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Discomorpha carlobrivioi, a new species from Bolivia (Coleoptera: Chrysomelidae: Cassidinae)

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ABSTRACT. *Discomorpha carlobrivioi*, a new species from Bolivia is described. It is close to *D. metallica* (GUÉRIN) and *D. santaremi* BOROWIEC et DĄBROWSKA but differs from both relatives in pubescent elytra.

Key words: entomology, taxonomy, new species, Coleoptera, Chrysomelidae, Cassidinae, Omocerini, *Discomorpha*, Bolivia.

The genus *Discomorpha* CHEVROLAT, 1837 comprises 55 species divided into three subgenera, spread in tropical central and South America (BOROWIEC 1999, BOROWIEC and ŚWIĘTOJAŃSKA 2002). In material studied recently we found specimens of a new species. Its description is given below.

***Discomorpha* (s. str.) *carlobrivioi* n. sp.**

ETYMOLOGY

Dedicated to Rev. Carlo BRIVIO (P.I.M.E. Entomologica Museum, Monza, Italy) who send us the new species to description. Carlo BRIVIO's collection of Neotropical Cassidinae is rich in many interesting species, including several new taxa.

DIAGNOSIS

A member of nominotypical subgenus. Uniformly metallic green or cupreous pronotum and elytra, and extremely dense and coarse elytral puncturation near this species only to *Discomorpha metallica* (GUÉRIN, 1844) and *D. santaremi* BOROWIEC et DĄBROWSKA, 1996. *D. carlobrivioi* distinctly differs from both relatives in pubescent elytra. *D. santaremi* differs also in smaller size (male length 10.5-11.3 mm female 12.4-13.0 mm, in *D. carlobrivioi* 13.1-14.5 mm and 14.2-15.7 mm respectively) and lower and obtuse postscutellar tubercle (high and angulate in *D. carlobrivioi*). *D. metallica* looks at first glance very similar to *D. carlobrivioi* but differs, except bare elytra, also in coarsely punctate elytral marginalia, pronotal corners less protruding laterally, and completely bare pronotum. Other uniformly metallic species of *Discomorpha* s. str.: immaculate form of *D. biplagiata* (GUÉRIN, 1844), *D. caerulata* (BOHEMAN, 1856), *D. heikertingeri* (SPAETH, 1920), immaculate form of D. *languinosa* (BOHEMAN, 1850), and *D. pinkeri* (SPAETH, 1907) differ in finer and/or shallower elytral puncturation and metallic colouration never as metallic green or cupreous as in *D. carlobrivioi* and its two relatives.

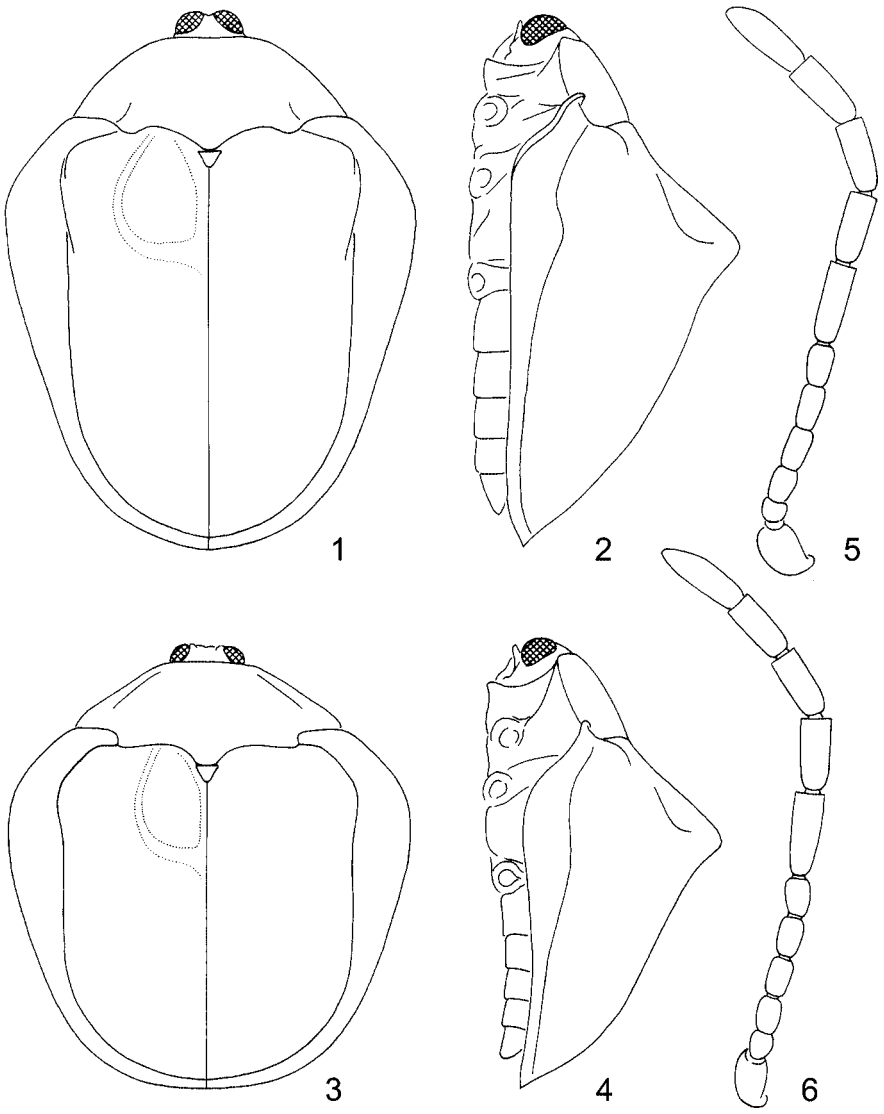
DESCRIPTION

Length: male 13.1-14.5 mm, female: 14.2-15.7 mm, width: male 11.6-12.6 mm female 11.4-13.2 mm, length of pronotum: male 3.5-3.8 mm, female 3.4-3.9 mm, width of pronotum: male 7.9-8.3 mm, female 7.8-8.8 mm, length/width ratio: male 1.13-1.15, female 1.15-1.25, width/length of pronotum ratio: both sexes 2.18-2.35. Body subpentagonal, males with sides more rounded than in females (figs 1, 2).

Pronotum and elytra mixed metallic green and metallic cupreous, in three of examined specimens green predominate, in another three cupreous predominate. Pronotal angles always cupreous, extreme margin of elytra green, gold or cupreous (for colour photo see electronic Internet manual by BOROWIEC and ŚWIĘTOJAŃSKA: www.biol.uni.wroc.pl/cassidae/katalog%20internetowy/index.htm). The metallic colour is very intensive, almost as intensive as in well known and the jeweller's species *Polychalca punctatissima* (WOLF) (better known under name *P. variolosa*). Head and ventrites black with green metallic tint. Antennae with six basal glabrous segments metallic green, and five distal pubescent segments black.

Pronotum with very sparse adherent pubescence. Elytra with moderately dense, mostly erect pubescence, in female vestiture distinctly denser and longer than in male. Pronotum trapezoidal, anterior margin straight shallowly emarginate, sides straight or only slightly convex, strongly converging anterad. Basal corners strongly protruding laterally, more elongate than in related species. Disc moderately convex, shallowly impressed on sides, along the middle with more or less developed smooth line or shallow sulcus. Surface of disc dull, distinctly microreticulate and finely and sparsely punctate; explanate margin indistinctly bordered from disc, dull, microreticulate, impunctate but with very fine, setose pricks. Lateral margin slightly elevated, especially in females.

Scutellum triangular, impunctate. Elytra moderately broad, in male slightly stouter than in female, with maximum width in female at 1/4 and in male at 2/5 length, then moderately converging posterad (figs 1, 2). Disc with large, angulate postscutellar tubercle (fig. 3), the tubercle on sides with obtuse carinae, postscutellar impression slightly defined, on sides with very low marginal fold. Puncturation coarse, deep, and dense, punctures with sharply defined margin, intervals narrow,



1-4. *Discomorpha carlobrivioi*: 1 – female dorsal, 2 – female lateral, 3 – male dorsal, 4 – male lateral, 5 – female antenna, 6 – male antenna

flat, do not form a reticulation. Surface of intervals mostly smooth with indistinct microreticulation, surface of punctures dull and microsculptured. Marginal row distinct. Explanate margin moderately declivous, moderately broad, its surface dull, microreticulate, with extremely fine and sparse puncturation. Margin elevated only in humeral area. Epipleuron in posterior half very narrow, its interior margin moderately elevated, ending in apex, surface in apical part in both sexes with sparse erect hairs.

Head with sharp frontal groove ending at vertex in oval, deep impression. Clypeus strongly elevated, labrum transversely impressed. Antennae with six basal glabrous and five distal dull segments. Length ratio of segments in male: 100:48:80:84:88:80:208:176:148:148:200 (fig. 4), in female: 100:48:80:84:88:76: 192:164:160:152:200. Sexual dimorphism in structure of antennae indistinct, in male last segment with outer margin slightly more curved and apex with slightly denser and longer hair than in female.

Ventrites without diagnostic characters.

MATERIAL EXAMINED

Ho1otype fema1e: "Bolivia, Caranavi prov., La Paz dp., IX-2000, C. Tello"; 2 male and 3 female paratypes: the same data; 2 male and 1 female paratypes: the same locality but date "XI-2000"; 7 male and 6 female paratypes: the same locality but date "I-2001"; 1 male and 4 female paratypes: "Bolivia, Guanay, Coroico, XI-96" (holotype at P.I.M.E. Entomological Museum, Monza, Italy, paratypes at P.I.M.E. Entomological Museum, Monza, Italy, at the Department of Systematic Zoology and Zoogeography, Wrocław University, Wrocław, Poland, and in D. SASSI collection, Castelmarte, Italy).

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