©Zoologische Staatssammlung München;download: http://www.biodiversitylibrary.org/; www.biologiezentrum.at

SPIXIANA	21	1	21–24	München, 01. März 1998	ISSN 0341-8391

A further new species of the genus *Mecyclothorax* Sharp from western New Guinea

(Insecta, Coleoptera, Carabidae, Psydrinae)

Martin Baehr

Baehr, M. (1998): A further new species of the genus *Mecyclothorax* Sharp from western New Guinea (Insecta, Coleoptera, Carabidae, Psydrinae). – Spixiana **21/1:** 21-24

Mecyclothory bilaianus, spec. nov. from central Irian Jaya, western New Guinea is described. It belongs to a group of species distinguished by small size, globose elytra, absence of the posterior lateral seta of prothorax and occurrence in montane rain forest of median altitudes.

Dr. Martin Baehr, Zoologische Staatssammlung, Münchhausenstr. 21, D-81247 München, Germany.

In a sample of carabid beetles collected by Mr. A. Riedel, München, during one of his recent trips to Irian Jaya, a further new species of *Mecyclothorax* was detected that is described herein.

The genus *Mecyclothorax* has recently turned out as being rather numerous and diverse in the highlands of New Guinea (Baehr 1995). Therefore, it is not too surprising to find a further new species in central Irian Jaya that is rather closely related to *M. riedeli* Baehr, *M. jiwikae* Baehr, and *M. langdae* Baehr described recently (Baehr 1992, 1995) from collectings made by A. Riedel in different parts of Irian Jaya.

Mecyclothorax bilaianus, spec. nov.

Figs 1, 2

Types. Holotype: ♂, IRIAN JAYA, Panai-Pr. Kamandoga, Bilai, 1900-2300 m, 3.1.1996, leg. A. Riedel (Zoologische Staatsammlung, as permanant loan in working collection of author).

Diagnosis. Small, iridescent black species, distinguished by absence of the posterior lateral pronotal seta, obtuse basal angle and impunctate basal part of pronotum, short, not oviform elytra with markedly punctate inner and almost reduced outer striae, and glossy, though not iridescent surface. It is closely related to *M. riedeli* Baehr, *M. jiwikae* Baehr, and *M. langdae* Baehr, but is distinguished from all three species by the conspicuously falciform apex of the aedeagus.

Description

Measurements. Length: 4.0 mm; width: 1.7 mm. Ratios. Width head/prothorax: 0.65; width/length of prothorax: 1.17; width base/apex of prothorax: 1.01; with elytra/prothorax: 1.45; length/widthof elytra: 1.42.

Colour. Black, mandibles, palpi, antennae, and legs reddish. Lower surface black, elytral epipleurae reddish.

Head. Rather narrow in relation to prothorax. Eyes comparatively large though depressed, orbits small, oblique, c. ⅓ of length of eye. Clypeal suture well impressed. Frontal furrows slightly sinuate,

©Zoologische Staatssammlung München;download: http://www.biodiversitylibrary.org/; www.biologiezentrum.at

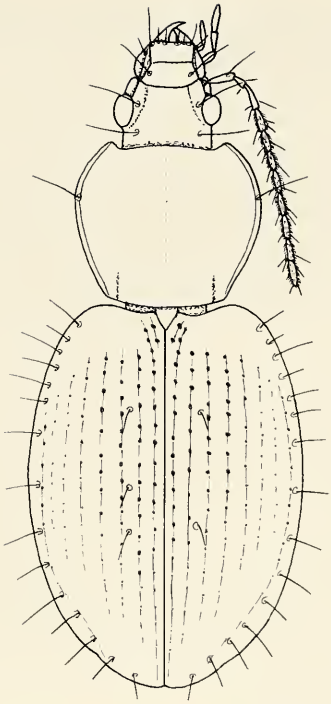

Fig. 1. *Mecyclothorax bilaianus*, spec. nov. Habitus. Length: 4 mm.

very oblique, deep, prolonged just medially of eyes almost behind posterior supraocular seta. Labrum transverse, truncate, 6-setose. Mandibles moderately elongate, apically suddenly curved. Mentum with distinct, apically rounded tooth. Antenna short, barely surpassing posterior border of pronotum, median antennomeres c. 1.5 x as long as wide. Posterior supraorbital seta situated well behind posterior border of eye. Frons with shallow, oblong median groove. Surface impunctate, without microreticulation, glossy.

Pronotum. Large, wide, circular, considerably wider than long, in middle rather depressed, laterally evenly curved, without any excision in front of the basal angles. Widest diameter slightly in front of middle. Base as wide as apex. Apex straight, apical angles feebly projecting, rounded off. Base slightly convex, laterally rather oblique. Basal angles perceptible though very obtuse. Marginal channel narrow throughout, barely widened near basal angles, base and apex not margined. V-shaped anterior sulcus only laterally perceptible. Median line distinctly impressed, anteriorly slightly, posteriorly much abbreviated. Basal grooves linear, elongate, straight. Basal area not explanate, on same level with disk, almost impunctate. Anterior marginal seta situated slightly in front of middle, slightly removed from lateral margin, posterior marginal seta absent. Surface impunctate, without any microreticulation, highly glossy.

Elytra. Short and wide, dorsally markedly convex, widest diameter in middle. Shoulders obtusely rounded off, lateral margin evenly curved. Basal margin strong, oblique, slightly sinuate, connected to scutellary striole. Striae except for sutural stria much abbreviated at shoulder, all striae except for inner two also abbreviated at apex. Sutural stria fairly impressed, 2nd-4th striae slightly impressed, very coarsely punctate, 5th and 6th striae not impressed, though punctate, 7th striae barely perceptible. Scutellary striole fairly elongate, situated mediad of 1st interval. Marginal channel narrow. 3rd interval with 2-3 setiferous punctures in centre of interval, anterior puncture in basal fourth, posterior puncture in middle, on left elytron an additional puncture slightly behind middle. Punctures rather inconspicuous, setae extremely short. Near apex with two setiferous punctures outside 3rd stria in a deep, elongate striole marking the prolongation of 7th stria. Marginal pores inconspicuous, about 13 in a row that is slightly interrupted in middle. Intervals impunctate, without any traces of microreticulation.

©Zoologische Staatssammlung München;download: http://www.biodiversitylibrary.org/; www.biologiezentrum.at

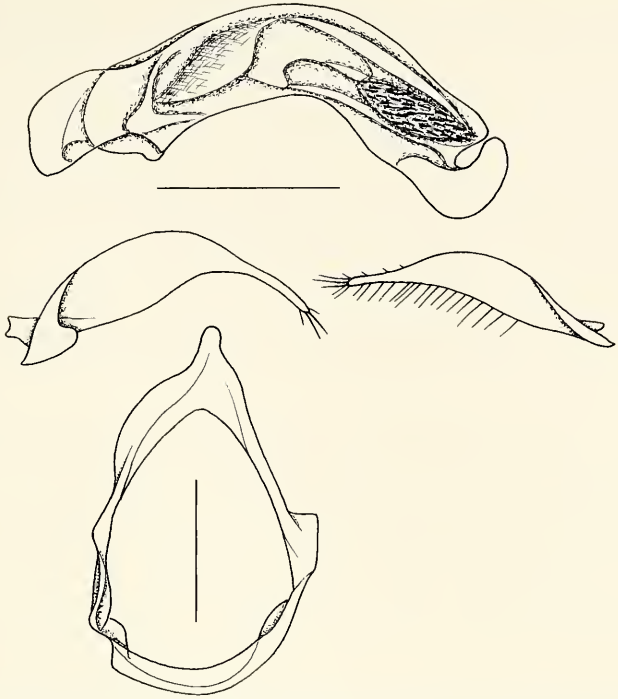

Fig. 2. *Mecyclothorax bilaianus*, spec. nov. ♂ genitalia, aedeagus, parameres, and geital ring. Scales: 0.5 mm.

Surface highly glossy, though not iridescent. Inner wings absent.

Lower surface. Impunctate. Metepisternum about as long as wide. Sternum VII in ♂ 2-setose.

Legs. Without striking features. Three basal tarsomeres of male anterior tarsus expanded and squamose.

♂ genitalia. Genital ring odd shaped, with conspicuously incurved lateral flanges, markedly asymmetric. Aedeagus moderately elongate, suddenly curved, apex not twisted, markedly compressed, foliaceous, conspicuously falciform, strongly sclerotized, on right side less compressed, less laminate, and with a sclerotized rim. Orifice almost completely situated on right side. Internal sac with a weakly toothed apical part and with some folding. Right paramere rather short and wide, at apex c. 5 fairly elongate apical setae, two shorter subapical setae, some short hairs on upper rim, and many thin and rather elongate hairs along lower margin. Left paramere more elongate, basally moderately wide, with narrow, fairly elongate, strongly curved apex that bears two elongate and two shorter apical setae.

♀ genitalia. Unknown.

Variation. Unknown.

Distribution. Bilai area, central Irian Jaya. Known only from type locality.

Collecting circumstances. Largely unknown. Presumably collected by sieving litter from or under logs in montane rain forest of median altitude.

Etymology. The name refers to the type locality.

Recognition

When using my key to the New Guinean species (Baehr 1995) the new species would key out at couplet 7. From there, the key should be altered as following:

7. Smaller and shorter species, length <3.8 mm, ratio l/w of elytra <1.37; basal angles of pronotum almost rounded off; anterior transverse sulcus of pronotum weak; aedeagus elongate, markedly

©Zoologische Staatssammlung München;download: http://www.biodiversitylibrary.org/; www.biologiezentrum.at

curved, with sclerotized apical plate (Baehr 1995, fig. 10). Jiwika area, central Irian Jaya, at 2300 m ..... *jiwikae* Baehr

– Larger and more elongate species, length >4.0 mm, ratio l/w of elytra >1.42; basal angles of pronotum distinct, though obtuse; aedeagus different, less evenly curved, either stouter, or with two sclerotized rods in internal sac, or with conspicuously falciform apex (Fig. 2) ..... 8.

8. Smaller and shorter species, length <4.4 mm, ratio l/w of elytra 1.42-1.44; colour glossy black; striae of elytra less impressed, intervals less convex; median segments of antenna shorter, < 2 x as long as wide; aedeagus markedly curved down, either with slightly upturned apex and two sclerotized rods within internal sac, or with conspicuously falciform apex (Fig. 2) ..... 9.

– Larger and more elongate species, length 4.6 mm, ratio l/w of elytra 1.52; colour reddish, with slightly darker head; striae of elytra more deeply impressed, intervals distinctly convex; median segments of antenna longer, c. 2.5× as long as wide; aedeagus less distinctly curved down, apex simply curved down, internal sac without sclotized rods (Baehr 1995, fig. 11). Langda area, eastern central Irian Jaya, at 2300 m ..... *langdae* Baehr

9. Striae of elytra less coarsely punctate; microreticulation of elytra superficial though present; apex of aedeagus slightly curved up, internal sac with two sclerotized rods (see Baehr 1992, fig. 2). Kangine area, Baliem Valley, central Irian Jaya, at 1900 m ..... *riedeli* Baehr

– Striae of elytra coarsely punctate; microreticulation of elytra totally absent; apex of aedeagus markedly falciform, internal sac without sclerotized rods (Fig. 2). Bilai area, central Irian Jaya, at 1900-2300 m ..... *bilaianus* Baehr

Remarks

The new species belongs to a group of species that are distinguished by rather small size, globose elytra, absence of posterior lateral seta on prothorax, obtuse basal angles of prothorax, and occurence in ground litter of rain forest in median altitude. It is distinguished from all described New Guinean species of this group by its strange aedeagus that bears a heavily sclerotized, remarkably falciform apex.

Acknowledgements

My thanks are due to Mr. A. Riedel, München, for kindly submitting the specimens for identification.

References

Baehr, M. 1992: A new *Mecyclothorax* Sharp from New Guinea (Insecta, Coleoptera, Carabidae, Psydrinae). – Spixiana **15**, 249-252

– – 1995. The genus *Mecyclothorax* SHARP, 1903 in New Guinea (Coleoptera, Carabidae, Psydrinae). – Mit. Münch. Ent. Ges. **85**: 3-19

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: Spixiana, Zeitschrift für Zoologie

Jahr/Year: 1998

Band/Volume: 021

Autor(en)/Author(s): Baehr Martin

Artikel/Article: A further new species of the genus Mecyclothorax Sharp from western New Guinea (Insecta, Coleoptera, Carabidae, Psydrinae) 21-24