

Genus	Vol. 15(2): 253-256	Wrocław, 30 VI 2004
-------	---------------------	---------------------

Charidotella (Philaspis) marginepunctata, a new species from
Brazil
(Coleoptera: Chrysomelidae: Cassidinae)

LECH BOROWIEC

Zoological Institute, University of Wrocław, Przybyszewskiego 63/77, 51-148 Wrocław, Poland,
e-mail: cassidae@biol.uni.wroc.pl

ABSTRACT. *Charidotella (Philaspis) marginepunctata* n. sp. is described from Mato Grosso, Brazil. It is well characterized by extremely coarse puncturation of the explanate margin of elytra. A key to the subgenus *Philaspis* SPAETH, 1913 is given.

Key words: entomology, taxonomy, new species, Coleoptera, Chrysomelidae, Cassidinae, *Charidotella*, *Philaspis*, Brazil.

SPAETH (1913) proposed a new genus *Philaspis* for *Cassida polita* KLUG, 1829, *Coptocyclus bivulnerata* BOHEMAN, 1855, and *Odontionycha seriatopunctata* SPAETH, 1900. In 1936, SPAETH included in the genus *Philaspis* more 5 species, including three new to science. HINCKS (1952) reduced *Philaspis* to the subgenus of the genus *Charidotella* WEISE, 1896. This point of view was also presented by SEENO and WILCOX (1982), RILEY (1986), and BOROWIEC (1989, 1999). Till now only 8 species listed by SPAETH (1936) were known from the subgenus *Philaspis*.

In materials studied recently I have found two specimens of a new species of the genus *Philaspis*, with peculiar puncturation of elytral marginalia. Its description is given below.

***Charidotella (Philaspis) marginepunctata* n. sp.**

ETYMOLOGY

Named after coarse puncturation of the explanate margin of elytra.

DIAGNOSIS

It is a very distinct species, well characterized by its very coarse puncturation of the explanate margin of elytra. From eight hitherto known species five have impunctate elytral marginalia and three: *Ch. seriatopunctata* (SPAETH, 1900), *Ch. goyazensis* (SPAETH, 1936), and *Ch. nigriceps* (SPAETH, 1936) have punctate marginalia. In these three species puncturation of the explanate margin of elytra is fine, punctures are not or only slightly coarser than the punctures in elytral rows, while in *Ch. marginepunctata* the punctures on marginalia are three to five times coarser than the punctures in elytral rows. *Ch. marginepunctata* has the explanate margin of elytra less declined than in other species, almost subhorizontal.

DESCRIPTION

Length: male 7.8 mm, female 7.2 mm; width: both sexes 5.8 mm; length of pronotum: both sexes 2.5 mm; width of pronotum: male 4.3 mm, female 4.0 mm, length/width ratio: male 1.21, female 1.24; width/length ratio of pronotum: male 1.72, female 1.60. Body short-oval, elytra slightly converging posterad (fig. 1).

Dorsum yellow, one puncture in 1/3 length of fifth row marked with black. Ventrites uniformly yellow, including head and legs. Six basal antennal segments yellow, last four segments black, in holotype segment 7 infuscate, in paratype yellow.



1-2. *Charidotella (Philaspis) marginepunctata* n. sp.: 1 – dorsal, 2 – lateral

Pronotum transverse, of typical shape for the subgenus *Philaspis*, with angulate sides and shallowly emarginate between base and lateral angulation. Anterior margin regularly rounded. Disc moderately convex, indistinctly bordered from explanate margin. Sides of disc with several moderately coarse punctures, surface of disc smooth and shiny. Explanate margin shiny, on sides with a group of moderately coarse punctures.

Scutellum triangular, without sulci. Base of elytra distinctly wider than pronotum, humeri distinctly protruding anterad, subangulate. Disc regularly convex (fig. 2), with top of convexity in 1/3 length, without impressions. Puncturation of disc regular, fine, but distinctly coarser than in *Ch. seriatopunctata* or *Ch. nigriceps* and slightly coarser than in *Ch. inculta*. Interfals flat, broad, on sides of disc two, on top of disc four times wider than rows. Marginal row distinct, its punctures very coarse, many times coarser than punctures in central rows, and coarser than punctures on marginalia. Surface of disc smooth, shiny. Explanate margin broad, in the widest part four times narrower than disc, less declined than in other species, appears subhorizontal. Whole surface of explanate margin with coarse punctures, three to five times coarser than punctures in central rows. Surface between punctures smooth and shiny. Apex of elytral epipleura bare.

Clypeus broad, 1.7 times as wide as long, its anterior margin only slightly elevated, central plate shallowly impressed. Anterior margin of labrum shallowly emarginate. Prosternal process moderately expanded apically, flat, along apex with a row of elongate punctures.

Antennae slim, length ratio of antennal segments 100:45:55:62:65:47:55:45:50:47:102. Segment 3 approximately 1.2 times longer than segment 2, segment 4 slightly longer than segment 3.

Legs slim, in male external claw of mid legs simple, remaining claws with basal tooth, in female all claws with basal tooth.

TYPE MATERIAL

Holotype male: "Brazil, Mato Grosso, Chapada Plateau, VIII 1990, native collector"; paratype female: the same data but date "X 1990" (preserved at the Department of Biodiversity and Evolutionary Taxonomy [former Department of Systematic Zoology and Zoogeography], Wrocław University, Wrocław, Poland).

KEY TO THE SUBGENUS *PHILASPIS*

(colour photos of species marked with an asterisk * are available on web page by BOROWIEC and ŚWIĘTOJAŃSKA 2002)

1. Elytral interval 4, or rows 4 or 5 in 1/3 length with small black spot, sometimes only one or two punctures in row black 2.
- . Elytra uniformly yellow, without black markings 7.
2. Trochanters mostly or completely yellow 3.
- . Trochanters mostly or completely dark brown to black. From Mexico to Costa Rica *bivulnerata* (BOHEMAN, 1855)*

3. Explanate margin of elytra completely or at least along marginal row punctate 4.
 -. Explanate margin of elytra impunctate 5.
4. Puncturation of explanate margin of elytra fine and sparse, punctures only slightly coarser than punctures in elytral rows. Brazil: Goiás, Mato Grosso *goyazensis* (SPAETH, 1936)
 -. Puncturation of explanate margin of elytra extremely coarse, punctures three to five times coarser than punctures in elytral rows. Brazil: Mato Grosso *marginepunctata* n. sp.
5. Ventrites partly black 6.
 -. Ventrites uniformly yellow. N Argentina, Bolivia, S Brazil; Paraguay, Uruguay *subnotata* (BOHEMAN, 1855)*
6. Antennae uniformly yellow. Thorax completely black. S Brazil *polita* (KLUG, 1829)
 -. Last four antennal segments infusate to black. Sides of thorax with yellow spot. Brazil *bistillata* (SPAETH, 1936)*
7. Explanate margin of elytra with fine puncturation, strongly declined. Puncturation of elytral rows simple, in lateral rows as coarse as on top of disc. Body elongate 8.
 -. Explanate margin of elytra impunctate, less declined than in related species. Puncturation in lateral elytral rows distinctly coarser than on top of disc. Body stout, trapezoidal. Brazil *inculta* (BOHEMAN, 1855)
8. Ventrites uniformly yellow. N Argentina, S Brazil, Paraguay *seriatopunctata* (SPAETH, 1900)*
 -. Ventrites mostly black. N Argentina, Paraguay *nigriceps* (SPAETH, 1936)*

REFERENCES

- BOROWIEC, L., 1989 b. Three new species of *Charidotella* WEISE (Coleoptera, Chrysomelidae, Cassidinae), with checklist of the genus. Pol. Pismo Entomol., 59: 203-222.
- , 1999. A world catalogue of the Cassidinae (Coleoptera: Chrysomelidae). Biologica Silesiae, Wrocław, 476 pp.
- BOROWIEC, L., ŚWIĘTOJAŃSKA, J., 2002. Cassidinae of the world - an interactive manual (Coleoptera: Chrysomelidae). Permanent electronic publication: www.biol.uni.wroc.pl/cassidae/katalog%20internetowy/index.htm
- HINCKS, W. D., 1952. The genera of the Cassidinae (Coleoptera: Chrysomelidae). Trans. R. Entomol. Soc. Lond., 103: 327-358.
- RILEY, E. G., 1986. Review of the tortoise beetle genera of the tribe Cassidini occurring in America North of Mexico (Coleoptera: Chrysomelidae: Cassidinae). J. New York Entomol. Soc., 94: 98-114.
- SEENO, T. N., WILCOX, J. A., 1982. Leaf beetle genera (Coleoptera: Chrysomelidae). Entomography, 1: 1-221.
- SPAETH, F., 1900. Zwei neue Cassididen von Paraguay gesammelt von Herrn G. BOGGIANI. Ann. Mus. Civ. Stor. Nat. Genova, ser. 2, 20: 577-579.
- , 1936. Mitteilungen über neue oder bemerkenswerte Cassidinen aus dem Seneckberg-Museum (Ins. Col.). Entomol. Rundsch.: 53: 109-111, 138-140, 170-173, 213-216, 259-262.