

On the presence of *Buprestis (Buprestis) magica* Laporte et Gory, 1837 (Coleoptera Buprestidae) in Italy

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ABSTRACT

The present study confirmed the presence of *Buprestis (Buprestis) magica* Laporte et Gory, 1837 (Coleoptera Buprestidae) in Italy based on a male specimen preserved at the Museum of Natural History of Genoa (Italy), which, for some peculiar morphological characteristics, is described as a new subspecies: *B. magica doderoi* n. ssp. from Sardinia. The new subspecies is illustrated and compared with related taxa.

KEY WORDS

Buprestidae; *Buprestis*; new subspecies; Sardinia.

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INTRODUCTION

Buprestis (Buprestis) magica Laporte et Gory, 1837 (Coleoptera Buprestidae) is widespread in Tunisia, Algeria, Morocco and Spain (Baviera & Sparacio, 2002; Kubán, 2006). In Italy, this species is signalized by Porta (1929 sub *B. octoguttata* a. *magica*), Luigioni (1929 sub *B. octoguttata* a. *magica*) and Obenberger (1938, 1941 sub *B. octoguttata* ssp. *magica*). Subsequently, these reports were attributed, with doubt, to *B. octoguttata corsica* Obenberger, 1941 (Curletti, 1985; Gobbi & Platia, 1995; for the exacte date description of "*corsica*" see also Schaefer, 1949 p. 206). After the taxonomic and genomic reevaluation of this species by Baviera & Sparacio (2002) there were not more data on the presence of *B. magica* in Italy (Curletti et al., 2003).

The present study confirms the presence of this species in Italy and highlights some morphological differences in the specimen of Sardinia examined and described below.

ACRONYMS. CGM: G. Magnani collection, Cesena, Italy. MCSNG: Collection of Museo Civico

di Storia Naturale "Giacomo Doria", Genova, Italy. CIS: I. Sparacio collection, Palermo, Italy.

Buprestis (Buprestis) magica doderoi n. ssp. Figures 1, 2, 5, 9, 13, 17

EXAMINED MATERIAL. Holotypus male, pinned with three original labels: Carloforte (Sardinia) A. Dodero - Var. *magica* Lap. - Collezione A. Dodero (red label) (MCSNG). Collection date: 1901–1912. A. Dodero travelled to Carloforte only three times, in 1901, 1902 e 1912 (R. Poggi *in verbis*).

Other examined material. *Buprestis magica magica*. Algeria, D. Fairmaire, teste Thery 1926, Museo Civico di Genova, 1 male (MCSNG). Algeria, Blida Chrea m. 1500, G. Magnani legit, ex larva *Cedrus atlantica*, 28.VI.1986, 1 male (CGM). S-Spain, Tarifa, IX.1983, 1 female, legit G. Dellacasa (MCSNG); S-Spain, Coto Doñana, XII.1984, 1 female, leg. Cortesogno (MCSNG); Spain, Cadiz, Conil El Colorado, 15.VII.1995, P. Coello legit, 2 males (CIS); Balearic Islands, Mallorca, Pollensa,

1 male and 1 female, leg. J. Jordà (MCSNG). *Buprestis octoguttata octoguttata* Linnaeus, 1758. Croatia, 2 males (MCSNG). Dalmatia, 1 female, leg. Kelecsényi (MCSNG). Germany, Chiemgau, Grassau Moor, 23.VII.1972, 2 males, leg. P. Brandl (CIS). Italy, Potenza, Pietra Castello, 15.VII.1996, 1 male, leg. F. Izzillo (CIS). *Buprestis octoguttata corsica*. S-Corsica, Partinello, 19.VII.1990, 1 male, leg. A. Paulian (CIS). *Buprestis aetnensis* Baviera et Sparacio, 2002. Italy, Sicily, Mount Etna north side, 2000 m asl, 14.VIII.1999, leg. C. Baviera (CIS), idem 1 female (CIS).

DESCRIPTION OF THE HOLOTYPE. Male. Length 14.6 mm. Head, pronotum and elytra dark with feeble green or bluish lustre. Ventral surface dark with more metallic lustre. Presence of multiple yellow spots arranged on the dorsal surface as follows: 1 elongated spot on the inner edge of the eye, 1 on the lower edge and a smaller one on the upper-rear edge; pronotum with yellow lateral margins that continue forward on the anterior margin, 2 large spots on the posterior margin, contiguous but clearly distinct, joined by a small stretch; elytra with 4 spots reaching neither the suture nor the elytral margin; 1 humeral spot irregular and extended and a very small one on the elytral margin before the last pre-apical spot. Ventral surface with yellow spots disposed as follows: 4 in the prosternum, the more elongated upper, 2 spots elongated on the margin of prosternal process; 4 spots on the mesosternum; 4 spots on the metasternum; sternites 1–4 with isolated spots; anal sternite with 1 spot elongated along the basal half; other small spots are arranged on the coxae; femurs with spots of elongated shape on the lower edge that, at the articulation with the tibia, extend in part on the dorsal surface. Frons, antennae, legs and ventral surface with short, sparse and white pubescence.

Epistome concave. Frons little hollowed with big and dense punctures; eyes big, protruding, inner margins almost straight, little converging dorsally. Antennae (Fig. 5) with first antennomere long and little dilated anteriorly, second one short, third antennomere denticulate, 4–10 little, denticulate but with obtuse outer angles, terminal antennomere elongated and rounded at apex. Pronotum 1.6 times as wide as long, transverse, regularly convex, lateral margins converging anteriorly, maximum pronotal width at basal third, anterior margin deeply biar-

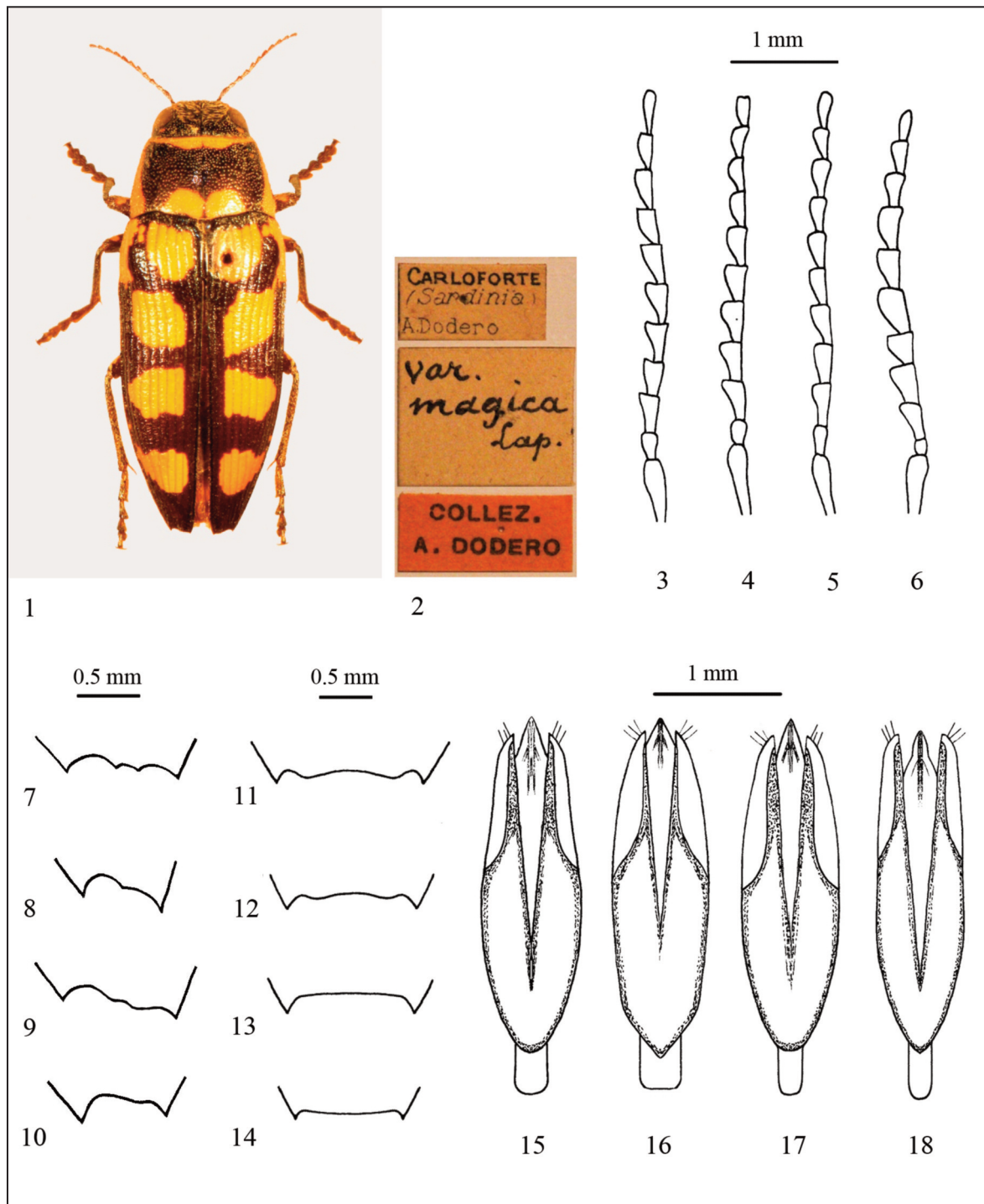
cuate, medial lobe very slightly prominent, posterior margin very biarcuate, strongly lobate in the middle; pronotal sculpture consisting of big, deep and dense punctures, interspace between punctures with very little, superficial and sparse punctures. Scutellum subcordiform, 1.2 times as wide as long, microsculptured. Elytra 1.9 times as long as wide, slightly wider than pronotum at humeral part, subparallel at anterior two thirds, narrowed at elytral apices, elytral epipleura narrow not reaching the elytral apex; elytral sculpture consisting of regular striae of small points, deep and spaced; interstriae slightly convex with wide and superficial punctures, little and transverse lines, and background microsculpture not very evident; humeral swellings distinct; apex of elytra (Fig. 9) irregularly and obliquely truncate between two tooth-shaped protrusions: the margin is concave in the outer half, straight and irregular in the inner half. Legs relatively long and slender, all femora normal, not swollen; protibiae slightly, straight, wider distally and with the pre-apical emargination and 1 apical tooth; mesotibiae slender, nearly straight; metatibiae straight, flattened, 1–4 segments of tarsi dilated, the first one little and narrower than the other three; tarsal claws slender, hook-shaped slightly enlarged at the base. Prosternal process with a median furrow and big and sparse punctures; the sides are straight with apex truncate and rounded. Metasternum with punctures and a median furrow. Sternites microreticulated with elongated and irregular punctures, the first one with a little hollow at the center, anal sternite (Fig. 13) truncated and little concave at apex between two tooth-shaped protrusions.

Aedeagus (Fig. 17) with parameres pointed apically, larger around the middle and narrow and slightly hollow at apical half; microsculpture apical medium thickened; median lobe pointed apically.

VARIABILITY. Unknown.

ETYMOLOGY. The new subspecies is dedicated to Agostino Doderò (Genoa, Italy) who collected the specimen object of this study.

BIOLOGY AND DISTRIBUTION. The species of the genus *Buprestis* Linnaeus, 1758 usually develops on wood of various conifers (*Pinus*, *Picea*, *Abies*, *Larix*, ...). *Buprestis magica doderoi* n. sp. is known, at the moment, only from Southern Sardinia.



Figures 1, 2. *Buprestis (B.) magica doderoi* n. ssp. holotypus male (14.6 mm) with labels. Figures 3–6. Antennae of male of *B. (B.) magica magica* (Algeria) (Fig. 3), *B. (B.) magica magica* (Spain, Cadiz) (Fig. 4), *B. (B.) magica doderoi* n. ssp. (Fig. 5) and *B. (B.) octoguttata corsica* (Corsica, Partinello) (Fig. 6). Figures 7–10. Apex of elytra of male of *B. (B.) magica magica* (Algeria) (Fig. 7), *B. (B.) magica magica* (Spain, Cadiz) (Fig. 8), *B. (B.) magica doderoi* n. ssp. (Fig. 9) and *B. (B.) octoguttata corsica* (Corsica, Partinello) (Fig. 10). Figures 11–14. Anal sternite of male of *B. (B.) magica magica* (Algeria) (Fig. 11), *B. (B.) magica magica* (Spain, Cadiz) (Fig. 12), *B. (B.) magica doderoi* n. ssp. (Fig. 13) and *B. (B.) octoguttata corsica* (Fig. 14). Figures 15–18. Aedeagus of *B. (B.) magica magica* (Algeria) (Fig. 15), *B. (B.) magica magica* (Spain, Cadiz) (Fig. 16), *B. (B.) magica doderoi* n. ssp. (Fig. 17) and *B. (B.) octoguttata corsica* (Corsica, Partinello) (Fig. 18).

REMARKS. The description of *B. magica doderoi* n. ssp. was performed on a single male specimen that, however, appears well differentiated by the peculiar shape of the antennae, the apex of elytra, anal sternite and aedeagus (Figs. 5, 9, 13, 17).

In particular, this new subspecies is different from the surrounding populations of Tunisia, Algeria, Morocco and Spain, Balearic Islands included, attributed to *B. magica magica* (Figs. 3, 4, 7, 8, 11, 12, 15, 16) and those of Corsica attributed to *B. octoguttata corsica* (Figs. 6, 10, 14, 18); *B. magica doderoi* n. ssp. is different, also, from European populations of *B. octoguttata octoguttata* and Sicilian populations of *B. aetnensis* (see Baviera & Sparacio, 2002).

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