A new species of *Cassida* Linnaeus from Australia (Coleoptera: Chrysomelidae: Cassidinae: Cassidini)

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ABSTRACT. Cassida queenslandica, species new to science, is described from Queensland, NE Australia. It is close to Cassida diomma Boisduval.

Key words: entomology, taxonomy, new species, Coleoptera, Chrysomelidae, Cassidinae, Cassidini, Cassida, Australia.

Australian members of the genus Cassida Linnaeus, 1758 were revised recently (Borowiec 1990). Only eight species have been recorded from the continent. They form two distinct groups separated morphologically and partly geographically. First group which includes C. denticulata Boheman, 1856, C. mera GERMAR, 1848, C. navicella BOHEMAN, 1862, and C. sappho (BOHEMAN, 1862) occurs in SE Australia: South Australia, Victoria, New South Wales, and south Queensland. Species of the group have no close relatives in other zoogeographical regions. The second group which includes C. aureola (Spaeth, 1915), C. compuncta (BOHEMAN, 1855), C. diomma BOISDUVAL, 1835, and C. sexguttata BOISDUVAL, 1835 occurs mostly in N and NE Australia with southernmost localities in NE New South Wales. The group is close to large and widespread in Paleotropics species related to Cassida circumdata HERBST, 1799, often grouped in the subgenus or independent genus *Taiwania* Spaeth, 1913 (in my opinion division of the genus Cassida into subgenera is completely artificial and in my world catalogue of Cassidinae (Borowiec 1999) I treated all subgeneric names proposed in the genus as simple synonyms).

In material loaned from Canadian Museum of Nature, Ottawa, Canada, I found a new species of the genus *Cassida* Linnaeus collected in Queensland Province of north-eastern Australia. It belongs to the group of species close to *C. diomma* Boisduval. Its description is given below.

Colour photos of all Australian *Cassida* species are available in Borowiec and Świętojańska (2002).

Cassida queenslandica n. sp.

ETYMOLOGY

Named after its terra typica, Queensland Province in NE Australia.

DIAGNOSIS

Small size, uniformly yellow ventrites, completely regular elytral puncturation, and elytral disc with no pale relief nears this species only to Cassida aureola (SP.). The new species distinctly differs in elytral disc with black band along middle of elytron while in C. aureola whole elytra are uniformly yellow. Elytral rows in C. aureola are arranged completely regular with intervals between central rows of the same width, while in C. queenslandica two rows running along black band are more close together than to rows running along yellow parts of disc. In my key to Australopapuan Cassida (Borowiec 1990) it runs to the group of species between couplets 7 and 12. C. compuncta (BOHEMAN, 1855), C. diomma Boisduval, 1835, and C. sexguttata Boisduval, 1835 distinctly differ in presence of elytral relief. In all these species dark pattern of elytra (black or reddish) occupies lateral and sutural parts of disc while yellow relief forms irregular band along middle of disc or along subsutural part of disc. In C. queenslandica sutural and lateral parts of disc are yellow while black band runs along middle of disc. At first glance C. astrolabiana (Spaeth, 1903) from New Guinea is the most similar, but in this species black band is broader than in C. queenslandica and runs along sides of the disc. C. astrolabiana has also black pattern in anterior part of suture. In C. astrolabiana black occupies more than half surface of disc while in C. queenslandica yellow predominate.

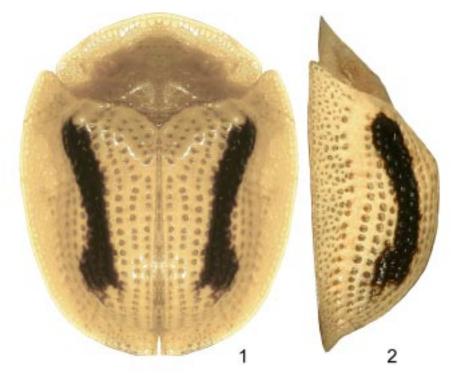
DESCRIPTION

Length 4.3-4.8 mm, width 3.45-3.8 mm, length of pronotum 1.6-1.8 mm, width of pronotum 2.55-2.8 mm, width of elytral disc 2.55-3.0 mm, length/width ratio 1.25-1.26, width/length ratio of pronotum 1.56-159. Body short-oval, sides of elytra softly converging posterad (fig. 1).

Pronotum and scutellum yellow. Elytra yellow, between rows 4 and 7 runs black band beginning from humeral callus and ending on slope. Ventrites uniformly yellow. Antennal segments 1-7 yellow, segments 8-11 gradually infuscate, dorsal side of segment 11 almost black.

Pronotum elliptical, with maximum width slightly before middle, sides narrowly rounded, no basal corners. Disc moderately convex, with sparse fine pricks, smooth and shiny. Explanate margin impunctate, smooth and shiny, with honeycomb structure.

Base of elytra distinctly wider than pronotum, humeri distinctly protruding anterad, angulate. Disc regularly convex, with top of convexity in postscutellar point (fig. 2). Postscutellar impressions shallow but distinct, no other impressions. Puncturation of disc completely regular, punctures in rows moderately coarse, distance between punctures mostly narrower than puncture diameter. Puncturation of black band slightly coarser than on pale parts of disc, punctures almost touching each other. Marginal row distinct, its punctures in anterior half of row slightly coarser in posterior half as coarse as in submarginal row. Intervals mostly wider than rows only interval between rows running along the black band very narrow, linear. Marginal interval broad, distinctly wider than latero-marginal intervals. Surface of intervals smooth and shiny. Explanate margin of elytra moderately declivous, in the widest part as wide as 1/6 width of disc, very shallowly punctate, its surface appears slightly irregular. Apex of elytral epipleura bare.



1, 2. Cassida queenslandica: 1 – dorsal, 2 - lateral

Head moderately broad, clypeus narrow, approximately 1.2 times as wide as long, flat, without median impression, smooth and shiny, fine clypeal lines converging in arch. Labrum shallowly emarginate. Antennae slim and long, length ratio of antennal segments: 100:50:75:75:67:50:67:54:58:58:104.

Claws with distinct basal tooth.

Type material.

Holotype: "AUSTRALIA, Qld., Southedge Res. Sta., 12 km NW Mareeba, 5.I.1989, H. & A. Howden" "FIT: Flight Intercept trap"; paratype: the same data but date "7.II.1989" and "malaise trap" (holotype preserved at

the Australian National Insect Collection, Canberra, Australia, paratype at the Canadian Museum of Nature, Ottawa, Canada).

ACKNOWLEDGEMENTS

I would like to express my sincere thanks to F. GÉNIER (Ottawa, Canada) for lending me specimens of the new species.

This paper was supported by scientific grant of the Zoological Institute, University of Wrocław, 1018/IZ/2006.

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