

Genus	Vol. 24(2): 217-221	Wrocław, 31 VII 2013
-------	---------------------	----------------------

A new species of *Aspidimorpha* HOPE from Sumbawa, Indonesia (Coleoptera: Chrysomelidae: Cassidinae: Aspidimorphini)

¹JOLANTA ŚWIĘTOJAŃSKA & ²LECH BOROWIEC

Department of Biodiversity and Evolutionary Taxonomy, University of Wrocław, Przybyszewskiego 63/77, 51-148 Wrocław, Poland, e-mail: ¹sindiola@biol.uni.wroc.pl, ²cassidae@biol.uni.wroc.pl

ABSTRACT. *Aspidimorpha sumbawaensis* n. sp. is described from Sumbawa, Indonesia. It is unique species with no close relatives in the Oriental Region.

Key words: entomology, taxonomy, new species, Indonesia, Sumbawa, Coleoptera, Chrysomelidae, Cassidinae, Aspidimorphini.

INTRODUCTION

The genus *Aspidimorpha* HOPE comprises 198 species divided into 10 subgenera distributed in subtropics and tropics of the Old World with two species in East Palearctic (BOROWIEC 1999, BOROWIEC & ŚWIĘTOJAŃSKA 2013). Australopapuan species were revised recently by BOROWIEC (1992), African and Madagascan species by BOROWIEC (1997) and BOROWIEC & ŚWIĘTOJAŃSKA (2011), and Oriental species by ŚWIĘTOJAŃSKA (2001). Only three species were described after these revisions, one from the Oriental Region (ŚWIĘTOJAŃSKA & BOROWIEC 2006) and two from the Ethiopian Region (BOROWIEC 2006; BOROWIEC & SEKERKA 2010). In the Oriental Region occur 51 species, 50 from the nominotypical subgenus and one from the monotypical subgenus *Dianaspis* CHEN & ZIA. In old material of the former René OBERTHUR collection preserved in Museum Koenig, Bonn we found four specimens of the genus *Aspidimorpha* collected on Sumbawa island and representing a new distinct species. Its description is given below.

Photos were prepared using Nikon SMZ 1500 stereomicroscope and Nikon Coolpix 4500 photo camera, and Helicon Focus software.

Exact label data are cited for type material. A forward slash (/) separates different lines and a double slash (//) different labels of data.

Abbreviations for collections:

DBET – Department of Biodiversity and Evolutionary Taxonomy, University of Wrocław, Poland;

MKB – Museum Koenig, Bonn, Germany.

DESCRIPTION

Aspidimorpha sumbawaensis ŚWIĘTOJAŃSKA & BOROWIEC n. sp.

ETYMOLOGY

Named after its terra typica, Sumbawa island.

TYPE MATERIAL

Holotype: “Sumbawa / Colffs., // ex coll. / René Oberthur /Rennes / coll. ZFMK, Bonn” (preserved in MKB); three paratypes: the same data (MKB, DBET).

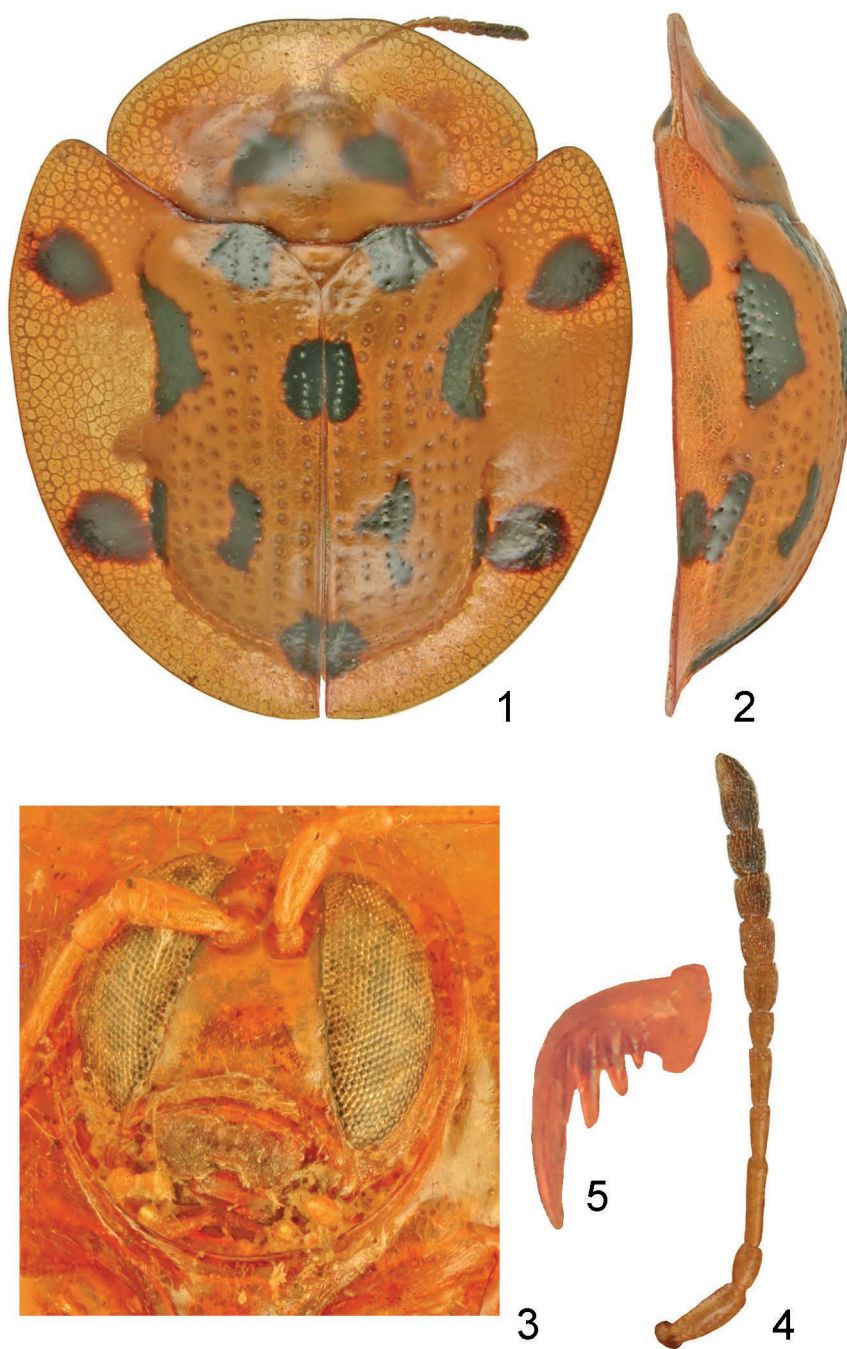
DIAGNOSIS

A very distinct species belonging to the nominotypical subgenus with no close relatives. Its dorsal coloration with two black spots on pronotal disc is rare character in the genus *Aspidimorpha* and was observed only in typical form of *Aspidimorpha deusta* (F.), wide spread in the Oriental and Australian Regions, and in *A. angora-mensis* BOR. from New Guinea. Both species form a monophyletic group and differ in more elongate body, different elytral pattern with black sutural spot (see photos in BOROWIEC & ŚWIĘTOJAŃSKA 2013) and acute humeral angles. The only other Oriental and Australian species with spotted pronotum *A. maculatissima* (BOH.) has different dorsal pattern with usually black basal parts of explanate margin of pronotum. The most similar dorsal pattern has typical form of *A. punctum* (F.) from Seram, New Guinea and northern Australia but differs in immaculate pronotum and broad, black sutural spot, also Australian *A. westwoodi* BOH. has similar elytral pattern but differs in immaculate pronotum, humeral spot extending to anterior margin of elytra, sides of elytral disc with continuous black band expanded in the middle to the half width of elytron and broad sutural spot.

DESCRIPTION

Length: 7.0-7.4 mm, width: 6.0-6.7 mm, length of pronotum: 2.2-2.4 mm, width of pronotum: 4.3-4.7 mm, length/width ratio: 1.07-1.17, width/length ratio of pronotum: 1.95-1.98. Body almost circular (fig. 1).

Pronotum yellow, disc with two large, round, black spots. Scutellum yellow. Elytral disc yellow with 9 black spots: large, round to square at base of elytra close to basal corners of scutellum, large, elongate behind humeral callus, large round at top of disc, narrow, elongate close to base of posterolateral spots on explanate margin, elongate on slope of each elytron (sometimes divided into two spots), and round on apex of suture. Explanate margin yellow with black humeral and posterolateral spots. Humeral spot round, in distance from anterior margin of elytra and not or narrowly extending to



1-5. *Aspidimorpha sumbawaensis* n. sp.: 1 – dorsal, 2 – lateral, 3 – head, 4 – antenna, 5 – tarsal claw

lateral margin of elytra, posterolateral spot round, not or narrowly extending to lateral margin of elytra and partly connected with posterolateral spot of disc. No sutural spot. Head, thorax, abdomen and legs yellow. Antennal segments 1-7 yellow, segment 8 from uniformly yellow to mostly infusate, segments 9-11 gradually infusate to black.

Pronotum very broad, 1.95-1.98 times as wide as long, widest slightly behind the middle, sides rounded. Pronotal disc regularly convex, its impunctate, shiny. Explanate margin distinctly bordered from disc, its surface impunctate, shiny, transparent with well visible honeycomb structure.

Scutellum triangular, with transverse sulcus apically. Base of elytra much wider than pronotum, humeri moderately protruding anterad, humeral angles rounded. Disc evenly convex, without postscutellar elevations or tubercles (fig. 2). Postscutellar and proncipal impressions very shallow or absent. Punctuation of disc fine, regular, from base to slope slightly gradually smaller, distance between punctures in various rows from as wide as to thrice wider than puncture diameter. Marginal row distinct, its punctures as coarse as in lateral rows. Intervals at top of disc broad, four to five times as wide as rows, on sides of disc as wide as to twice wider than rows. Marginal interval very narrow, narrower than submarginal interval with broad lateral fold. Surface of intervals flat, impunctate, shiny. Explanate margin of elytra broad, in the widest part 2.5 times narrower than disc, subhorizontal, impunctate, shiny, transparent with well visible honeycomb structure. Apex of elytral epipleura with sparse long setae.

Eyes very large, gena obsolete. Clypeus broad, approximately 1.3 times as wide as long, clypeal plate convex, shiny, impunctate. Prosternal process broad in the middle, strongly expanded apically, area between coxa flat with shallowly canaliculate sides, impunctate shiny, expanded apex slightly convex in the middle, impressed laterally, impunctate, shiny. Antennae moderately long, segment 10 only slightly longer than wide. Length ratio of antennal segments: 100:48:110:64:69:42:56:49:49:51:100, segment 3 approximately 2.3 times as long as segment 2 and 1.7 times as long as segment 4.

Claws pectinate, inner pecten with three teeth, the largest extends to 2/5-1/2 length of claw, outer pecten with two teeth.

DISTRIBUTION

Sumbawa island in the Lesser Sunda Islands. Only two other species of the genus *Aspidomorpha* were noted from this island: *A. amabilis* BOH. and *A. miliaris* (F.).

ACKNOWLEDGEMENTS

We would like to express our sincere thanks to Dirk AHRENS (Museum Koenig, Bonn) for sending us specimens to study.

REFERENCES

- BOROWIEC, L., 1992. A review of the tribe Aspidomorhini of the Australian Region and Papuan Subregion (Coleoptera: Chrysomelidae: Cassidinae). Genus, Wrocław, 3: 121-184.

- , 1997. A monograph of the Afrotropical Cassidinae (Coleoptera: Chrysomelidae). Part II. Revision of the tribe Aspidimorphini 2, the genus *Aspidimorpha* HOPE. Genus, suppl. 11, Biologica Silesiae, Wrocław, 596 pp.
- , 1999. A world catalogue of the Cassidinae (Coleoptera: Chrysomelidae). Biologica Silesiae, Wrocław, 476 pp.
- , 2006. A new species of *Aspidimorpha* sgen. *Spaethia* from Zambia (Coleoptera: Chrysomelidae: Cassidinae). Genus, Wrocław, **17**: 249-252.
- BOROWIEC, L., SEKERKA, L., 2010. *Aspidimorpha* (s. str.) *karamojana*, a new species from Central Africa (Coleoptera: Chrysomelidae: Cassidinae). Genus, Wrocław, **21**: 271-277.
- BOROWIEC, L., ŚWIĘTOJAŃSKA, J., 2011. The Tortoise beetles of Madagascar (Coleoptera: Chrysomelidae: Cassidinae), Part 1: Basiprionotini, Aspidimorphini and Cassidini (except the genus *Cassida*). Polish Taxonomical Monographs, **18**: 246 pp.
- , 2013. Cassidinae of the world - an interactive manual (Coleoptera: Chrysomelidae). Permanent electronic publication (open in 2002, last modification 2 IV 2013): www.biol.uni.wroc.pl/cassidae/katalog%20internetowy/index.htm.
- ŚWIĘTOJAŃSKA, J., 2001. A revision of the tribe Aspidimorphini of the Oriental Region (Coleoptera: Chrysomelidae: Cassidinae). Genus, suppl. 11, Biologica Silesiae, Wrocław, 318 pp. + 18 pl.
- ŚWIĘTOJAŃSKA, J., BOROWIEC, L., 2006. *Aspidimorpha* (s. str.) *tibetana*, a new species from China (Coleoptera: Chrysomelidae: Cassidinae). Genus, Wrocław, **17**: 541-544.