

## New species of *Agrilus* Curtis, 1825 belonging to the subgenus *Nigritius* Curletti, 1998 from Ethiopic Region (Coleoptera Buprestidae Agrilini)

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### ABSTRACT

Four new W African species are described: *Agrilus (Nigritius) massaronei* n. sp. from Gabon, *Agrilus (Nigritius) yangambii* n. sp. from Congo Democratic Republic, *Agrilus (Nigritius) ivorianus* n. sp. and *Agrilus (Nigritius) bancoi* n. sp. both from Ivory Coast.

### KEY WORDS

Buprestidae; *Agrilus*; *Nigritius*; new species; Africa.

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### INTRODUCTION

The study of material obtained from an entomological expedition in Gabon in the February 2012 organized by the Museum of Calimera, Lecce, Italy (abbreviation: MSNS), showed the presence of a new species that is described here. On this occasion a further three new species conserved for a long time in the collections of the Museum of Carmagnola, Turin, Italy (abbreviation: MCCI) are also described.

All species treated in this work belong to the genus *Agrilus* Curtis, 1821 (Coleoptera Buprestidae) subgenus *Nigritius* Curletti, 1988, including those examined for comparison (Kerremans, 1903; Obenberger, 1831; Théry, 1947; Curletti, 1998). The specimens are preserved dry, the pictures were obtained with a Coolpix P6000 connected with a stereomicroscope Leica MZ6 and elaborated in stacking with Adobe Photoshop CS5 Extended vers. 12.0.

### DESCRIPTION OF THE SPECIES

*Agrilus (Nigritius) massaronei* n. sp.

EXAMINED MATERIAL. Holotypus female (Figs.

1, 2): Gabon, Ogooué, Ivindo, 500 m, P.N. Ivindo, Station de Recherche d'Ipasa, 0°30'43"N-12°48'12"E, 16-29.II.2012, C. Massarone leg. (MSNS).

DESCRIPTION OF HOLOTYPE. Length 12.3 mm. Dorsal color uniformly black. Vertex furrowed in middle, 1/3 of the anterior edge of pronotum, with obsolete and thin punctuation. Frons black, glabrous, with exception of white, brilliant pubescence at the base, covering also the clypeus. Two wide superficial depressions in the upper part. Clypeus without transverse carina. Antennae black, serrate from fourth antennomere. Pronotum wider in middle, with lateral edges few arcuate, subparallel, but with posterior angles strongly sinuate and acute. Disc convex, regular transversal striae. Pre-marginal carinula brief but well evident. Yellow gold pubescence covering the integument at the lateral sides. Lateral carinae joined at the base. Prosternal plate rhomboidal. Scutellum wide and short, with strong transverse carina. Elytra glabrous; apex with a strong tip in middle. Lateroterga with uniform yellow gold pubescence, well visible from the top. Abdominal sterna with the same pubescence of the lateroterga. Legs black, with all claws dentate.

Metatarsus shorter than metatibia; basal article longer than the sum of the following three ( $1 > 2+3+4$ ).

ETIMOLOGY. After the name of the collector, the colleague Carlo Massarone (Italy).

REMARKS. Given that the majority of species belonging to the subgenus *Nigritius* Curletti, 1998 is composed by species of big size, elongated, and black dorsal color, *A. massaronei* n. sp. is characterized by elytra glabrous, premarginal carinula not entire, presence of apical tips, uniform yellow pubescence on lateroterga and sterna. Among this group, *A. massaronei* n. sp. is near to *A. cernus* Obenberger, 1931 described from Cameroun. I know two syntypes of this species, one male in Tervuren Museum (Belgium) and one (sex not identified) in Prague Museum (Czech Republic), that may be two distinct species, because the specimen from Tervuren lacks of the tips at the elytral apex. Anyway both *A. cernus* specimens differ for having smaller dimensions (9.1 and 9.5 mm in length), yellow pubescence also on humeral callus and on middle of the frons, vertex sculpture composed by striae and not punctiform, posterior angles of pronotum obtuse without sinuosity before these angles, metatarsus long as the metafemur. The type specimen was found together with two specimens of *Agrilus (Nigritius) alluaudi* Kerremans, 1903; this species has the same pattern of yellow pubescence, but differs principally for having premarginal carinula entire and elytral apex acuminate, without tips.

*Agrilus (Nigritius) ivorianus* n. sp.

EXAMINED MATERIAL. Holotypus female (Figs. 3, 4): Côte d'Ivoire, forêt de Banco, XII.1986, Ture leg. (MCCI).

DESCRIPTION OF HOLOTYPE. Length 11.8 mm. Head black, pronotum green, elytra green in median anterior part, dark brown posteriorly. Vertex width about 1/3 of anterior margin of pronotum, flat, smooth, with obsolete punctiform sculpture. Frons dark green, clypeus without carina. Antennae bronze, serrate from 4th antennomere. Pronotum wider anteriorly, with lateral margins regularly narrowed behind, but with basal angles acute. Disc with transverse thickened sculpture. Premarginal carinula not entire, in bold relief. Lateral carinae

welded to the base. Anterior margin of prosternal lobe widely sinuous. Scutellum wide and short, strongly carinate. Elytra with pubescence gray, short, but well visible, slightly thickened in middle. Elytral apices with a median tip. Ventral side dark bronze with red reflections: sternites with a spot of yellow ochre pubescence on the sides. Lateroterga with the same spots placed in correspondence of those present on sternites. Green legs, all the claws simply dentate. Metatarsus longer than metatibia, with the basal metatarsomere longer than the sum of the following four ( $1 > 2+3+4+5$ ).

ETIMOLOGY. After Ivory Coast, the country of locus typicus.

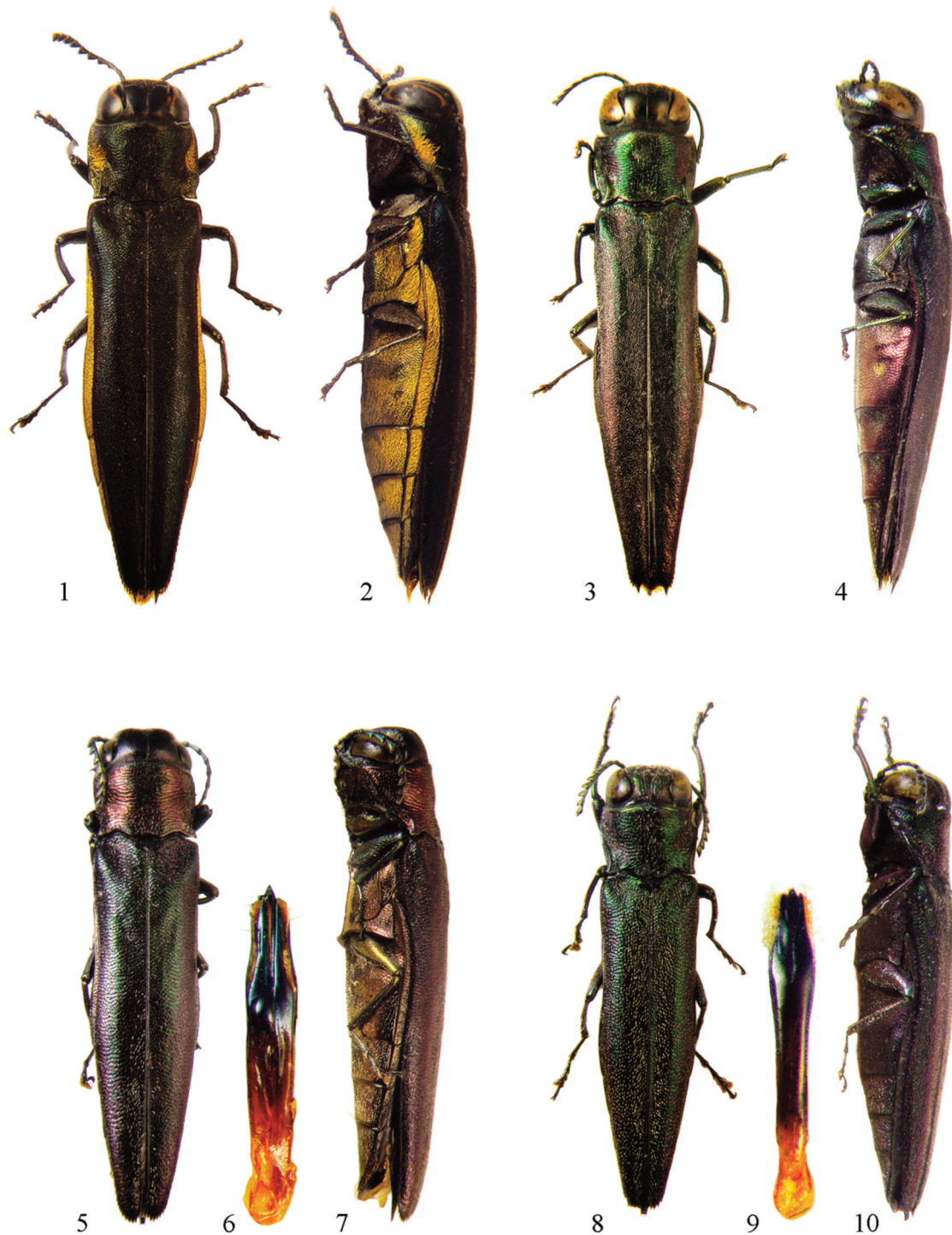
REMARKS. The sum of the characters of body color, elytral pubescence, apical tips, ventral spots is unique among the subgenus *Nigritius*.

*Agrilus (Nigritius) yangambii* n. sp.

EXAMINED MATERIAL. Holotypus male (Figs. 5-7): Congo, Yangambi, 1953 (MCCI).

DESCRIPTION OF HOLOTYPE. Length 9 mm. Head black, pronotum brown, elytra black. Vertex protruding, similar to species belonging to subgenus *Robertius* Théry, 1947, furrowed in middle, with longitudinal sculpture. Frons green, flat, hardly sculptured, glabrous with exception of a line of brown coasts along the eyes. Clypeus separated from frons by a transversal carina. Antennae green-bronze, serrate from article 4. Pronotum wider anteriorly, then sinuate before the base, with anterior angles obtuse. Disc with regular transverse sculpture. Premarginal carinula entire. Lateral carinae separated from the base. Anterior margin of prosternal lobe amply sinuate. Scutellum transversely carinate. Elytra with vertex rounded and denticulate. White pubescence visible at 1/3 of apex only, along the suture. Ventral side bronzed, scattered with uniform brief white pubescence not covering the integuments. Apex of last visible sternite rounded. Legs bronze, anterior claws bifid, median and posterior simply dentate. Metatarsus shorter than metatibia; basal metatarsomere little longer than the sum of the following three ( $1 > 2+3+4$ ). Aedeagus big, sclerotized, long and parallel, with median lobe acute (Fig. 6).

ETIMOLOGY. After the name of the locus typicus.



Figures 1, 2. *Agrilus (Nigritius) massaronei* n. sp., holotypus female, length 12.3 mm. Figures 3, 4. *Agrilus (Nigritius) ivorianus* n. sp., holotypus female, length 11.8 mm. Figures 5-7. *Agrilus (Nigritius) yangambii* n. sp., holotypus male, length 9 mm, with aedeagus (Fig. 6). Figures 8-10. *Agrilus (Nigritius) bancoii* n. sp., holotypus male, length 6.9 mm, with aedeagus (Fig. 9).

REMARKS. Among *Nigritius* species having head remembering the subgenus *Robertius* and having pubescence at elytral apex only, it is known *A. luebanus* Obenberger, 1931 only, described from Congo (type in Narodni Muzeum, Prague). *A. yangambii* n. sp. differs principally for having body less elongate, frons glabrous with different sculpture, premarginal carinula entire, basal metatarsomere less elongate.

***Agrilus (Nigritius) bancoi* n. sp.**

EXAMINED MATERIAL. Holotypus male (Figs. 8-10): Côte d'Ivoire, forêt de Banco, XII.1986, Ture leg. (MCCI).

DESCRIPTION OF HOLOTYPE. Length 6.9 mm. Dorsal color brown, entirely covered of grey/yellow pale pubescence more thickened along the elytral suture. Vertex flat, 1/3 the width of anterior margin of pronotum, with transverse hard sculpture. Frons green, furrowed, regularly pubescent. Clypeus carinate. Antennae serrate from 4th article; antennomeres 1-5 bronze, 6-11 green. Pronotum wider anteriorly, then sinuate before the posterior angles that are acute. Disc convex, with transverse regular striae. Premarginal carinula sturdy, prominent, entire. Marginal carinae joined before the base. Elytra with apex hardly denticulate. Ventral side and lat-

eroterga uniformly pubescent: the pubescence not covering the integuments. Legs dark bronze-grey. Anterior and median claws bifid, posterior dentate. Metatarsus longer than metatibia. First metatarsomere shorter than the sum of the following three ( $1 < 2+3+4$ ), but with the fifth longer than the sum of the third and fourth ( $5 > 3+4$ ). Aedeagus elongate, little fusiform (Fig. 9).

ETIMOLOGY. After the type locality.

REMARKS. For the sum of dimensions added to elytral pubescence and the entire premarginal carinula, *A. bancoi* n. sp. is unmistakable among the subgenus *Nigritius*.

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