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Contribution to the knowledge of the genus *Iphiothe* Pascoe, 1866 (Coleoptera: Cerambycidae: Lamiinae). 2. A new species from Borneo, with notes on the other members of the genus

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Abstract. *Iphiothe pascoei* Miroshnikov et Heffern, **sp. n.** is described from Borneo. It differs clearly from all members of the genus by the sharply dichromatic coloration of the legs and antennomere 3, the immaculate femora and tibiae, the very motley, spotted, light setation of the elytra, the shorter antennae of the male. The stability and reliability of the features previously indicated to distinguish *I. criopsioides* Pascoe, 1866 and *I. malaccensis* Miroshnikov, 2019, including in the habitus, the shape of the pronotum and elytra, the structure of antennomere 3 are shown. *Iphiothe borneana* (Breuning, 1976) is being recorded from East Malaysia for the first time.

Key words: Coleoptera, Cerambycidae, Lamiinae, *Iphiothe*, new species, new record, Borneo, Malaysia.

К познанию жуков-дровосеков рода *Iphiothe* Pascoe, 1866 (Coleoptera: Cerambycidae: Lamiinae). 2. Новый вид с Борнео с заметками о других представителях рода

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Резюме. Описан новый вид *Iphiothe pascoei* Miroshnikov et Heffern, **sp. n.** с Борнео, отличающийся от всех видов рода резко двухцветной окраской ног и 3-го членика усиков, бедрами и голеньями без пятен, очень пестрым, пятнистым, светлым покровом надкрылий, более короткими усиками самца. Показана устойчивость и надежность признаков, ранее указанных для отличия *I. criopsioides* Pascoe, 1866 и *I. malaccensis* Miroshnikov, 2019. *Iphiothe borneana* (Breuning, 1976) впервые отмечен из Восточной Малайзии.

Ключевые слова: Coleoptera, Cerambycidae, Lamiinae, *Iphiothe*, новый вид, новая находка, Борнео, Малайзия.

Introduction

A brief review of the Oriental genus *Iphiothe* Pascoe, 1866 was published recently, in which three species were considered, including one new species [Miroshnikov, 2019].

In this paper, another new species of the genus is described from East Malaysia, as well as some new data on other members are provided.

The material treated in the present work belongs to the following institutional and private collections:

BMNH – Natural History Museum (London, United Kingdom);

IRSN – Institut Royal de Sciences naturelles de Belgique (Bruxelles);

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

cDH – collection of Daniel Heffern (Houston, Texas, USA).

Genus *Iphiothe* Pascoe, 1866

Iphiothe Pascoe, 1866: 254; Lacordaire, 1872: 451; Gemminger 1873: 3059; Aurivillius, 1921: 211; Breuning, 1963: 491; Polaszek,

Earl of Cranbrook, 2006: 443; Heffern, 2013: 57; Miroshnikov, 2019: 127.

Mimepaphra Breuning, 1976: 101; Cools, 1993: 81; Miroshnikov, 2019: 127 (syn. pro *Iphiothe* Pascoe, 1866).

Type species *Iphiothe criopsioides* Pascoe, 1866, by monotypy.

Composition. The genus includes four species, one of which is described below as new.

Distribution. Oriental realm.

Iphiothe pascoei Miroshnikov et Heffern, **sp. n.**
(Figs 1, 2, 7–9, 14–16)

Material. Holotype, ♂ (cDH) (Fig. 1): Malaysia, Sabah, Ranau, 12.02.2004, "Lubin coll.", "DJHC Acc # 04–5600". Paratypes: 1♀ (cDH), Malaysia, Sabah, Crocker Range, 03.04.2007 (local collector); 1♀ (cAM) (Fig. 2), Malaysia, Sabah, Sipitang, 10.02.2005 (local collector).

Diagnosis. This new species differs clearly from all congeners by the sharply dichromatic coloration of the legs and antennomere 3, as in Figs 1, 2, 7–9 (cf. Figs 3–6, 10–13; [Miroshnikov, 2019: figs 5, 7–10, 18–24]); the significantly more motley, spotted, light setation of the elytra, as in Figs 1, 2 (cf. Figs 3–6; [Miroshnikov, 2019: figs 5, 7–10]); antennomere 3 being thinner in the basal part,

especially so in the female, as in Figs 7–9 (cf. Figs 10–13; [Miroshnikov, 2019: figs 5, 7–10, 18–24]); the immaculate femora and tibiae, as in Figs 1, 2 (cf. Figs 3–6; [Miroshnikov, 2019: figs 5, 7–10]); the shorter antennae of the male, as in Fig. 1, at least from *I. malaccensis* Miroshnikov, 2019 and *I. borneana* (Breuning, 1976) (cf. [Miroshnikov, 2019: figs 5, 8, 9]).

Description. Body length 14.2–16 mm, humeral width 5.7–6.2 mm, thereby holotype largest. Body and antennomeres 1–2 entirely, apical part of antennomeres 3 and 4, apices of femora, bases of tibiae in female, bases and very apices of tibiae in male, tarsi almost completely or entirely in male and female, respectively, black; remaining parts of antennomere 3, antennomere 4 in male, femora and tibiae red tones; basal part of antennomere 4 in female reddish yellow; antennomeres 5–11 brown tones.

Head with a rough, partly heterogeneous puncturation; frons longitudinal, barely convex; eyes with a very well-developed emargination, weakly convex, with relatively small ocelli; genae long; antennae of peculiar structure like in other congeners, with a longest and distinctly curved antennomere 3, in male only slightly longer than body, reaching beyond apex of elytra by penultimate antennomere, in female very clearly not reaching the apex of elytra; length ratio of antennomeres 1–11 in male, 62 : 9 : 94 : 44 : 31 : 28 : 26 : 23 : 21 : 20 : 28, in female (one of the paratypes taken as an example), 55 : 7 : 70 : 25 : 21 : 19 : 18 : 16 : 15 : 15 : 22; antennomere 2 subequal in length and width.

Pronotum distinctly transverse, 1.17 or 1.23–1.29 times as wide as long in male and female, respectively; base 1.27 or 1.21–1.22 times as wide as apex in male and female, respectively; with rough, relatively uniform, moderately dense punctures.

Scutellum triangular, rounded apically.

Elytra in male clearly narrowed towards apex, in female predominantly nearly parallel-sided starting from base; 1.66–1.73 times as long as humeral width; with a coarse, relatively uniform puncturation gradually decreasing from base towards apex and partly hidden by a dense setation; each elytron at apex truncate and, besides this, with a shallow emargination; apical external angle obtuse, sutural angle almost right.

Prosternum with a smoothed sculpture; prosternal process strongly, but uniformly curved, strongly expanded at apex; mesosternal process more than twice as wide as prosternal process between coxae, with a strong tubercle; metasternum and abdominal sternites with a gentle dense puncturation; metasternum with a distinct median suture; last (visible) sternite in male widely rounded apically, in female truncate and weakly emarginate in middle part.

Legs moderately long, robust; femora claviform, especially so in metafemora; metatibia straight or nearly straight.

Recumbent spotted setation developed mostly on body, thereby very motley on elytra due to numerous, more or less small, mostly shapeless spots (in addition to roundish predominantly larger spots) of dense yellow and partly white setae, as in Figs 1, 2.

Male genitalia as in Figs 14–16; tegmen (excluding apical setae), penis and tergite 8 (excluding apical setae) about 2.9, 2.5 or 1.1 mm in length, respectively.

Distribution. Borneo (East Malaysia: Sabah).

Etymology. This new species is dedicated to the memory of Francis Polkinghorne Pascoe (1813–1893), a famous English coleopterologist, who made invaluable contributions to the knowledge of longicorn beetles, especially in the Oriental Region, including Borneo.

Iphiothe criopsioides Pascoe, 1866
(Figs 3–5, 10–12)

Iphiothe criopsioides Pascoe, 1866: 255 (type locality: [Malaysia] Sarawak (according to the original description and the label of the holotype)); Lacordaire, 1872: 451 (Borneo) (“mâle”;

mistakenly); Gemminger, 1873: 3059 (Borneo); Gahan, 1906: 119 (partim, Borneo, Sumatra: Merang); Aurivillius, 1921: 211 (partim, Borneo, Sumatra); Polaszek, Earl of Cranbrook, 2006: 443 (Sarawak); Miroshnikov, 2019: 127, color pl. 9, figs 1–4, pl. 10, figs 14, 15.

Iphiothe criopsioides (misspelling): Breuning, 1963: 491 (partim, Borneo, Sumatra); Heffern, 2013: 57 (partim, Borneo, Sumatra).

Material. 1♀ (cDH) (Fig. 4), Malaysia, Sabah, Ranau, 12.04.2005 (local collector); 1♀ (cDH) (Fig. 5), Malaysia, Sabah, Trus Madi Mt., 10.04.2007 (local collector); 1♀ (cAM) (Fig. 3), Malaysia, Sabah, Crocker Range, 06.06.2012 (local collector).

Previously examined material (including the holotype) deposited in BMNH see in Miroshnikov [2019].

Notes. A study of the three females presented here for the first time, shows the stability of important diagnostic characters of this species, including the habitus, the shape of the pronotum and elytra, the structure of antennomere 3. These features confirm the reliability of the differences between *I. criopsioides* and the most similar congener, *I. malaccensis*, while relevant photographs introduced in the paper (Figs 3–5, 10–12), in addition to the previously published [Miroshnikov, 2019], clearly demonstrate this.

The body length of the above females is 12.7–13.9 mm, the humeral width is 5.5–6.3 mm, thereby one of the females is the largest among all known specimens of *I. criopsioides*.

The male remains unknown.

Distribution. Borneo (East Malaysia: Sarawak, Sabah; very likely, Indonesian part); Sumatra.

Iphiothe borneana (Breuning, 1976)
(Figs 6, 13)

Mimepaphra borneana Breuning, 1976: 101 (type locality: Borneo, Pontianak (according to the original description and the label of the holotype)); Breuning, 1978: 6; Heffern, 2013: 57.

Iphiothe borneana: Miroshnikov, 2019: 128, color pl. 10, figs 8–13.

Material. 1♀ (cDH) (Fig. 6), Malaysia, Sarawak, Gunung Buda, 100 m, 04°13'N / 114°56'E, 21.11.1996, “coll: Alan D. Mudge”, “DJHC Acc # 04–5620”.

Previously examined material (including types) deposited in IRSN see in Miroshnikov [2019].

Notes. The body length of the female presented here for the first time, is 9.7 mm, the humeral width is 3.7 mm. These body sizes are the smallest in adults of *I. borneana*.

Distribution. Borneo (Indonesia: West Kalimantan) [Miroshnikov, 2019]. Based on the studied material, *I. borneana* is being recorded here from East Malaysia for the first time.

Iphiothe malaccensis Miroshnikov, 2019

Iphiothe criopsioides: Gahan, 1906: 110, 119 (partim, Malay Peninsula, Selangor, Bukit Kutu) (non Pascoe, 1866); Aurivillius, 1921: 211 (partim, Malacca) (non Pascoe, 1866).

Iphiothe criopsioides (misspelling): Breuning, 1963: 491 (partim, “Malaisie” (= Western Malaysia)) (non Pascoe, 1866); Heffern, 2013: 57 (partim, Western Malaysia) (non Pascoe, 1866).

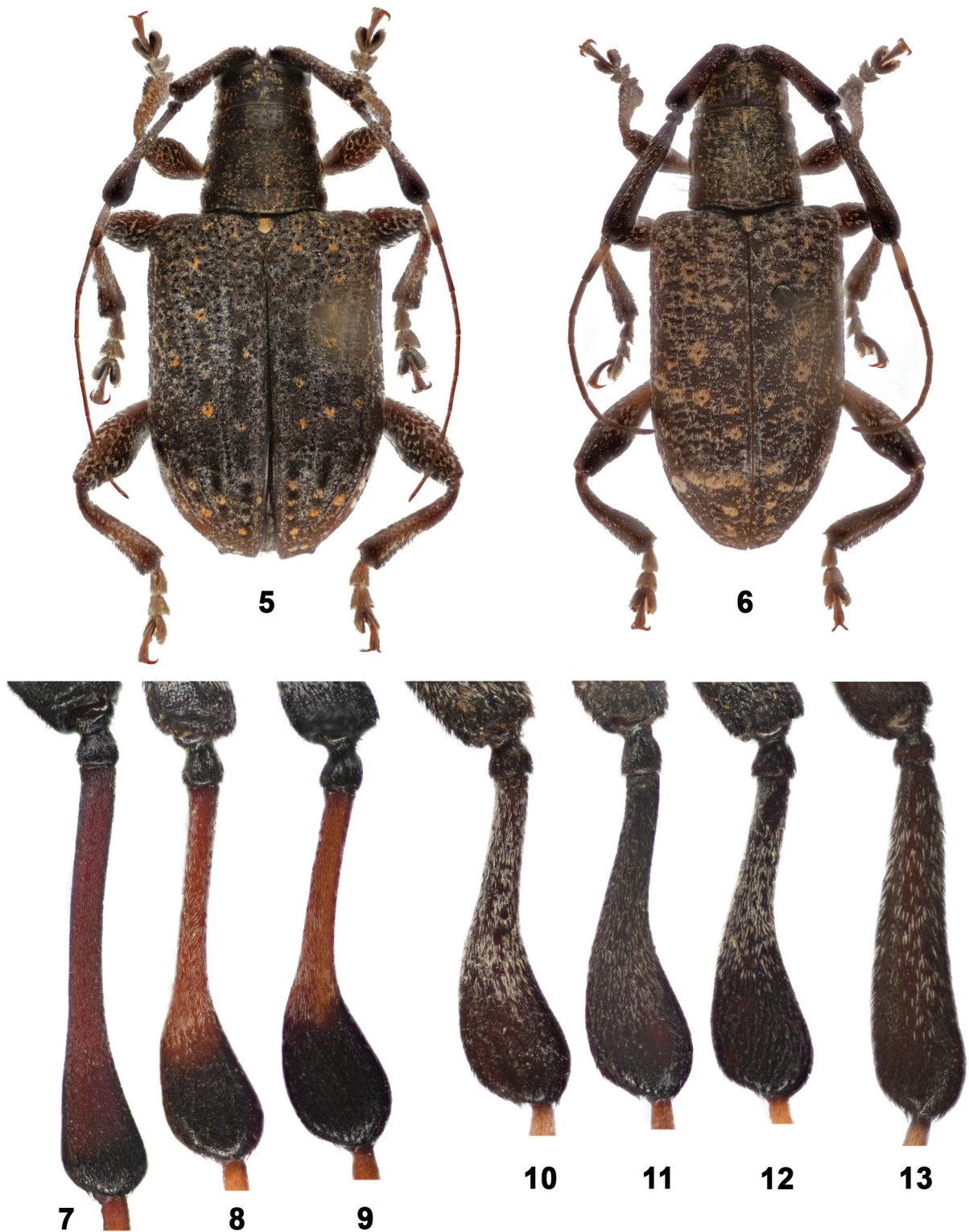
Iphiothe malaccensis Miroshnikov, 2019: 128, color pl. 9, figs 5–7, pl. 10, figs 16–17 (type locality: W Malaysia, Selangor, Bukit Kutu (according to the original description and the label of the holotype)).

Previously examined material (including types) deposited in BMNH and cAM see in Miroshnikov [2019].

Notes. This species is still known only from two type specimens.



Figs 1–4. Species of the genus *Iphiothe* Pascoe, 1866, habitus.
1–2 – *I. pascoei* sp. n.: 1 – male, holotype, 2 – female, paratype; 3–4 – *I. criopsioides*, females.
Рис. 1–4. Виды рода *Iphiothe* Pascoe, 1866, общий вид.
1–2 – *I. pascoei* sp. n.: 1 – самец, голотип, 2 – самка, паратип; 3–4 – *I. criopsioides*, самки.



Figs 5–13. Species of the genus *Iphiothe* Pascoe, 1866, general view and details of structure.
 5, 10–12 – *I. cripsioides*; 6, 13 – *I. borneana*; 7–9 – *I. pascoei* sp. n.: 7 – male, holotype, 8–9 – females, paratypes. 5–6 – habitus; 7–13 – antennomeres 2–3, lateral view.

Рис. 5–13. Виды рода *Iphiothe* Pascoe, 1866, общий вид и детали строения.
 5, 10–12 – *I. cripsioides*; 6, 13 – *I. borneana*; 7–9 – *I. pascoei* sp. n.: 7 – самец, голотип, 8–9 – самки, паратипы. 5–6 – габитус; 7–13 – 2–3-й членики усиков сбоку.

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Figs 14–16. *Iphiothe pascoei* sp. n., male genitalia (holotype). 14 – tegmen, ventral view; 15 – tergite 8, dorsal view; 16 – apical part of penis, ventral view. Scale bar 1 mm.

Рис. 14–16. *Iphiothe pascoei* sp. n., гениталии самца (голотип). 14 – термен, вид снизу; 15 – 8-й тергит, вид сверху; 16 – верхняя часть пениса, вид снизу. Масштабная линейка 1 мм.

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