On the presence of *Cyphosoma lawsoniae lawsoniae* (Chevrolat, 1838) (Coleoptera Buprestidae) in Sicily, Italy

Giovanni Altadonna & Ignazio Sparacio

ABSTRACT

*Cyphosoma lawsoniae lawsoniae* (Chevrolat, 1838) (Coleoptera Buprestidae) had already been reported in the past for Sicily (Italy). However, its presence on the island is doubted due to the lack of recent records. In the present paper, the occurrence of this species in Sicily is confirmed by one finding in Catania’s Plain (Catania province, East Sicily). A short description of the finding locality is given.

INTRODUCTION

The genus *Cyphosoma* Mannerheim, 1837 (Coleoptera Buprestidae) comprises a dozen palaearctic taxa (Kubáň, 2006), of which two occur in Italy: *C. euphraticum euphraticum* (Gory et Laporte, 1839), with Turanico-Eastern Mediterranean geonemy, reported for Apulia, Basilicata, and Calabria, and *C. lawsoniae lawsoniae* (Chevrolat, 1838), a widely diffused in Southern Mediterranean species present only in Sicily and Sardinia (Porta, 1924; Luigioni, 1929; Curletti, 1994; Sparacio, 1997; Curletti et al., 2003; Kubáň, 2006). In particular, *C. lawsoniae lawsoniae* is reported in Sicily only on generic indications, without any specific location. In addition, three specimens conserved in collections of the Entomological Department of the National Museum, Praha-Kunratice, are generically labelled as “Sicilia” (Trojan, 2009).

In this paper, a recent finding of *C. lawsoniae* in Sicily (Catania province) is signaled and the locality of the finding is shortly described.

KEY WORDS

Distribution; Buprestidae; *Cyphosoma*; Sicily.


*Cyphosoma lawsoniae lawsoniae* (Chevrolat, 1838)

EXAMINED MATERIAL. Italy, Sicily, Catania province, Belpasso, Simeto river (20 m a.s.l.), Lat. 37°27′00.7″N, Long. 14°55′48.7″E, 6.IX.2015, on *Tamarix* sp., 1 ex, G. Altadonna leg. (CA).


DESCRIPTION. Female. Length from vertex to elytral apex: 14 mm, Convex, bronze, bright. Head with eyes protruding and vertex wide; holes of the antennae without frontal tubercles. Pronotum with deep and dense punctures rounded to the sides and forward. Scutellum visible. Elytra sub-parallel on the sides, restricted to the apex, with bands of deep punctures and two oblique and longitudinal bands of short and dense white pubescence. Legs relatively short, first tarsomere of the rear legs slightly longer than the second one. Prosternal process lodged in a cavity formed in the anterior part from the mesosternum and in the posterior one from the metasternum.

DISTRIBUTION AND BIOLOGY. Cyphosoma lawsoniae lawsoniae is a jewel beetle with a South Mediterranean distribution: it is present in Algeria, Egypt, France (Corsica), Italy (Sardinia, Sicily), Libya, Morocco, Portugal, Spain, Tunisia (Bellamy, 2008; Kubáň, 2006). Locus typicus is in North East Algeria, near the Mediterranean Sea, close to Annaba municipality, near Bône (Chevrusat, 1838): “Barbaria. Trouvé par M. Wagner sur les bords de la Seybouse sur le Lawsonia inermis”.

Other subspecies of *C. lawsoniae* are recorded coming from East Asia and Central Africa: *C. lawsoniae kalala* (Obenberger, 1929) for Iraq, Israel and Jordan (Jordan river valley); *C. lawsoniae emediana* (Descarpentries & Mateu, 1965) for Chad and *C. lawsoniae orientalis* (Bily, 1983) for Iran (Bellamy, 2008; Kubáň, 2006; see also Trojan, 2009).

Despite various information, the biology of *C. lawsoniae* is little known. In Algeria (Thery, 1928), this species was found in swampy environments on *Schoenus* (Cyperaceae). In Morocco (Cobos, 1955, 1969), it has been reported on *Scirpus maritimus* L. and on other plants with submerged root systems. In Spain, Cobos (1986) reports that the larva is both root-eating and exophyte, while the adults are found on Cyperaceae of the genus *Schoenus* and *Scirpus* or on *Phragmites* (Poaceae). Gobbi (1986), in a work on the hosts plants of Italian buprestids, reports almost all these data and it recalls that the type of this species was collected on *Lawsonia inermis* L. (Lythraceae), a plant native to India, but widely naturalized and cultivated in the Mediterranean area (see also Chevrurat, 1838 and Thery, 1928). Sparacio (1997) indicates this species lives in coastal environment and near river mouths and that its larva is probably rhyzophagous, maybe on Cyperaceae and *Phragmites* sp., on which the adults are often found. According to Curletti et al. (2003), the larva of this species develops on *Scirpus* plants (Cyperaceae). Finally, Trojan (2009) reports the *Bolboschoenus* (*Bolboschoenus maritimus* L.) Palla (= *Scirpus maritimus*) (Cyperaceae) as the host plant of this species, relying on biological observation conducted in northern Tunisia.

A single Sicilian specimen was found in the early morning (7:00 a.m.) on a low bush of *Tamarix* sp., near the Simeto river. The finding locality is localized in the territory of the Belpasso Municipality (Catania province), in Catania’s Plain, over 10 kilometers far from the coast of the Ionian Sea. This riparian environment, surrounded by citrus groves and other crops, is characterized by a warm and very dry climate. Among the plant essences, there are: *Saccharum officinarum* L., *Phragmites australis* (Cav.) Trin. ex Steud, *Glycyrrhiza glabra* L., *Tamarix* sp., and few specimens of *Populus* sp. and *Eucalyptus* sp. Moreover, Cyperaceae and other hydrophilous vegetation are localized in the most wet points.

STATUS AND CONSERVATION. Two Italian species of the genus *Cyphosoma* have very small or restricted populations and they are decreasing due to the degradation or disappearance of the natural environments in which they live because of human activities. According to the IUCN Red List of Threatened Species Categories (2017), they can be classified as Vulnerable (VU).

REMARKS. The morphology of the Sicilian specimen does not differ from what is known for this species (Thery, 1928; Porta, 1929; Cobos, 1986). Particularly, it appears easily distinguishable from *C. euphraticum*, present in Italy, for the presence of two net pubescent longitudinal bands on the elytra. In *C. euphraticum*, the elytra are adorned by irregular, not-contiguous pubescent spots.

The occurrence of this species in Sicily was first reported by Ghiliani (1839: Catania, *Cyphonota inflata* Dej.), subsequently by Steck (1886, Sicilia, sub *Coeculus gravidus* Lap.) and Ragusina (1893: “... Questa specie è riportata di Sicilia in tutti i cataloghi”). *Cyphosoma lawsoniae* is mentioned, generically for Sicily, in the subsequent catalogues on the Italian entomofauna (Porta, 1924; Luigioni, 1929; Curletti, 1994; Gobbi, 1995; Curletti et al., 2003; Kubáň, 2006).
Therefore, indeed, the first reporting of this species for Sicily by Ghiliani (1839) also quoted the only locality known in bibliography for this species in the island, ignored by the subsequent entomological literature until today, and which overlaps, as geographical area, with the specimen object of this paper.

The presence of *C. lawsoniae* in Sicily is thus confirmed, after almost two hundreds years.

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**REFERENCES**


