

Genus	Vol. 14(2): 235-239	Wrocław, 30 VI 2003
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## A new species of *Lorentzocassis* SPAETH from New Guinea (Coleoptera: Chrysomelidae: Cassidinae)

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ABSTRACT. *Lorentzocassis riedeli*, a new species from New Guinea is described.  
Key to the genus *Lorentzocassis* SPAETH is given.

Key words: entomology, taxonomy, new species, Coleoptera, Chrysomelidae, Cassidinae,  
Cassidini, *Lorentzocassis*, New Guinea.

The genus *Lorentzocassis* SPAETH, 1913 has been revised recently (BOROWIEC 1991). It comprises only three species, two from New Guinea and adjacent islands, and one from Borneo. In the material studied recently I found specimens of a new species from New Guinea. Its description is given below. New materials of other two species known from New Guinea oblige me to the compilation a new key to the members of the genus. Colour photos of all species from New Guinea are available in electronic manual by BOROWIEC and ŚWIĘTOJAŃSKA (2002).

### *Lorentzocassis riedeli* n. sp.

#### ETYMOLOGY

Dedicated to the German collector A. RIEDEL, who collected this species during his expedition to the New Guinea in 1998.

#### DIAGNOSIS

Like some aberrations of *Lorentzocassis papuana* SP. it has complete postero-lateral spots on elytral marginalia. It differs in almost uniformly yellow antennae

(with at least three black apical segments in *L. papuana*), and yellow part on elytral disc occupies approximately half of the disc (in *L. papuana* black predominate). *L. aruensis* Sp. and *L. purpurascens* (Sp.) distinctly differ in incomplete or absent posterolateral spot on marginalia.

#### DESCRIPTION

Length: 9.8-10.0 mm, width: 9.2-9.5 mm, length of pronotum: 3.2 mm, width of pronotum: 6.50-6.75, length/width ratio: 1.05-1.07, width/length ratio of pronotum: 2.0-2.1. Body almost circular, widest in posthumeral area, then slightly narrowed posterad (fig. 1).

Pronotum yellow, base of disc with large brown, almost regularly pentagonal spot with parallel sides. The spot is slightly constricted in the middle. Scutellum yellow. Elytra yellow with brown pattern as in fig. 1. Brown and yellow occupy approximately equal space of disc. Marginalia yellow, with complete brown posterolateral spot. Head, legs, and ventrites yellow, only abdomen in the middle brown. Antennae uniformly yellow, or only last segment indistinctly infuscate.

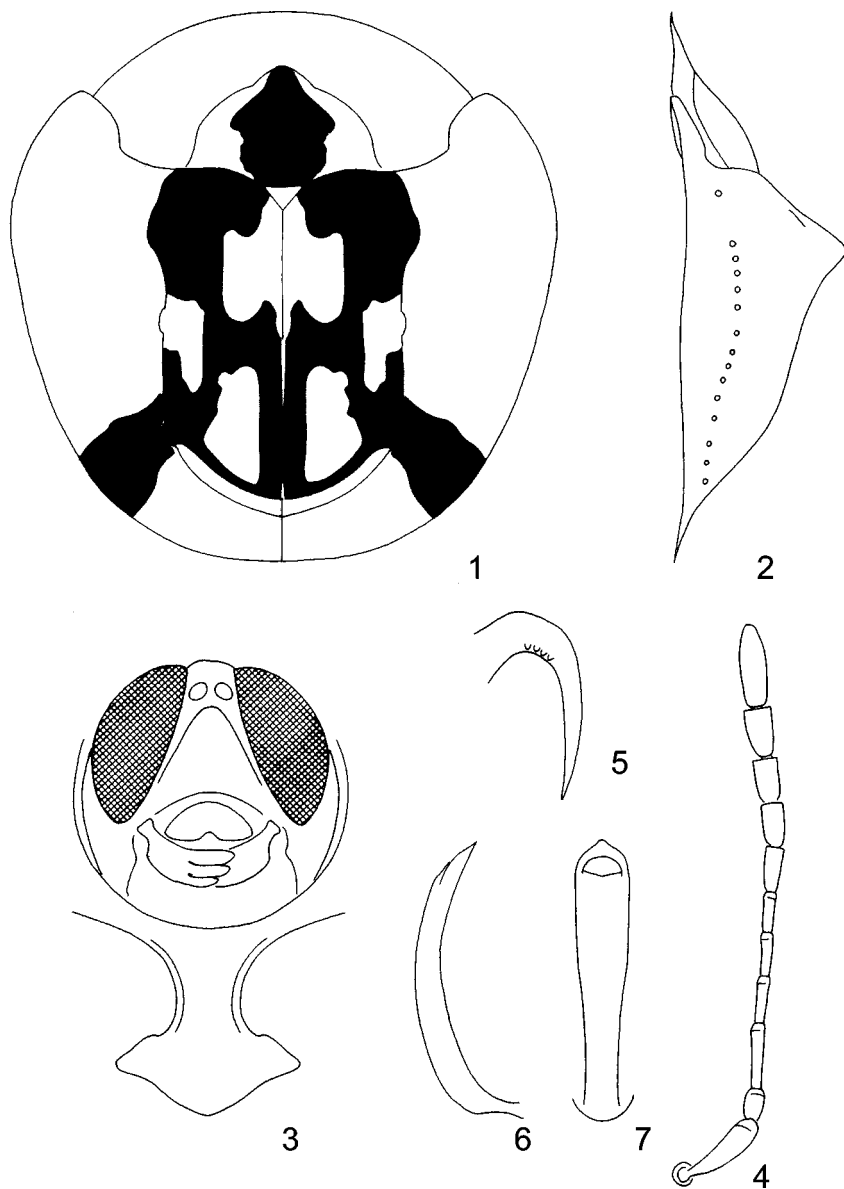
Pronotum very broad, c. two times wider than long, with characteristic shape for the genus *Lorentzocassis*, with emarginate basal half of sides and angulate lateral angle. Surface of both disc and explanate margin smooth and shiny. Marginalia transparent, with honeycomb structure.

Scutellum triangular, impunctate. Base of elytra wider than pronotum, humeri strongly protruding anterad, angulate. Basal margin of elytron arcuate at an angle 90° (fig. 1). Disc with large, conical postscutellar tubercle (fig. 2). Punctuation of elytra regular, very fine, at sides and on slope punctures disappearing. Intervals flat, many times wider than rows. Surface of intervals smooth and shiny. Marginal row distinct, its punctures distinctly coarser than in central rows. Explanate margin almost horizontal, very broad, in the widest part slightly wider than half width of disc. Marginalia transparent, with honeycomb structure, their surface smooth and shiny. Apex of elytral epipleura with few erect hairs.

Head completely horizontal. Clypeus c. 1.3 times as wide as long, its central part slightly elevated, clypeal grooves very fine, almost disappearing. Surface of clypeus impunctate, shiny. Labrum transverse, with carinate margins, shallowly emarginate to 1/6 length. Antennae slim, elongate, with six basal glabrous and five distal dull segments. Length ratio of segments in male: 100:48:96:60:72:52:64:56:60:64:120 (fig. 4). Prosternal collar very short, prosternal process broad, flat, strongly expanded apically, its surface glabrous and shiny, without special sculpture.

Ventrites without diagnostic characters. Legs slim. Claws large, simple, micropectinate.

Aedeagus slim, elongate, its apex regularly rounded with short and broad apical process.



1-4. *Lorentzocassiss riedelii*: 1 –dorsal, 2- lateral, 3 – head and prosternum, 4 –antenna, 5 – claws, 6, 7 – male genitalia (6 – lateral, 7 – dorsal)

## MATERIAL EXAMINED

Holotype: "PAPUA N. G., Morobe Prov., Mindik, 1200-1500 m, 26.IV.1998, leg. A. RIEDEL"; one paratype: the same data; one paratype: the same locality and collector but "1400-1550 m, 27.IV.1998" (holotype and one paratype at the Staatliches Museum für Naturkunde, Stuttgart, Germany, one paratype at the Department of Systematic Zoology and Zoogeography, Wrocław University, Wrocław, Poland.).

## NOTES ON TWO CONGENERS FROM NEW GUINEA

*Lorentzocassis papuana* SPAETH, 1913

New material: Indonesia, Prov. Yalmabi, Jayawijaya, 1200-1400 m, 8 X 1996, 1 ex.

The specimen is similar to the form with humeral and posterolateral spots figured in my revision (BOROWIEC 1991) but has yellow spots on slope large, elongate, and black four apical antennal segments. It has basal pronotal spot distinctly larger than in specimens I examined previously, regularly pentagonal.

*Lorentzocassis aruensis* SPAETH, 1926

New material: Indonesia, Aru Is., 2 ex.

Two specimens examined recently have distinctly dark brown humeral spots, and short, triangular, brown posterolateral spots extending to half width of marginalia.

The colour forms described above oblige me to the compilation a new key to species:

1. Postscutellar tubercle yellow. Posterolateral spots on marginalia, if present, brown to black. New Guinea and adjacent islands ..... 2.
- Postscutellar tubercle and posterolateral spot on marginalia purple-red. Borneo ..... *purpurascens*
2. Posterolateral spot on marginalia complete. Basal pronotal spot in the widest part wider than base of scutellum. New Guinea and Bivak Is. .... 3.
- Posterolateral spot on marginalia incomplete. Basal pronotal spot in the widest part as wide as base of scutellum. Aru Is. .... *aruensis*
3. Yellow part on elytral disc occupies less than half of the disc, brown or black predominate. At least two apical antennal segments infusate to black. Body outline almost regularly circular ..... *papuana*
- Yellow part on elytral disc occupies approximately half of the disc. Antennae uniformly yellow or only last segment indistinctly infusate. Body outline not regularly circular, the widest in posthumeral part, then slightly narrowed posterad ..... *riedeli*

## ACKNOWLEDGEMENTS

I would like to express my sincere thanks to Dr. Wolfgang SCHAWALLER (Staatliches Museum für Naturkunde, Stuttgart, Germany) for the loan of the material, and to Dr. J. ŚWIĘTOJAŃSKA (University of Wrocław, Poland) for preparing figures.

## REFERENCES

- BOROWIEC, L., 1991. On the genus *Lorentzocassis* SPAETH, 1913 (Coleoptera: Chrysomelidae: Cassidinae). *Genus*, **2**: 11-17
- 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](http://www.biol.uni.wroc.pl/cassidae/katalog%20internetowy/index.htm)