan (16 species) and in the Nearctic Region (7 species), and is very widespread in Africa (42 taxa), but this genus requires a separate comment (see below).

The genus *Gyrohypnus* is distributed in the Holarctic Region where is very common and widespread, eastward the Himalayan mountains, China and Taiwan (very few taxa). Only one species occurs in North Myanmar. One species occurs in North America. It was introduced elsewhere because the species are partly synanthropic, living in decomposing substances and the dung of farm animals. In the Afrotropical Region it occurs in the equatorial and sub-equatorial areas with 8 endemic species.

Oriental (and sometimes Neotropical) genera

One genus (*Neoxantholinus*) is distributed both in Oriental and in Neotropical Regions and is present also in New Zealand, Australia and Pacific islands. In the Afrotropical Region this sub-corticicolous genus is not usually common but is represented by 5 endemic species. The genus *Zeteotomus* occurs in the Indomalayan sub-region with an equatorial distribution, to New Guinea and Pacific islands, but not Australia (where it is replaced by the genus *Australinus*).

A few species also occur in the Palaearctic Region. In Africa, where it is represented 8 endemic sub-corticolous species in the equatorial zone, it is not usually common.

The genus *Xanthophius*, apparently composed of few taxa, occurs especially in the Oriental Region (3 species) eastward to Lombok and Sumba (1 non endemic species), in the eastern part of the Palaearctic Region (China and Japan) with three species, in Australia (2 endemic taxa). In Africa it is represented by 4 endemic species in the south-central zones.

These genera seem to originate the Oriental Region.

Widespread genera

Some genera seem to occur all over the world; these include *Gauropterus* which has relatively few taxa, but is known from almost all regions, except Australia. In the Afrotropical Region it is represented by 10 endemic species in all climatic zones of the continent.

Thyreocephalus is characteristic of warm regions of the earth, although its general distribution is yet to be defined; it is well represented in the Oriental Region (more than 40 species), Australia (17 species), and New Guinea (21 species). Some taxa also occur in China, but not in the Western part of the Palaearctic Region. In Africa the genus is represented by numerous taxa (40) in all climatic zones.

Achmonia was previously confused with *Thyreocephalus* and in some regions the two genera are sympatric, so the general distribution of *Achmonia* is incompletely defined. At present it is known from the Oriental Region, Australia and in the eastern part of the Palaearctic Region (China). In Africa there are 7 endemic taxa, distributed especially in the central zones.

Phacophallus occurs in the Palaearctic Region (3 taxa) and Oriental Region (5 taxa). Some species are synanthropic and have been introduced elsewhere, where they frequent decomposing substances and the dung of farm animals. In the Afrotropical Region this genus is very widespread in almost all zones (19 species). This genus seems to have its centre of distribution in Africa. These species, which often frequent dung, find favourable habitats here owing to the many mammals.

Genera composed by apterous and fully winged species

Some genera are composed by two categories of species, apterous and fully winged taxa, almost always living in different part of Africa. Not sur-

prisingly the flightless species inhabit the highest parts of the mountains and the fully winged species live at lower altitudes.

Nudobius. The very numerous apterous taxa (19) are concentrated in Kenya (Mt Kenya and Mt Elgon), especially under stones in alpine grasslands, differentiated, it seems, also according to the altitude and slope, more frequent especially on the western slopes, probably because these are most easily accessible to collectors. The fully winged taxa (23) occurs in central-southern zones, with a few species in Ethiopia. The continent could be the centre of dispersal of the genus towards the Palaearctic Region (North Africa, Europe, China, Japan).

Notolinopsis. This genus is also composed by the two categories of species; the apterous ones are focused in central zones (Mt Elgon in Kenya and especially on the mountains of the Kivu region in Congo), under stones but especially in humus of bamboo forests (13 taxa). The fully winged species (21) occur especially in South Africa and is the most representative genus of Xantholinini in this region.

Metocinus. This is the most speciose genus of those studied from the continent (82 taxa). It is divided in the two categories. The apterous species (30) occurs in central zones, especially in the mountains of the Kivu region in Congo and secondly in Rwanda and Tanzania, in humus of bamboo and *Hagenia*. The fully winged species (52) occurs in central-southern zones at lower altitude. This genus is very widespread in Africa, in particular in the equatorial mountains and is the most characteristic of Africa, also by virtue of the very distinctive structure of the aedeagus.

Byziniella. The apterous species (8) of this genus are restricted to Tanzania (Mt Meru, Mt Ngorongoro, Mt Kilimanjaro). The fully winged species (26) occur in the south-central areas. This genus is also characteristic of the Afrotropical Region.

South African genera

Three genera fall within this category: *Linosomus*, *Capesia* and, in part, *Notolinopsis*.

The first is represented by 7 species, including one with probably trans-austral disjunct distribution (Australia, New Zealand), although it may be a synanthropic species, and therefore easily exportable by human activities related to the farm animals. *Capesia* is an endemic genus, so far only known by 2 species. *Notolinopsis* is mentioned above. The South African species live especially in humus of *Quercus* and *Eucaliptus*. It is representative for the fauna of South Africa and very widespread in this region.

Endemic genera

The endemic genera, at present, as far as is known monospecific (*Homorocerus* and *Agaporina*) or only including very few species, are very numerous: *Elitheya*, *Microafra*, *Agoreina*, *Amharina*, *Afrus*, *Alexyrea*, *Belinga*, *Aleutia*, *Capesia*, *Notolinopsis*, *Metocinus*, *Endymathis*, *Balchis*, *Agaporina*, *Elapheia*, *Byziniella*, *Chaetocinus*. Fourteen are new to science. Some of these have already been mentioned above. Seven occurs almost exclusively in the equatorial zones (*Elitheya*, *Microafra*, *Agoreina*, *Afrus*, *Belinga*, *Aleutia*, *Agaporina*).

In two cases data are too scarce to provide precise information (*Amharina* and *Homorocerus*), also, the only known species of *Homorocerus*, albeit uncommon, seems present in all areas south of the Sahara.

Some genera occur in west-central areas; data for the last genus are very few, (*Alexyrea*, but known also from southern zone), *Balchis* (known only from Ethiopia), *Agoreina* (living in Kenya and Tanzania but known only by a few specimens). Some of the endemic genera are sub-corticolous.

Several genera reported from Africa by earlier authors, such as *Xantholinus* and *Leptacinus* (Palaearctic) and *Mitomorphus* (Oriental and Australasian), do not exist in the Afrotropical Region.

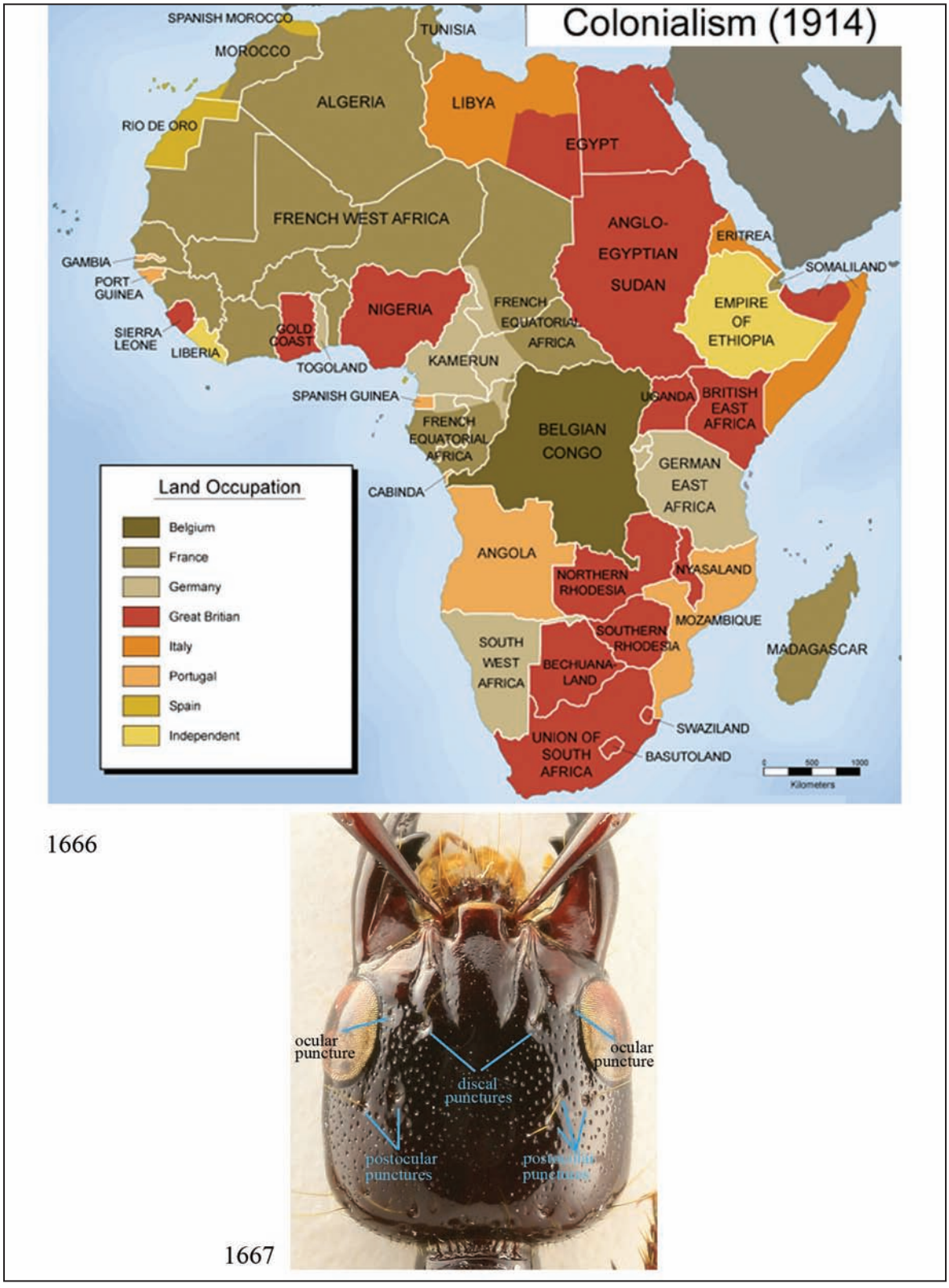
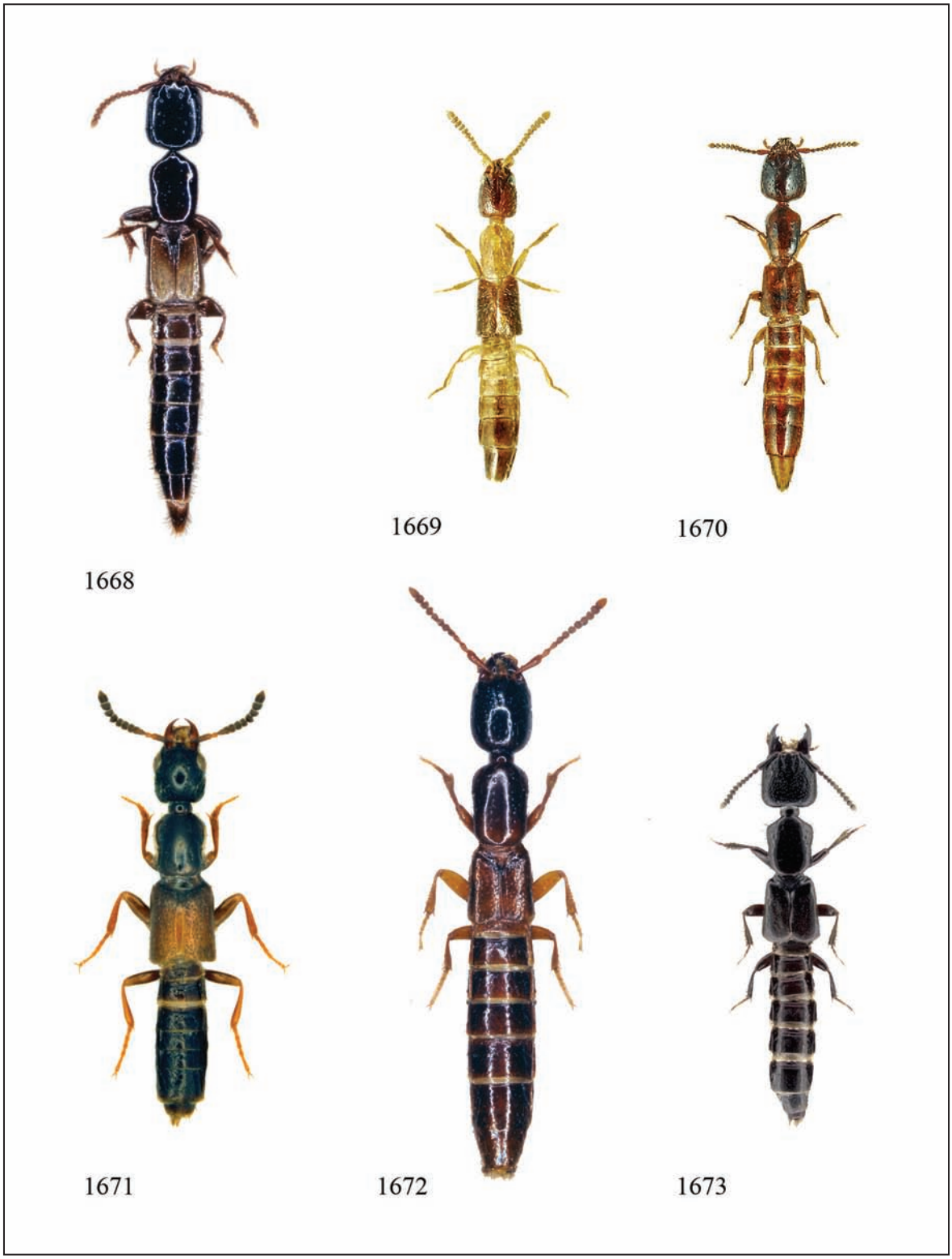
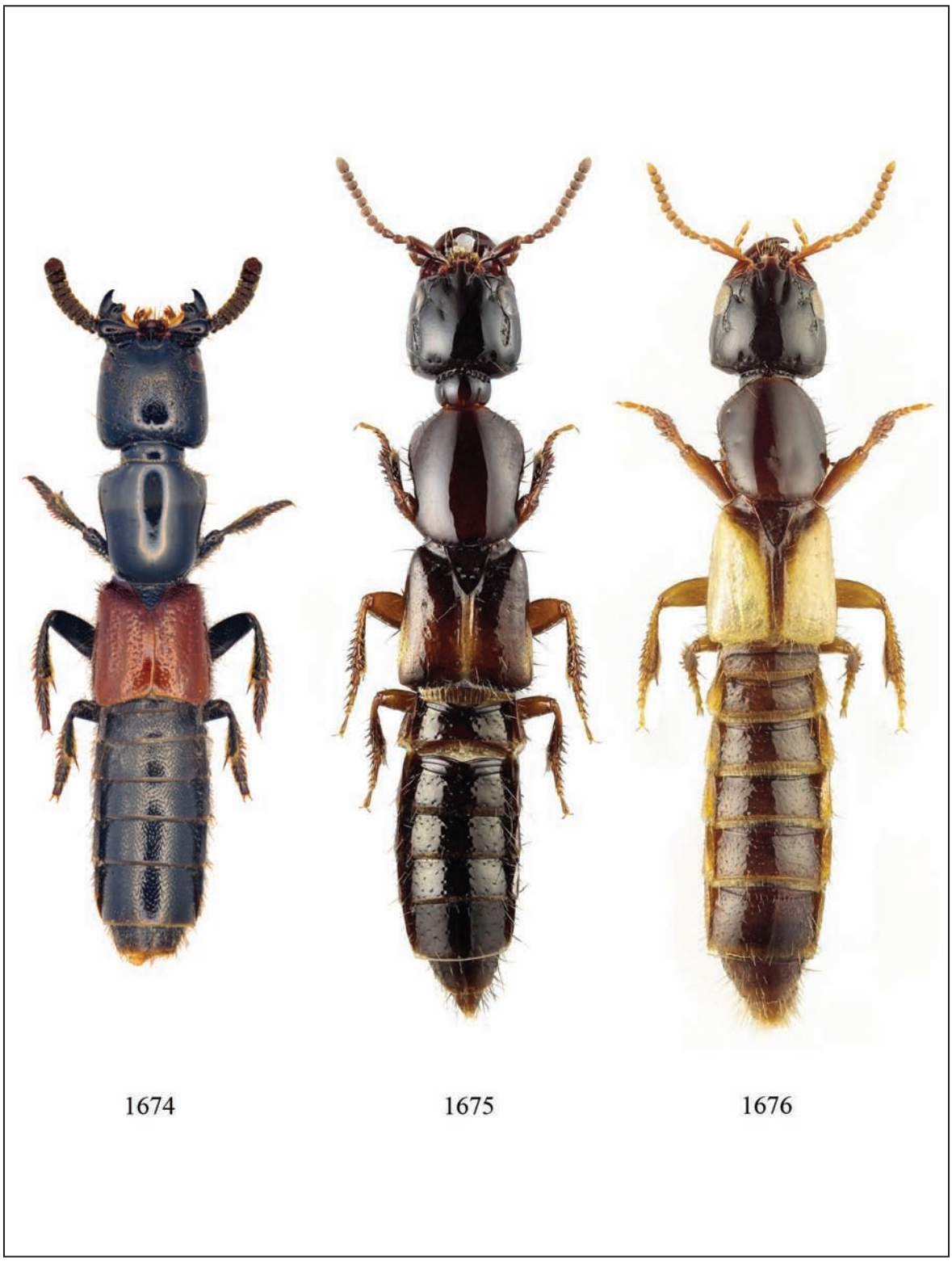


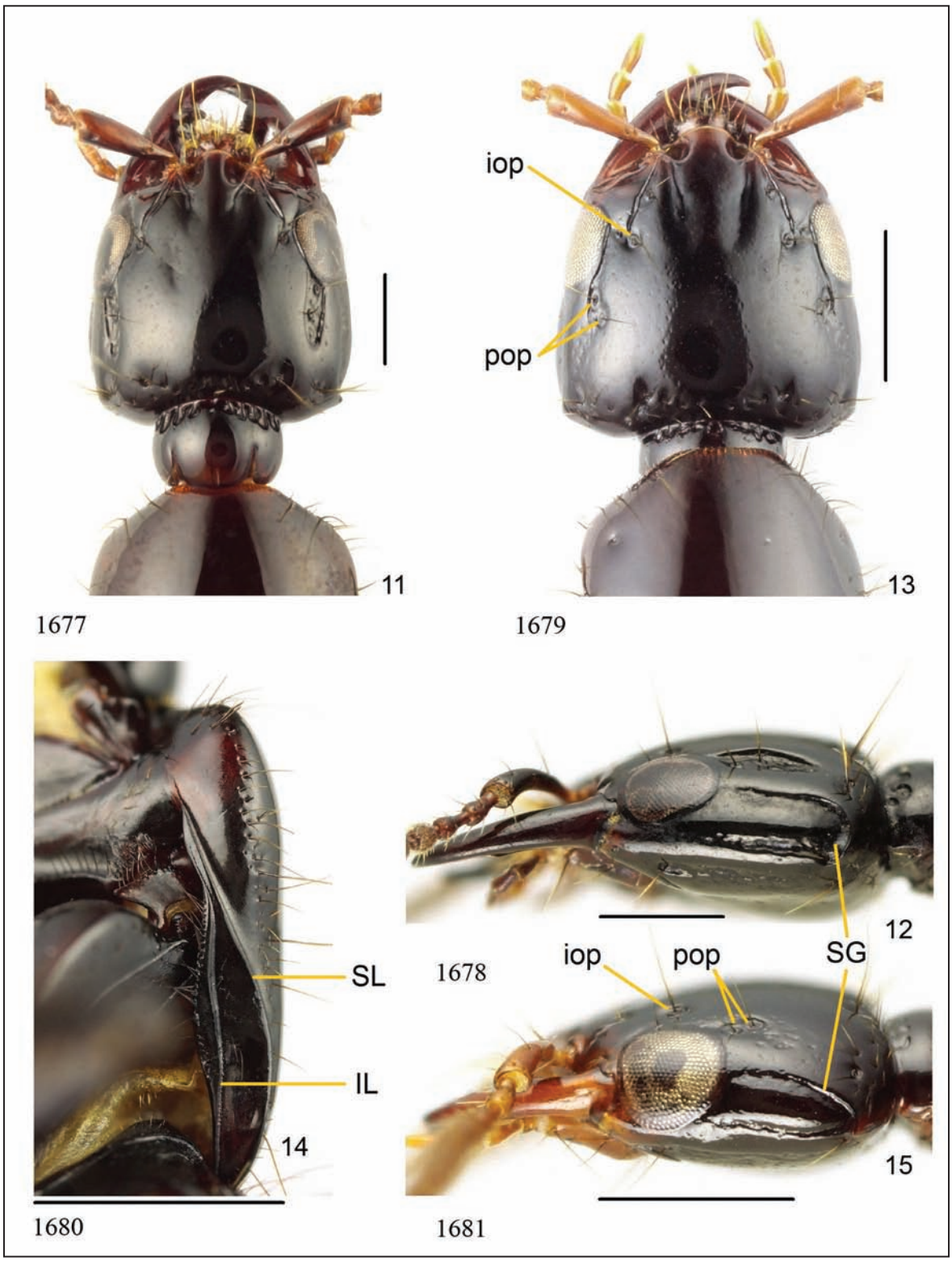
Figure 1666. Map of colonial boundaries.
Figure 1667. Head of *Thyreocephalus* with seetiferous punctures.



Figures 1668–1673. Habitus of *Elitheya pallidipennis* (tl: 6 mm) (Fig. 1668), *Microafra minutissima* (tl: 2 mm) (Fig. 1669), *Agoreina sulciceps* (tl: 7.5 mm) (Fig. 1670), *Amharina inopinata* (tl: 5 mm) (Fig. 1671), *Nudobius cheranganicus* n. sp. (tl: 6 mm) (Fig. 1672), and *N. schlueteri* (tl: 12 mm) (Fig. 1673).



Figures 1674–1676. Habitus of *Homorocerus rufipennis* (tl: 15 mm) (Fig. 1674). Habitus of *Afrus collarti* (tl: 10 mm) (Fig. 1675), and *A. spegazzinii* (tl: 6.5 mm) (Fig. 1676) (ex Janak & Bordoni, 2015).

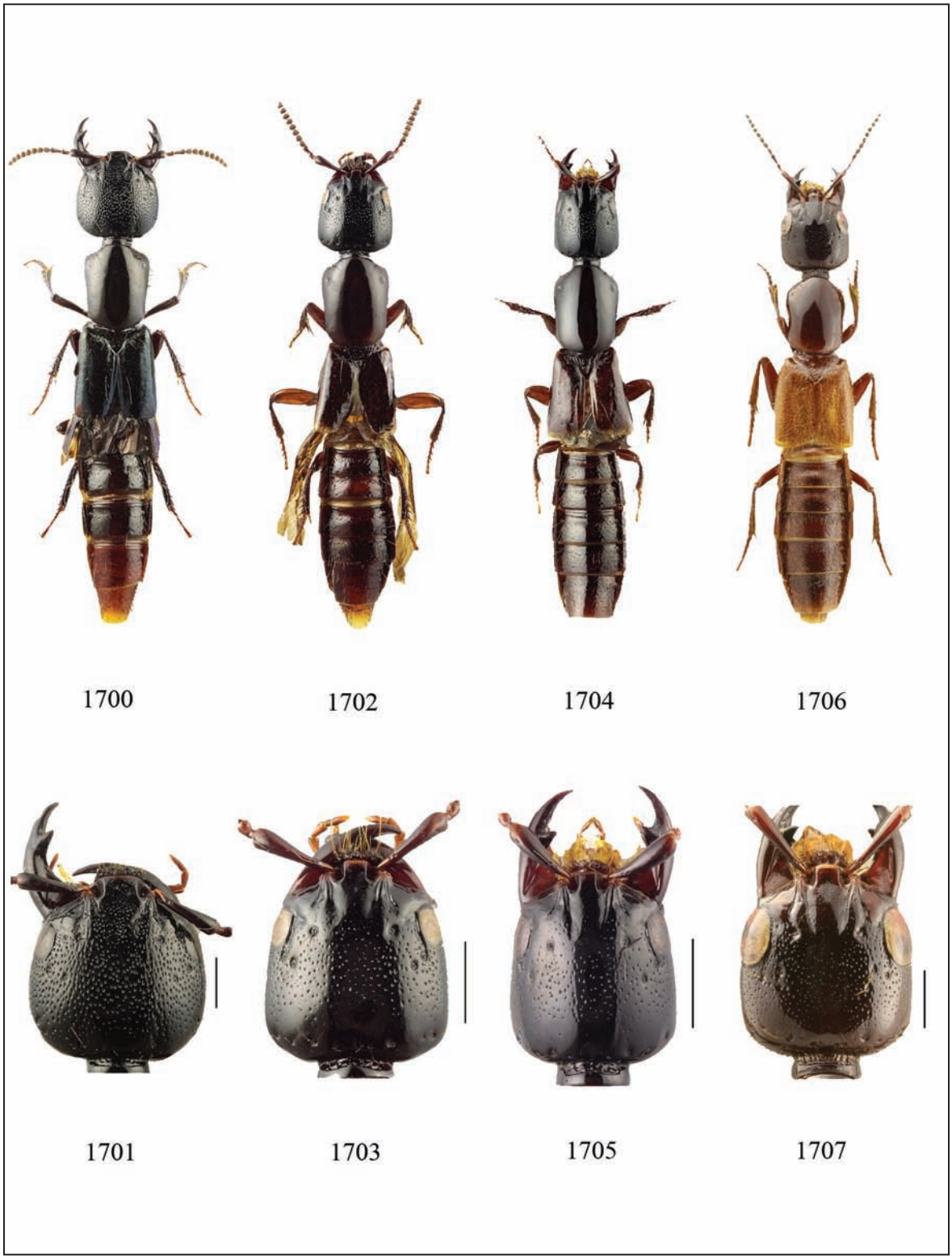


Figures 1677–1681 Head in dorsal and ventral view of *Afrus collarti* (Fig. 1677, 1678) and *A. spegazzinii* (Fig. 1679, 1680), lateral part of ventral side of pronotum of *A. spegazzinii* (Fig. 1681) (iop: internal ocular punctures, pop: posterior ocular punctures; SG: subelliptical groove; SL: upper line; IL: lower line (scale 0.5 mm) (ex Janak & Bordoni, 2015).

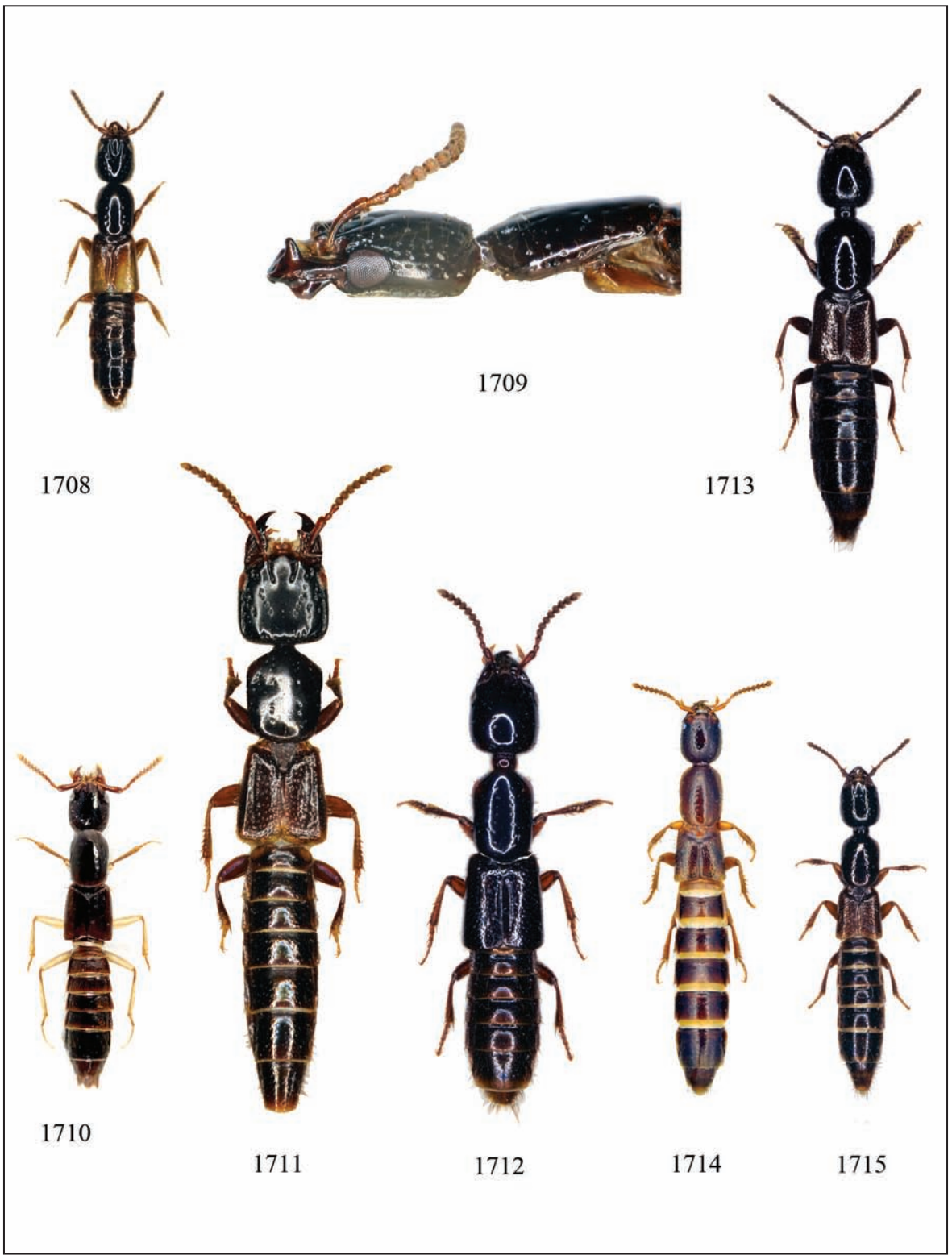
Figure 1682. Habitus of *Thyreocephalus brunneiventris* (tl: 20 mm) (ex Janak & Bordoni, 2015).
Figure 1683. Habitus of *Thyreocephalus alluaudi* (tl: 20 mm) (ex Janak & Bordoni, 2015).

Figures 1684–1691. Habitus and head of *Thyreocephalus manfredi* (tl: 15 mm) (Figs. 1684, 1685), *T. nairobiensis* male (tl: 15 mm) (Figs. 1686, 1687), *T. nairobiensis* female (tl: 14 mm) (scale: 1 mm) (Figs. 1688, 1689), and *T. meridoafricanus* (tl: 16.5 mm) (Figs. 1690, 1691) (ex Janak & Bordoni, 2015).

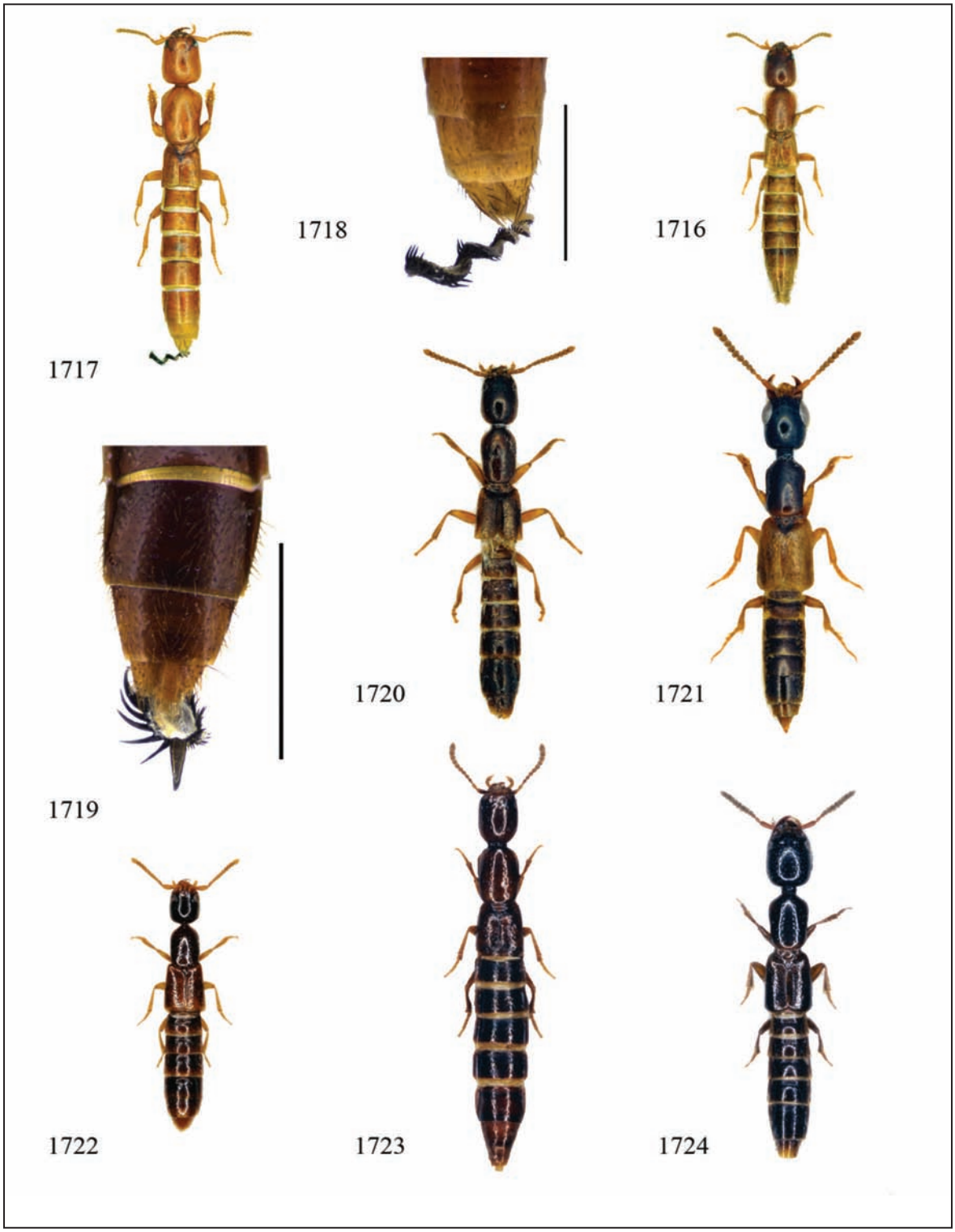
Figures 1692–1699. Habitus and head of *Thyreocephalus giganteus* (tl: 33 mm) (Figs. 1692, 1693), *T. magnus* (tl: 30 mm) (scale: 1 mm) (Figs. 1694, 1695), *T. michaeli* (tl: 15 mm) (Figs. 1696, 1697), and *T. ferox* (tl: 14.5 mm) (Figs. 1698, 1699). (ex Janak & Bordoni, 2015).



Figures 1700–1707. *Thyreocephalus raptor* (tl: 22 mm) (scale: 1 mm) (Figs. 1700, 1701), *T. camerunensis* (tl: 12.5 mm) (Figs. 1702, 1703), *T. marginipennis* (tl: 11.5 mm) (Figs. 1704, 1705), and *T. semipiceus* (tl: 18 mm) (scale: 1 mm) (Figs. 1706, 1707) (ex Janak & Bordoni, 2015).

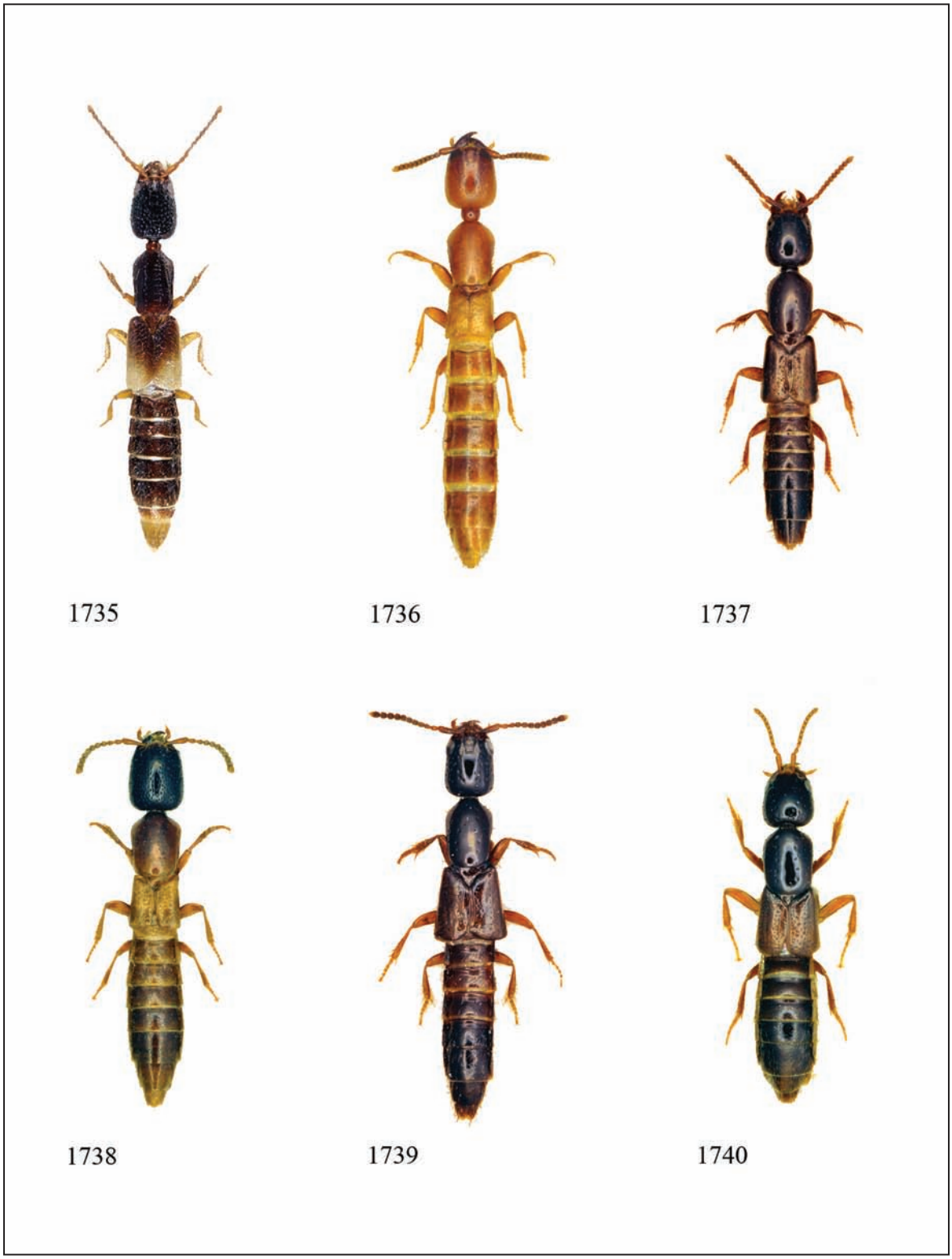


Figures 1708–1715. Habitus of *Alexyrea mandibularis* (tl: 5.5 mm) (Fig. 1708), ditto with head and pronotum in lateral view (tl: 2 mm) (Fig. 1709), *Belinga africana* (tl: 6 mm) (Fig. 1710), *Aleutia marginella* (tl: 10 mm) (Fig. 1711), *Capesia amatolensis* n. sp. (tl: 8.5 mm) (Fig. 1712), *Notolinopsis meridionalis* n. sp. (tl: 7.5 mm) (Fig. 1713), *N. crateris* (tl: 7 mm) (Fig. 1714), and *Linosomus mhlanlaensis* n. sp. (tl: 6.5 mm) (Fig. 1715).

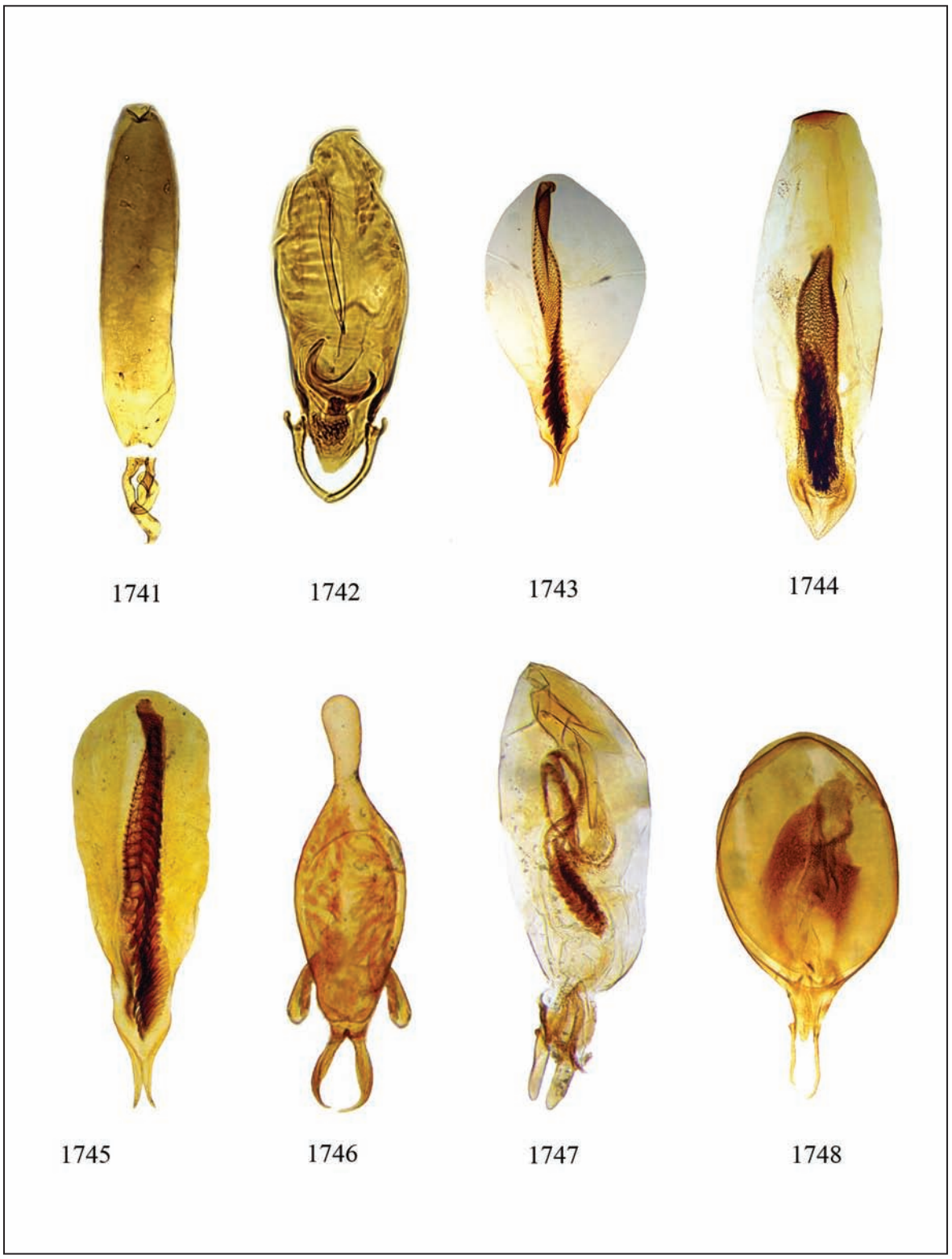


Figures 1716–1724. Habitus of *Metocinus kahuzi* n. sp. (tl: 6 mm) (Fig. 1716), and *M. congoensis* n. sp. (tl: 6 mm) (Fig. 1717), ditto, last abdominal segments with everted inner sac (scale: 1 mm) (Fig. 1718). Last abdominal segments with everted inner sac of *Metocinus* sp. (Fig. 1719); habitus of *M. meridionalis* n. sp. (tl: 5 mm) (Fig. 1720), *M. zambianus* n. sp. (tl: 6 mm) (Fig. 1721), *Endymathis namibiana* n. sp. (tl: 4.5 mm) (Fig. 1722), *Balchis alpestris* n. sp. (tl: 5.7 mm) (Fig. 1723), and *Agaporina diaphana* n. sp. (tl: 5.5 mm) (Fig. 1724).

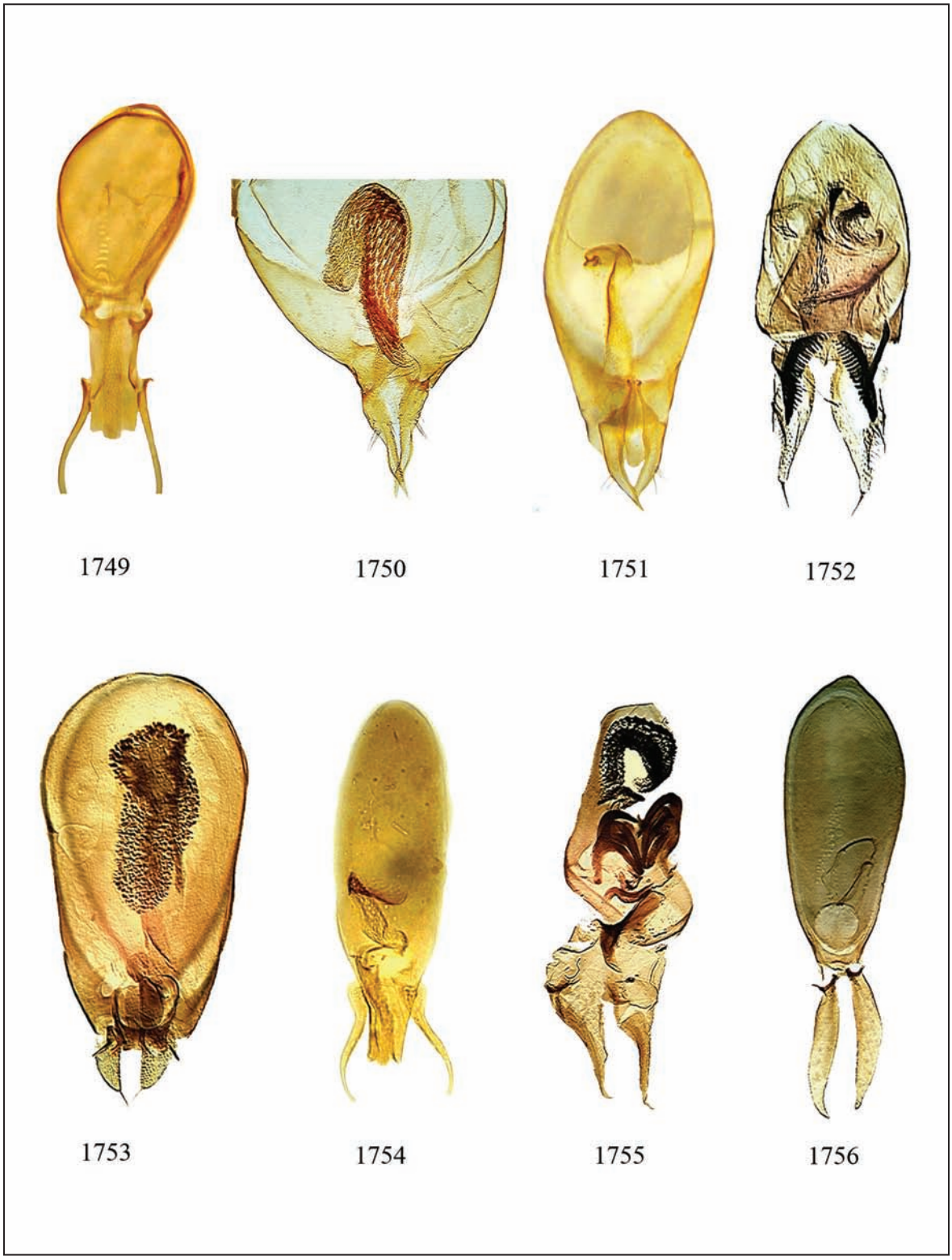
Figures 1725–1734. Habitus and head of *Achmonia carinata* (tl: 11 mm) (Figs. 1725, 1726), with pronotum and elytra (Fig. 1734), *A. simulatrix* (tl: 12 mm) (Figs. 1727, 1728), *A. amabilis* (tl: 15 mm) (Figs. 1729, 1730), with lateral part of pronotum in ventral view (Figs. 1733), and *A. congoensis* (tl: 15 mm) (Figs. 1731, 1732) (ex Janak & Bordoni, 2014).



Figures 1735–1740. Habitus of *Elapheia meridionalis* n. sp. (tl: 4.2 mm) (Fig. 1735), *Byziniella nigromontis* n. sp. (tl: 6 mm) (Fig. 1736), *B. abacta* (tl: 5 mm) (Fig. 1737), *Chaetocinus ruwenzori* n. sp. (tl: 6 mm) (Fig. 1738), *C. silvestris* n. sp. (tl: 7 mm) (Fig. 1739), and *C. heterocephalophilus* n. sp. (tl: 5.6 mm) (Fig. 1740).

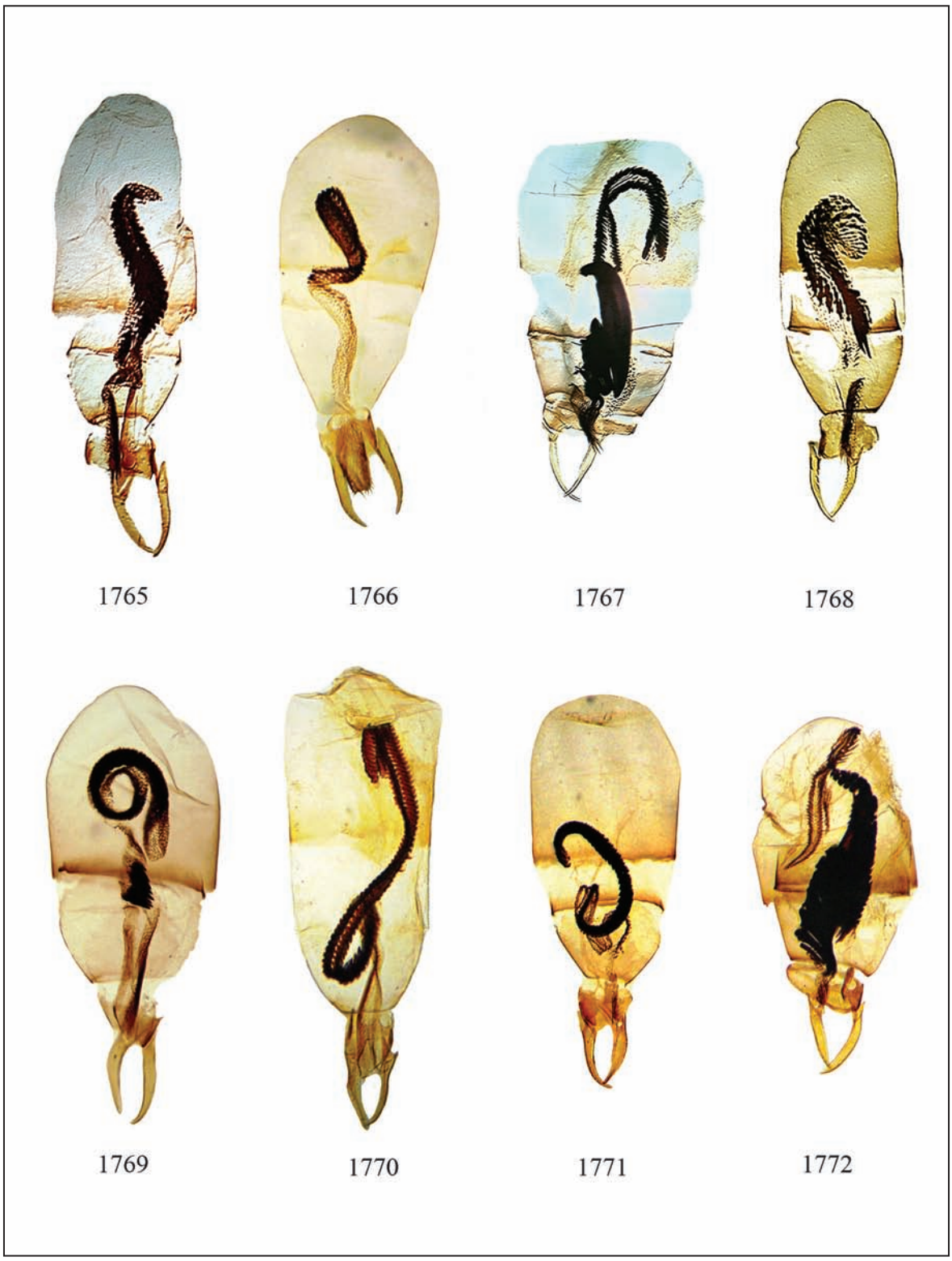


Figures 1741–1748. Aedeagus of *Elitheya pallidipennis* (tl: 0.96 mm) (Fig. 1741), *Microafra minutissima* (tl: 0.3 mm) (Fig. 1742), *Stenistoderus usugarae* (tl: 1.2 mm) (Fig. 1743), *S. senegalensis* n. sp. (tl: 1.48 mm) (Fig. 1744), *S. subnitidiceps* (tl: 1 mm) (Fig. 1745), *Agoreina sulciceps* (tl: 0.88 mm) (Fig. 1746), *Amharina oculata* n. sp. (tl: 1.1 mm) (Fig. 1747), and *Neoxantholinus superbus* (tl: 1 mm) (Fig. 1748).

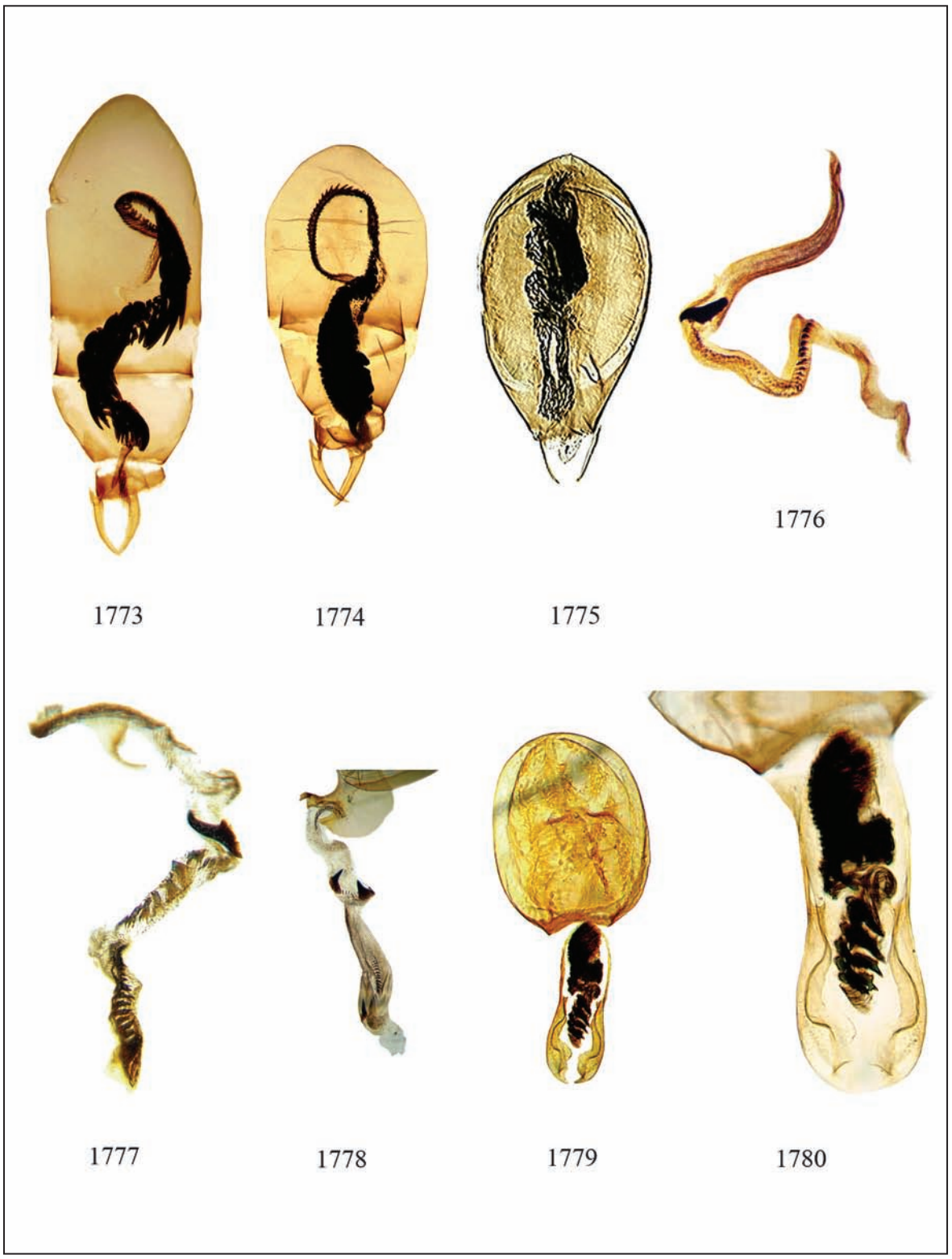


Figures 1749–1756. Aedeagus of *Zeteotomus ghanensis* n. sp. (tl: 0.74 mm) (Fig. 1749), *Nudobius congoensis* (tl: 0.8 mm) (Fig. 1750), *N. abessinus* (tl: 1.48 mm) (Fig. 1751), *Gyrohypnus tropicus* n. sp. (tl: 1 mm) (Fig. 1752), *G. shimba* n. sp. (tl: 1 mm) (Fig. 1753), *Alexyrea mandibularis* (tl: 0.6 mm) (Fig. 1754), *Belinga africana* (tl: 1.3 mm) (Fig. 1755), and *Aleutia kenyana* n. sp. (tl: 1.6 mm) (Fig. 1756).

Figures 1757–1764. Aedeagus of *Capesia amatolensis* n. sp. in ventral view (tl: 1.4 mm) (Fig. 1757), ditto, particular of the inner sac (Fig. 1758), *Notolinopsis crateris* (tl: 1.4 mm) (Fig. 1759), *N. afromontanus* n. sp. (tl: 1.4 mm) (Fig. 1760), *N. fallax* (tl: 1.1 mm) (Fig. 1761), *N. oceanicus* n. sp. (tl: 1.4 mm) (Fig. 1762), *N. finisterrae* n. sp. (tl: 1.3 mm) (Fig. 1763), *L. tenuicornis* (tl: 1.7 mm) (Fig. 1764).

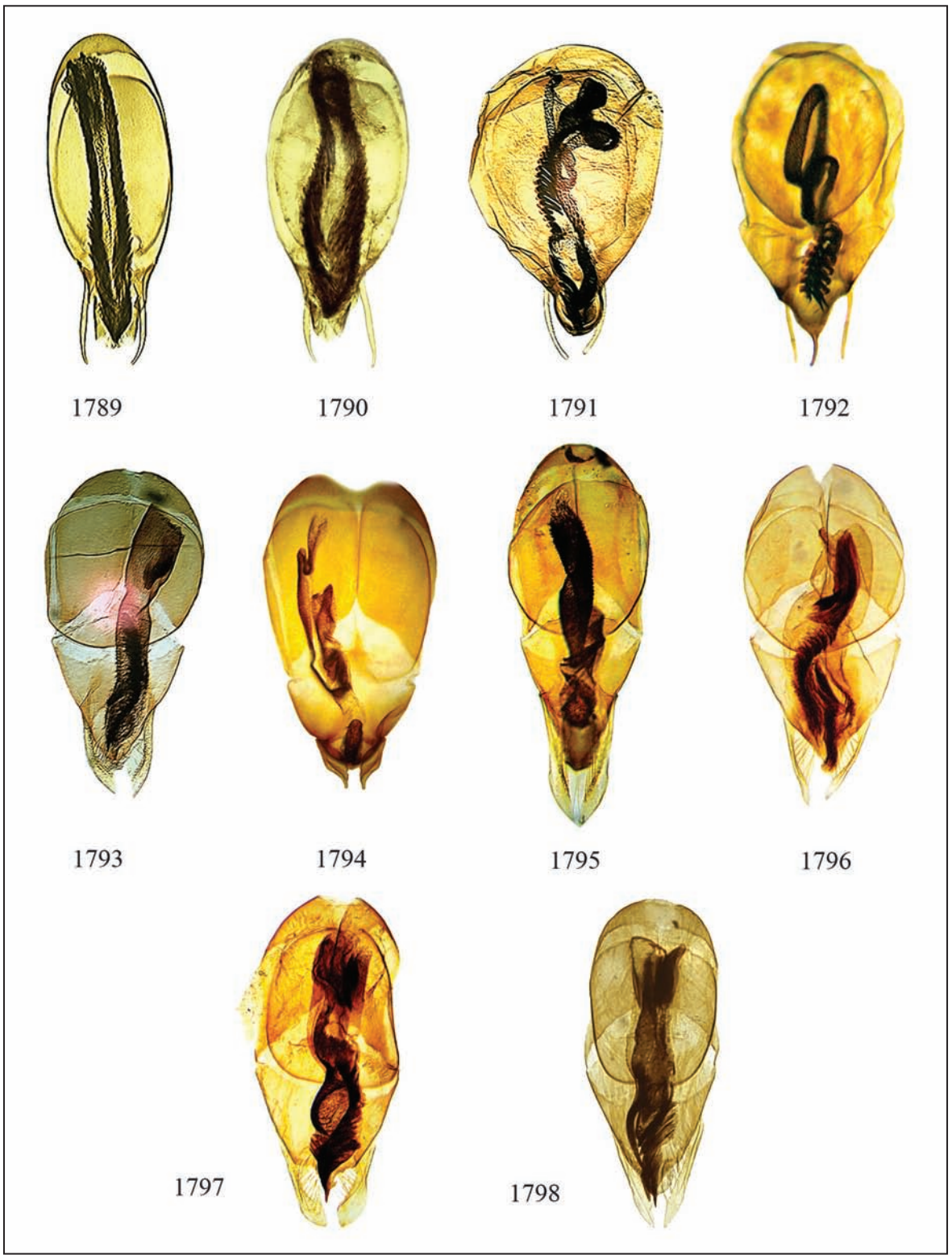


Figures 1765–1772. Aedeagus of *Metocinus blukwa* n. sp. (tl: 1.3 mm) (Fig. 1765), *M. montanellus* n. sp. (tl: 1 mm) (Fig. 1766), *M. afromontanus* n. sp. (tl: 1.3 mm) (Fig. 1767), *M. rwandensis* n. sp. (tl: 1 mm) (Fig. 1768), *M. aethiops* (tl: 1.3 mm) (Fig. 1769), *M. bilemniscatus* n. sp. (tl: 1 mm) (Fig. 1770), *M. arboreus* n. sp. (tl: 1 mm) (Fig. 1771), and *M. sclerophyllicus* n. sp. (tl: 0.7 mm) (Fig. 1772).



Figures 1773–1780. Aedeagus of *Metocinus pseudokiymbi* n. sp. (tl: 1.4 mm) (Fig. 1773), *M. dissimilis* n. sp. (tl: 1 mm) (Fig. 1774), *Endymathis namibiana* n. sp. (tl: 0.7 mm) (Fig. 1775), extended inner sac of *Phacophallus unispinosus* n. sp. (tl: 1.3 mm) (Fig. 1776), extended inner sac of *P. mirus* sp. n. (tl: 0.7 mm) (Fig. 1777), extended inner sac of *P. sahariensis* (tl: 0.7 mm) (Fig. 1778), aedeagus of *Xanthophius usaensis* n. sp. (tl: 1 mm) (Fig. 1779), particular of the inner sac between parameres (Fig. 1780).

Figures 1781–1788. Aedeagus of *Balchis balensis* n. sp. (tl: 1 mm) (Fig. 1781), *Agaporina basipennis* (tl: 1 mm) (Fig. 1782), *Elapheia inusualis* n. sp. (tl: 0.9 mm) (Fig. 1783), *E. gracilenta* (tl: 0.8 mm) (Fig. 1784), *Byziniella nigromontis* n. sp. (tl: 1 mm) (Fig. 1785), *B. lupata* n. sp. (tl: 0.6 mm) (Fig. 1786), *B. abacta* (tl: 0.8 mm) (Fig. 1787), and *B. bugera* n. sp. (tl: 0.7 mm) (Fig. 1788).



Figures 1789–1798. Aedeagus of *Byziniella cyangugu* n. sp. (tl: 0.8 mm) (Fig. 1789), *B. kiymbi* n. sp. (tl: 0.8 mm) (Fig. 1790), *B. montana* n. sp. (tl: 1 mm) (Fig. 1791), *B. africana* (tl: 1 mm) (Fig. 1792), *Chaetocinus silvestris* n. sp. (tl: 1.3 mm) (Fig. 1793), *C. spectabilis* n. sp. (tl: 1.7 mm) (Fig. 1794), *C. ghanensis* n. sp. (tl: 1 mm) (Fig. 1795), *C. fizianus* n. sp. (tl: 0.8 mm) (Fig. 1796), *C. kivuensis* n. sp. (tl: 0.8 mm) (Fig. 1797), and *C. dorylophilus* n. sp. (tl: 0.8 mm) (Fig. 1798).

1799

1780

Figure 1799. Mount Kahuzi (Congo).
Figure 1800. Mount Ruwenzori (Congo-Uganda).

1801

1802

Figure 1801. Volcan Mikeno (Congo-Rwanda).
Figure 1802. Volcan Sabinyo (Congo-Rwanda).

1803

1804

Figure 1803. Mount Elgon (Kenya).
Figure 1804. Mount Kenya (Kenya).

1805

1806

Figure 1805. Mount Kilimanjaro (Tanzania).
Figure 1806. Mount Usumbara (Tanzania).

Figure 1807. Mount Uluguru (Tanzania).

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INDEX OF GENERA AND SPECIES

(the synonyms in italic)