РОССИЙСКАЯ АКАДЕМИЯ НАУК Южный научный центр

RUSSIAN ACADEMY OF SCIENCES Southern Scientific Centre



Кавказский Энтомологический Бюллетень

CAUCASIAN ENTOMOLOGICAL BULLETIN

Том 15. Вып. 2 Vol. 15. No. 2



Ростов-на-Дону 2019

The longicorn beetle tribe Cerambycini Latreille, 1802 (Coleoptera: Cerambycidae: Cerambycinae) in the fauna of Asia. 10. A new species of the genus *Mimimbrius* Miroshnikov, 2017 from Borneo

Жуки-дровосеки трибы Cerambycini Latreille, 1802 (Coleoptera: Cerambycidae: Cerambycinae) фауны Азии. 10. Новый вид рода *Mimimbrius* Miroshnikov, 2017 с Борнео

© A.I. Miroshnikov^{1, 2}, D.J. Heffern³ © А.И. Мирошников^{1, 2}, Д.Дж. Хефферн³

¹Russian Entomological Society, Krasnodar, Russia. E-mail: miroshnikov-ai@yandex.ru

²Sochi National Park, Moskovskaya str., 21, Sochi, Krasnodar Region 354002 Russia

³Florida State Collection of Arthropods, Museum of Entomology, 10531 Goldfield Lane, Houston, TX 77064 USA. E-mail: titanusgiganteus@hotmail.com

¹Русское энтомологическое общество, Краснодар, Россия

²Сочинский национальный парк, ул. Московская, 21, Сочи, Краснодарский край 354002 Россия

³Флоридская государственная коллекция членистоногих, Музей энтомологии, 10531 Голдфилд Лейн, Хьюстон, ТХ 77064 США

Key words: Coleoptera, Cerambycidae, Cerambycini, *Mimimbrius*, new species, Borneo. *Ключевые слова*: Coleoptera, Cerambycidae, Cerambycini, *Mimimbrius*, новый вид, Борнео.

Abstract. A new species, *Mimimbrius sabahensis* Miroshnikov et Heffern, **sp. n.**, is described from Borneo. It is especially similar to *M. dembickyi* Miroshnikov, 2017 inhabiting Southern Thailand, but differs clearly by the somewhat peculiar sculpture of the pronotal disc, the more strongly developed recumbent light setation in its apical third; the presence of a distinct emargination at the apex of the last (visible) sternite in the male; the noticeably narrower longitudinal strips of recumbent, dense, light setae between the upper lobes of the eyes, especially so in the male; the structure of the male genitalia, in particular, the peculiar shape of the apical parts of tergite 8, penis and tegmen, as well as by some other minor traits.

Описан новый Резюме. вид Mimimbrius sabahensis Miroshnikov et Heffern, sp. n. с Борнео. Он особенно сходен с М. dembickyi Miroshnikov, 2017, распространенным в Южном Таиланде, но явно отличается несколько своеобразной скульптурой диска переднеснинки, более сильно развитым лежачим светлым покровом в его вершинной трети, наличием отчетливой выемки на вершине последнего (видимого) стернита самца, заметно более узкими продольными полосами из лежачих густых светлых щетинок между верхними долями глаз, особенно у самца, строением гениталий самца, в частности своеобразной формой вершинных частей 8-го тергита, пениса и тегмена, а также некоторыми менее существенными признаками.

The Oriental genus *Mimimbrius* Miroshnikov, 2017 has been established for four species, including one new [Miroshnikov, 2017]. This paper describes another new species from Eastern Malaysia. The material treated here belongs to the following institutional and private collections:

BM – Bishop Museum (Honolulu, USA);

cAM – collection of Alexandr Miroshnikov (Krasnodar, Russia);

cAN - collection of Alexandr Napolov (Riga, Latvia);

cDH - collection of Daniel Heffern (Houston, USA);

cLD – collection of Luboš Dembický (Brno, Czech Republic).

Mimimbrius sabahensis Miroshnikov et Heffern, **sp. n.** (Figs 1, 2, 7, 8, 13, 14, 18, 22)

Material. Holotype, \circlearrowleft (cDH) (Fig. 2): E Malaysia, Sabah, Crocker Range, 3.04.2006 (local collector), "DJHC Acc # 09–5834", "*Imbrius* sp. near *geminatus*, det. D. Heffern". Paratype: 1 \bigcirc (cAM) (Fig. 1), E Malaysia, Sabah, Trus Madi Mt., 2.04.2007 (local collector), "*Imbrius* sp. near *geminatus*, det. D. Heffern".

Comparative material. *Mimimbrius subargenteus* (Gressitt et Rondon, 1970): $1\mathcal{S}$, holotype (BM) (Fig. 4), "Laos: Vientiane Prov., Phou Kou Khouei", "P. K. Khouei, 31.V.[19]66", "J.A. Rondon Collection Bishop Mus.", "Holotype *Zegriades subargenteus* J.L. Gressitt et Rondon", "*Zegriades subargenteus* Gressitt & Rondon det. 196[?]"; $1\mathcal{S}$, paratype (BM), "Laos: [Champasak Prov.] Ile de Khong, "fle de Khong, 15.IV.[19]65", "J.A. Rondon Collection Bishop Mus.", "Paratype *Zegriades subargenteus* Gressitt & Rondon"; $1\mathcal{S}$ (cAM) (Fig. 5), N Thailand, Lamphun, Mae Tha, 20.04.2011 (local collector); $1\mathcal{S}$ (cAN), same label; $1\mathcal{S}$ (cAM) (Fig. 6), N Thailand, Mae Hong Son, Pai env., road to Mae Yen Waterfall, 575–615 m, 19°21'42"N / 98°27'46"E – 19°22'01"N / 98°30'29"E, 27.04–9.05.2013 (leg. I. Melnik).

Mimimbrius dembickyi Miroshnikov, 2017: 13, holotype (cLD) (Fig. 3), S Thailand, Nakhon Si Thammarat, Khao Luang, Kiriwong, 08°16'12"N / 99°26'24"E, 9.04.1997 (local collector).

Diagnosis. This new species seems to be especially similar to *M. dembickyi* Miroshnikov, 2017, but differs clearly by the somewhat peculiar sculpture of the pronotal



Figs 1–6. *Mimimbrius* Miroshnikov, 2017, habitus, dorsal view. 1–2 – *M. sabahensis* **sp. n.**; 3 – *M. dembickyi* Miroshnikov, 2017; 4–6 – *M. subargenteus* (Gressitt et Rondon, 1970). 1, 3–4 – males, holotypes; 2 – female, paratype; 5–6 – males from Thailand. Рис. 1–6. *Mimimbrius* Miroshnikov, 2017, общий вид сверху. 1–2 – *M. sabahensis* **sp. n.**; 3 – *M. dembickyi* Miroshnikov, 2017; 4–6 – *M. subargenteus* (Gressitt et Rondon, 1970). 1, 3–4 – самцы, голотипы; 2 – самцы, голотипы; 5–6 – самцы из Таиланда.

278



Figs 7–12. *Mimimbrius* Miroshnikov, 2017, head and pronotum, dorsal view. 7–8 – *M. sabahensis* **sp. n**.; 9 – *M. dembickyi* Miroshnikov, 2017; 10–12 – *M. subargenteus* (Gressitt et Rondon, 1970). 7, 9, 11 – males, holotypes; 8 – female, paratype; 10, 12 – males from Thailand. Рис. 7–12. *Mimimbrius* Miroshnikov, 2017, голова и переднеспинка сверху. 1–2 – *M. sabahensis* **sp. n**.; 3 – *M. dembickyi* Miroshnikov, 2017; 4–6 – *M. subargenteus* (Gressitt et Rondon, 1970) 7, 9, 11 – самцы, голотипы; 8 – самцы, голотипы; 10, 12 – самцы из Таиланда.

279



Figs 13–25. *Mimimbrius* Miroshnikov, 2017, head and prosternum, ventral view, and male genitalia. 13–14, 18, 22 – *M. sabahensis* **sp. n**.; 15, 21, 23 – *M. dembickyi* Miroshnikov, 2017; 16–17, 19–20, 24–25 – *M. subargenteus* (Gressitt et Rondon, 1970). 13 – female, paratype; 14–16, 18–19, 22–24 – holotypes; 17, 20, 25 – specimen from Thailand; 14–17 – apical part of penis, ventral view; 18–21 – tergite 8, dorsal view; 22–25 – apical part of tegmen, ventral view. Puc. 13–25. *Mimimbrius* Miroshnikov, 2017, голова и простернум снизу и гениталии самца. 13–14, 18, 22 – *M. sabahensis* **sp. n**.; 15, 21, 23 – *M. dembickyi* Miroshnikov, 2017; 16–17, 19–20, 24–25 – *M. subargenteus* (Gressitt et Rondon, 1970). 13 – самка, паратип; 14–16, 18–19, 22–24 – голотипы; 17, 20, 25 – экземпляр из Таиланда; 14–17 – вершинная часть пениса снизу; 18–21 – 8-й тергит сверху; 22–25 – вершинная часть тегмена снизу.

disc, the more strongly developed recumbent light setation in its apical third, as in Figs 7, 8 (cf. Fig. 9) (see also description below); the presence of a distinct emargination at the apex of the last (visible) sternite in the male; the noticeably narrower longitudinal strips of recumbent, dense, light setae between the upper lobes of the eyes, especially so in the male, as in Figs 7, 8 (cf. Fig. 9); the structure of the male genitalia, in particular, the peculiar shape of the apical parts of tergite 8, penis and tegmen, as in Figs 14, 18, 22 (cf. Figs 15, 21, 23). Mimimbrius sabahensis sp. n. can also be compared to M. subargenteus (Gressitt et Rondon, 1970), but differs very distinctly by the structure of the pronotum, in particular, the irregular folds and tubercles on the disc, including only individual transverse folds, as in Figs 7, 8 (cf. Figs 10-12), the less strongly elevated, shorter and more weakly expressed sculptural formation in the apical third, as in Figs 7, 8 (cf. Figs 10-12), the clearly narrower symmetrical fragments of recumbent, dense, yellow setation near apex lateral to the midline, as in Figs 7, 8 (cf. Figs 10-12), the less strongly expressed median tubercle between these fragments of setation, as well as by the more numerous recumbent light setae on antennomere 1, as in Figs 7, 8 (cf. Figs 10-12), the brighter recumbent dense setation at least on the head dorsally, especially so in the female, as in Figs 7, 8 (cf. Figs 10-12), the structure of the male genitalia, as in Figs 14, 18, 22 (cf. Figs 16, 17, 19, 20, 24, 25), and some other minor traits.

Description. Body length 11.7–13.5 mm, humeral width 2.5–3 mm, thereby holotype smallest. Coloration of integument combines reddish-brown and dark reddish-brown tones; eyes black.

Head with moderately developed antennal tubercles; with a sharp median groove between bases of antennae, eyes and on vertex; eyes large, strongly convex, with very large ocelli characteristic of the genus (Figs 7, 8, 13); genae relatively short; submentum with a heterogeneous, rough and coarse sculpture; behind eyes with sharp transverse folds both laterally and ventrally; antennae in both sexes longer than body, nearly reaching the apex of elytra by apex of penultimate antennomere in male or reaching beyond the apex of elytra by last antennomere in female; length ratio of antennomeres 1–11 in male, 17:5:19:14:18:26:31:31:32:32:32:39, in female, 21:6:20:30:32:33:33:33:43; antennomere 1 with a somewhat heterogeneous, rough, partly dense puncturation; antennomere 2 slightly longitudinal; antennomeres 6–10 clearly serrate; last antennomere with a weakly expressed appendage.

Pronotum clearly longitudinal, 1.21 or 1.15 times as long as width in male and female, respectively; base 1.15 or 1.22 times as wide as apex in male and female, respectively; with a very sharp constriction near apex; on disk with rough and coarse, irregular, partly transverse, folds and tubercles, as in Figs 7, 8, thereby some tubercles, flattened dorsally in male, relatively weakly expressed, as indicated by arrows in Fig. 8, while in female, all tubercles, flattened dorsally, not flattened (in *M. dembickyi*, some tubercles, flattened dorsally in male (female unknown), very well-expressed, as indicated by arrows in Fig. 9); sculptural formation in apical one-third of disk moderately elevated, with a poorly expressed puncturation and with a noticeable, but not too clear median tubercle.

Scutellum strongly narrowed towards apex, triangular.

Elytra nearly parallel-sided, strongly elongated, 2.97 or 2.83 times as long as humeral width in male and female, respectively; with a small, somewhat heterogeneous, more or less dense puncturation (without double puncturation radically differing in size); apical external angle widely rounded, sutural angle almost right.

Prosternum with a distinct transverse groove in front of middle, with rough irregular folds between this groove and anterior border of coxal cavities; prosternal process with a lateral tooth in apical part on each side characteristic of the genus (Fig. 13); mesosternal process between coxae very clearly wider than prosternal process; mesosternum partly, metasternum and sternites with a small dense puncturation; metasternum with a gentle median groove; last (visible) sternite at apex in male with a distinct emargination, in female widely rounded; last (visible) tergite at apex in male with a shallow emargination, in female truncate.

Legs moderately developed; femora claviform; femora and tibiae with a longitudinal carina (characteristic of the genus) extending over entire length, from base to apex, and located almost completely in the middle part of both external and inner sides; metatarsomere 1 very clearly shorter than metatarsomeres 2 and 3 combined.

Recumbent setation of head dorsally and pronotum mainly yellow and partly yellowish, of remaining parts, including elytra, greyish (male), or of head dorsally and pronotum yellow, of basal antennomeres, elytra and partly metasternum yellowish, of remaining parts greyish (female); dense setae between upper lobes of eyes forming two symmetrical, very well-expressed, clearly divided, longitudinal, narrow strips, as in Figs 7, 8; dense setae on pronotum forming more or less symmetrical individual fragments only along sides, near both apex and base in middle part, as in Figs 7, 8; setation of elytra only partly masking puncturation, as in Figs 1, 2; antennomere 1, predominantly on inner side, with numerous greyish or yellow setae; head, pronotum laterally, elytra and abdomen at apex, prosternum, most of antennomeres in apical part, legs mainly on tibiae and trochanters with more or less long, erect, partly suberect, sparse or individual, thin setae.

Genitalia as in Figs 14, 18, 22.

Distribution. Eastern Malaysia.

Etymology. The formation of the name of this new species is related to its distribution in Sabah, Malaysia.

Acknowledgements

We are very grateful to James H. Boone (BM) for the opportunity to study the museum material, to Luboš Dembický (Brno, Czech Republic) and Alexandr Napolov (Riga, Latvia) who provided some valuable specimens from their private collections. We would also like to express our sincere thanks to Kirill V. Makarov (Moscow Pedagogical State University, Moscow, Russia) and Tatiana P. Miroshnikova (Krasnodar, Russia) for having rendered great help in the preparation of pictures.

References

Miroshnikov A.I. 2017. The longicorn beetle tribe Cerambycini Latreille, 1802 (Coleoptera: Cerambycidae: Cerambycinae) in the fauna of Asia.
1. New or little-known taxa, mainly from Indochina and Borneo, with reviews of some genera. *Caucasian Entomological Bulletin.* 13(2): 161–233, color pls 1–6. DOI: 10.23885/1814-3326-2017-13-2-161-233

> Received / Поступила: 20.11.2019 Accepted / Принята: 18.12.2019