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The longicorn beetle tribe Cerambycini Latreille, 1802 (Coleoptera: Cerambycidae: Cerambycinae) in the fauna of Asia. 17. A new species of the genus *Spinidymasius* Miroshnikov, 2017 from Borneo, with the description of the female of *S. huedepohli* (Vives, 2005) and new synonymy

Жуки-дровосеки трибы Cerambycini Latreille, 1802 (Coleoptera: Cerambycidae: Cerambycinae) фауны Азии. 17. Новый вид рода *Spinidymasius* Miroshnikov, 2017 с Борнео с описанием самки *S. huedepohli* (Vives, 2005) и новой синонимией

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KEY WORDS: Coleoptera, Cerambycidae, *Spinidymasius*, *Mimimbrius*, *Neocerambyx*, new species, new synonymy, new combination, Borneo, Vietnam.

КЛЮЧЕВЫЕ СЛОВА: Coleoptera, Cerambycidae, *Spinidymasius*, *Mimimbrius*, *Neocerambyx*, новый вид, новая синонимия, новая комбинация, Борнео, Вьетнам.

ABSTRACT. A new species, *Spinidymasius pseudohuedepohli* Miroshnikov, **sp.n.**, is described from Borneo. It is very similar to *Spinidymasius huedepohli* (Vives, 2005) inhabiting also Borneo, but differs in the less bright colouration of the recumbent setation of the body, the structure of the antennae, elytral apex, genitalia of both male and female, the well-expressed emargination at the apex of the last (visible) abdominal sternite of the male, and some other minor traits. The previously unknown female of *S. huedepohli* is described. The following new synonymy and new combination are established: *Mimimbrius sabahensis* Miroshnikov et Heffern, 2019 = *Mimimbrius fraternus* Holzschuh, 2021, **syn.n.**, *Neocerambyx melas* (Holzschuh, 2021), **comb.n.**

РЕЗЮМЕ. Описан новый вид *Spinidymasius pseudohuedepohli* Miroshnikov, **sp.n.** с Борнео. Он очень сходен с *Spinidymasius huedepohli* (Vives, 2005), распространённым также на Борнео, но отличается менее яркой окраской лежачего покрова тела, строением усиков, вершины надкрылий, гениталий самца и самки, формой последнего (видимого) брюшного стернита самца на вершине и некоторыми другими менее существенными признаками. Описана ранее неизвестная самка *S. huedepohli*. Установлена следующая новая синонимия и предложена новая комбинация: *Mimimbrius sabahensis* Miroshnikov et Heffern, 2019 = *Mimimbrius fraternus* Holzschuh, 2021, **syn.n.**, *Neocerambyx melas* (Holzschuh, 2021), **comb.n.**

Introduction

The Oriental genus *Spinidymasius* Miroshnikov, 2017 has been established for nine species [Miroshnikov, 2017].

This paper describes addinional one new species from Borneo and presents new data on *S. huedepohli* (Vives, 2005). A new synonymy and a new combination are also proposed.

The material treated here belongs to the following institutional and private collections: NHMD — Natural History Museum of Denmark, University of Copenhagen (Copenhagen, Denmark); ZSM — Zoologische Staatssa-

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mmlung München (München, Germany); cAM — collection of Alexandr Miroshnikov (Krasnodar, Russia); cDH — collection of Daniel Heffern (Houston, USA); cEV — collection of Eduard Vives (Barcelona, Spain); cGC — collection of Gérard Chemin (Champigny-sur-Marne, France).

Spinidymasius pseudohuedepohli Miroshnikov, **sp.n.**
Figs 1–2, 8, 10, 12, 14, 18, 20, 22, 24, 26.

Spinidymasius ?*huedepohli*: Miroshnikov, 2017: 191, 194 (E Malaysia, Sabah, Keningau Distr., Trus Madi Mt.).

MATERIAL. Holotype, ♂ (cGC) (Figs 1, 8), Indonesia, W Kalimantan, Bawang Mt., 00°53′N / 109°22′E, 15.06.2016, unknown collector, "*Elydnus huedepohli* Vives, 2005, Col. Chemin"; paratype, ♀ (cAM) (Figs 2, 10), E Malaysia, Sabah, Keningau Distr., Trus Madi Mt., 1250 m, 05°26′35″N / 116°27′05″E, 22–26.05.2014, leg. A. Klimenko, "*Spinidymasius* ?*huedepohli* (Vives, 2005) ♀ det. A. Miroshnikov 2017".

COMPARATIVE MATERIAL. *Spinidymasius huedepohli* (Vives, 2005): see below; *Spinidymasius ochraceovittatus* (Hüdepohl, 1989): holotype ♂ (ZSM) (Fig. 9), "Borneo, Sabah, Kumanis [sic] Road, 10th ml., IV.[19]86", "Holotypus ♂ *Elynus* [sic] *ochraceovittatus* mihi, Hüdepohl 1988"; paratype ♂ (ZSM), "Borneo, Sabah, Kumanis [sic] Road, 10th ml., V.[19]86", "Paratypus ♂ *Elydnus ochraceovittatus* mihi, Hüdepohl 1988"; paratype ♂ (ZSM), "Borneo, Sabah, Kumanis [sic] Road, 9th ml., VI.[19]86", "Paratypus ♂ *Elydnus ochraceovittatus* mihi, Hüdepohl 1988".

DIAGNOSIS. This new species is very similar to *S. huedepohli*, but differs by the slenderer, long, sharp spine at the apical external angle of the elytra, especially so in the female, as in Figs 12, 14 (cf. Figs 13, 15); the less bright colouration of the recumbent setation at least of the body; the structure of the genitalia, in particular, the parameres being more connivent with each other, as in Fig. 20 (cf. Fig. 21), the narrower penis at the apex, as in Fig. 22 (cf. Fig. 23), the somewhat peculiar shape of male tergite 8 apically, as in Fig. 24 (cf. Fig. 25), as well as by the styles being distinctly narrowed towards the apex, at the very apex relatively narrower and more strongly sloped, as in Fig. 26 (cf. Fig. 27); some features of the male, in particular, the shorter antennae, the less elongated antennomeres 6–11, especially so the last one, as in Fig. 1 (cf. Figs 4–5), the length ratio of the last two antennomeres, the absence of sharply expressed folds on antennomere 3, the well-developed emargination at the apex of the last (visible) abdominal sternite, as in Fig. 18 (cf. Fig. 19); some features of the female, in particular, the not toothed sutural angle of the elytra, as in Fig. 14 (cf. Fig. 15), the length ratio of the last two antennomeres. *Spinidymasius pseudohuedepohli* **sp.n.** can also be compared to *S. ochraceovittatus*, but is distinguished through the less elongated elytra, at least so in the male, as in Fig. 1 (cf. Fig. 9), the presence of a long sharp spine at the apical external angle of the elytra and vice versa, the absence of a long spine at the sutural angle of the elytra, only with a short tooth there in the male, as in Figs 12, 14 (cf. Figs 16–17), the shorter male antennae, the less elongated many male antennomeres, especially so the last one, as in Fig. 1 (cf. Fig. 9), and some other traits.

DESCRIPTION. Body length 21.0–23.5 mm, humeral width 5.3–5.55 mm, thereby the holotype smallest. Head dorsally, mandibles, eyes, basal antennomeres partly, pronotum, elytra almost entirely black; antennae mostly, scutellum, elytral epipleurae and apical teeth, venter entirely or almost completely, legs reddish brown and dark reddish brown.

Head with well-expressed antennal tubercles; with a deep or only shallow median groove between eyes and partly on vertex; eyes moderately convex; submentum mainly deeply impressed, with a rough, somewhat heterogeneous puncturation; neck ventrally and partly laterally with sharp, transverse, partly short folds; antennae of male much longer than body, nearly reaching the apex of elytra by apex of antennomere 8, in female reaching beyond apex of elytra by last antennomere; length ratio of antennomeres 1–11 in male, 43 : 14 : 51 : 35 : 38 : 69 : 81 : 77 : 71 : 68 : 134, in female, 45 : 14 : 54 : 35 : 37 : 62 : 67 : 60 : 53 : 47 : 47; antennomere 1 with a sharply expressed cicatrix, in addition, in male with coarse folds, being longitudinal mainly on dorsal side, in female with a clearly less coarse sculpture formed mostly by rugose rough puncturation; antennomere 2 slightly transverse; antennomeres 6–10 endoapically spined, most strongly so in female; antennomeres 7–10 ectoapically toothed and, in addition, strongly broadened in female; last antennomere apically sharpened in male or drawn into a sharp spine in female; last antennomere 1.97 times as long as penultimate antennomere in male, while these antennomeres subequal in length in female (in *S. huedepohli*, last antennomere 2.85–3.31 or 1.14 times as long as penultimate antennomere in male and female, respectively).

Pronotum distinctly longitudinal, 1.09–1.16 times as long as width; base 1.25–1.36 times as wide as apex; with a sharp constriction near apex; on disk slightly or moderately convex in male and female, respectively, with coarse transverse folds, as in Figs 1–2.

Scutellum strongly narrowed towards apex, triangular, narrowly rounded apically.

Elytra moderately narrowed towards apex; 2.44 or 2.68 times as long as humeral width in male and female, respectively; with a distinct, small, dense, more or less uniform puncturation, being predominantly poorly expressed near suture in about basal quarter; apical sutural angle clearly toothed or subrectangular in male and female, respectively, as in Figs 12, 14 (in female of *S. huedepohli*, sutural angle toothed, like in male, as in Figs 13, 15), external angle drawn into a long, relatively slender, sharp spine, as in Figs 12, 14.

Prosternum with a very well-developed transverse groove in front of middle, with rough and coarse, transverse folds in apical part, being most coarse behind groove; prosternal process pretty wide, very strongly broadened at apex, with a sharply expressed apical tubercle; mesosternal process between coxae only slightly wider than prosternal process, with a strong tubercle dorsally; mesosternum partly, metasternum and abdominal sternites with a small dense puncturation; metasternum with a sharp median groove; last (visible) abdominal sternite at apex with a well-expressed wide emargination in male, as in Fig. 18, or widely rounded in female; last (visible) abdominal tergite at apex widely rounded or truncate, with a shallow emargination in male and female, respectively.

Legs moderately long; pro- and mesofemora weakly claviform, metafemora not claviform; metatarsomere 1 significantly shorter than metatarsomeres 2 and 3 combined.

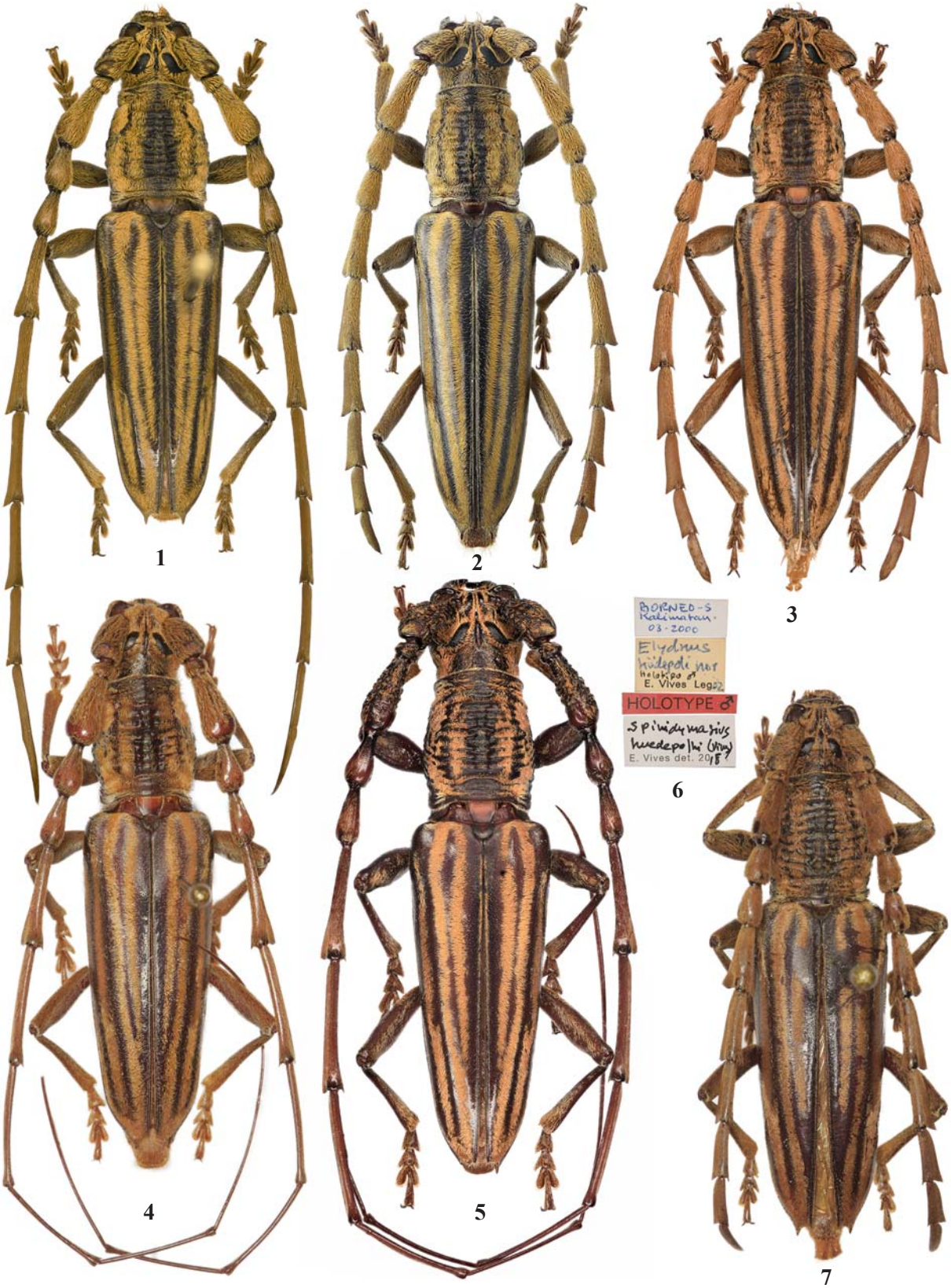
Structure of recumbent dense setation like in *S. huedepohli*, but its colouration relatively less bright, mostly of yellow tones, and only little part yellow-orange (in *S. huedepohli*, recumbent dense setation of body and antennae mainly of orange and yellow-orange tones, only partly yellow; see Note below).

Genitalia as in Figs 20, 22, 24, 26.

ETYMOLOGY. In Greek, pseudo (ψευδο) means "false", i.e., in general the name is treated as "false *huedepohli*".

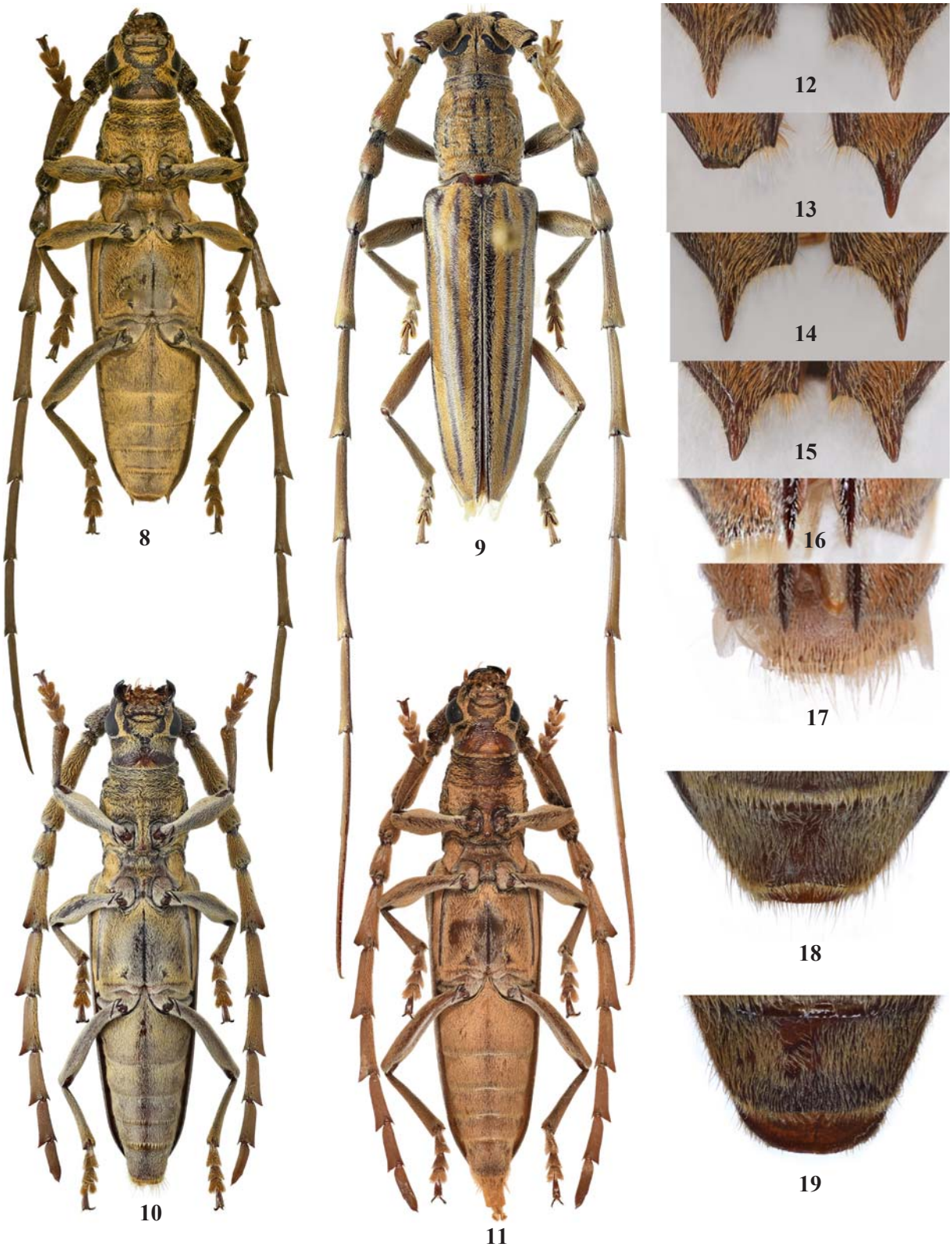
NOTE. The differences in the colouration of recumbent setation are clearly visible when comparing the corresponding specimens of *S. pseudohuedepohli* **sp.n.** and *S. huedepohli*, and may not be quite distinct when comparing their images.

DISTRIBUTION. Borneo.



Figs 1–7. *Spinidymasius* spp., habitus and labels: 1–2 — *S. pseudohuedepohli* **sp.n.**; 3–7 — *S. huedepohli* (4, 7 — photographs by Daniel Heffern); 1, 5–6 — holotypes; 2 — paratype; 1, 4–5 — males; 2–3, 7 — females.

Рис. 1–7. *Spinidymasius* spp., общий вид и этикетки: 1–2 — *S. pseudohuedepohli* **sp.n.**; 3–7 — *S. huedepohli* (4, 7 — фотографии Д. Хефферна); 1, 5–6 — голотипы; 2 — паратип; 1, 4–5 — самцы; 2–3, 7 — самки.



Figs 8–19. *Spinidymasius* spp.: 8, 10, 12, 14, 18 — *S. pseudohuedepohli* **sp.n.**; 9, 16–17 — *S. ochraceovittatus*; 11, 13, 15, 19 — *S. huedepohli*; 8–9, 12–13, 16, 18–19 — holotypes; 10, 14, 17 — paratypes; 8–9, 12–13, 16–19 — males; 10–11, 14–15 — females; 8, 10–11 — habitus, ventral view; 9 — habitus, dorsal view; 12–17 — elytral apex; 18–19 — last (visible) abdominal sternite of male.

Рис. 8–19. *Spinidymasius* spp.: 8, 10, 12, 14, 18 — *S. pseudohuedepohli* **sp.n.**; 9, 16–17 — *S. ochraceovittatus*; 11, 13, 15, 19 — *S. huedepohli*; 8–9, 12–13, 16, 18–19 — голотипы; 10, 14, 17 — паратипы; 8–9, 12–13, 16–19 — самцы; 10–11, 14–15 — самки; 8, 10–11 — общий вид, снизу; 9 — общий вид, сверху; 12–17 — вершина надкрылий; 18–19 — последний (видимый) брюшной стернит самца.

Figs 20–27. *Spinidymasius* spp., genitalia: 20, 22, 24, 26 — *S. pseudohuedepohli* **sp.n.** (20, 22, 24 — holotype, male; 26 — paratype, female); 21, 23, 25, 27 — *S. huedepohli* (21, 23, 25 — holotype, male; 27 — female); 20–21 — apical part of tegmen, ventral view; 22–23 — apical part of penis, ventral view; 24–25 — apical part of male tergite 8, dorsal view; 26–27 — coxites and styles, dorsal view.

Рис. 20–27. *Spinidymasius* spp., гениталии: 20, 22, 24, 26 — *S. pseudohuedepohli* **sp.n.** (20, 22, 24 — голотип, самец; 26 — паратип, самка); 21, 23, 25, 27 — *S. huedepohli* (21, 23, 25 — голотип, самец; 27 — самка); 20–21 — вершинная часть тегмена, снизу; 22–23 — вершинная часть пениса, снизу; 24–25 — вершинная часть 8-го тергита самца, сверху; 26–27 — кокситы и стилусы, сверху.

Spinidymasius huedepohli (Vives, 2005)
Figs 3–7, 11, 13, 15, 19, 21, 23, 25, 27.

Elydnus huedepohli Vives, 2005: 246. Type locality: Indonesia, Kalimantan (according to the original description), "Borneo — S Kalimantan (see Note below)" (according to the label of the holotype); Heffern, 2013: 10.

Spinidymasius huedepohli: Miroshnikov, 2017: 191, 194.

MATERIAL. Holotype, ♂ (cEV) (Fig. 5), "Borneo — S Kalimantan, 03 — 2000", "*Elydnus hüdepoli* (sic) nov. Holotipo ♂ E. Vives leg. (sic) 02", "Holotype ♂", "*Spinidymasius huedepohli* (Vives) E. Vives det. 2018" (Fig. 6); 1♀ (NHMD) (Figs 6, 11), E Malaysia, Sabah, Crocker Range, 03.2003, local collector, "*Elydnus ochraceovittatus* Hüdepohl, Ole Mehl det. 2005", "*Spinidymasius* ?*huedepohli* (Vives, 2005) ♀ det. A. Miroshnikov 2017", "*Spinidymasius huedepohli* (Vives, 2005) ♀ det. A. Miroshnikov 2021"; 1♂, 1♀ (cDH) (photographs; Figs 4, 7), E Malaysia, Sabah, Trus Madi Mt., 1500–2000 m, III–V.1998, local collector, "*Spinidymasius huedepohli* (Vives) det. D. Heffern"; 1♂ (cDH) (photograph), Indonesia (Borneo), E Kalimantan, Balikpapan, II.2000, local collector, "*Spinidymasius huedepohli* (Vives) det. D. Heffern".

REMARKS. This species was described on the basis of single male with a body length of 30 mm and a humeral width of 7 mm. The males kept in the collection of Daniel J. Heffern (Houston, USA; his personal communication of November 25, 2021) are smaller, 24–26 mm in length.

Female features are given here for the first time.

DESCRIPTION OF THE FEMALE (Figs 3, 7, 11, 15, 27). Closely resembles a male. Body length 24.8–25.0 mm, humeral width 5.9–5.95 mm.

Antennae reaching beyond apex of elytra by apical part of penultimate antennomere; length ratio of antennomeres 1–11, 47 : 15 : 60 : 39 : 39 : 69 : 72 : 66 : 58 : 50 : 57 (female from NHMD taken as an example); antennomere 3, unlike male, without coarse folds; spine at apical inner angle of antennomeres 6–10 more strongly developed than that in male; last antennomere apically drawn into a sharp spine.

Pronotum distinctly longitudinal, 1.15–1.16 times as long as wide; base 1.31–1.33 times as wide as apex.

Elytra moderately narrowed towards apex, 2.54–2.7 times as long as humeral width; external angle drawn into a long, relatively robust, sharp spine, apical sutural angle clearly toothed like in male, as in Figs 13, 15.

Last (visible) abdominal sternite widely rounded apically; last (visible) abdominal tergite truncate at apex.

Genitalia as in Fig. 27; styles nearly parallel-sided, not narrowed towards apex, at the very apex weakly sloped.

NOTE. Judging by the label (Fig. 6), the holotype was most likely collected in South Kalimantan Province, Indonesia.

DISTRIBUTION. Borneo.

Mimimbrius sabahensis Miroshnikov et Heffern, 2019

Mimimbrius sabahensis Miroshnikov et Heffern, 2019: 277. Type locality: E Malaysia, Sabah, Crocker Range (according to the original description and the label of the holotype).

Mimimbrius fraternus Holzschuh, 2021: 93, fig. 3 (Malaysia, Sabah, Crocker Range), **syn.n.**

REMARKS. Judging by Holzschuh's [2021] paper, he compared *Mimimbrius fraternus* only with *M. dembickyi* Miroshnikov, 2017 and *M. subargenteus* (Gressitt et Rondon, 1970), and did not mention *M. sabahensis* at all. Appa-

rently, Holzschuh was not aware of the publication describing the latter species [Miroshnikov, Heffern, 2019].

Based on the original description of *M. fraternus* and the picture of the holotype of this species, as well as taking into account its type locality, I believe it is necessary to establish the following new synonymy: *Mimimbrius sabahensis* Miroshnikov et Heffern, 2019 = *Mimimbrius fraternus* Holzschuh, 2021, **syn.n.**

It should be noted that the paper describing *M. sabahensis* contains some misprints in the captions. The necessary corrections are given in Table.

Neocerambyx melas (Holzschuh, 2021), **comb.n.**

Massicus melas Holzschuh, 2021: 97, fig. 5 (N Vietnam, Lao Cai pr., Sapa, Ta Phin, 22°23.37'N, 103°49.11'E, 1460 m).

REMARKS. Based on the original description and photograph of the holotype of this species [Holzschuch, 2021], I believe it is advisable to transfer it to the genus *Neocerambyx* J. Thomson, 1861 and establish the following new combination: *Neocerambyx melas* (Holzschuh, 2021), **comb.n.**

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Table. Corrections that should be made in Miroshnikov and Heffern [2019].
Таблица. Исправления к статье Мирошникова и Хефферна [2019]

Page Страница	Line Строка	As printed Напечатано	Correct form Следует читать
278	2	1, 3–4 — males, holotypes;	2–4 — males, holotypes;
278	3	2 — female, paratype;	1 — female, paratype;
279	2	7, 9, 11 — males, holotypes;	8–9, 11 — males, holotypes;
279	3	8 — female, paratype;	7 — female, paratype;
278	2	1, 3–4 — самцы, голотипы;	2–4 — самцы, голотипы;
278	3	2 — самцы, голотипы;	1 — самка, паратип;
279	2	7, 9, 11 — самцы, голотипы;	8–9, 11 — самцы, голотипы;
279	3	8 — самцы, голотипы;	7 — самка, паратип;