New and little known oriental species of Lycidae (Coleoptera)

Новые и малоизвестные ориентальные виды Lycidae (Coleoptera)

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КЛЮЧЕВЫЕ СЛОВА: Coleoptera, Lycidae, новые виды, Юго-восточная Азия

ABSTRACT. Eleven new species of Oriental Lycidae are described: Conderis sanguinarius sp.n. (Thailand), Mesolycus borneensis sp.n. (Kalimantan), M. sandakanensis, Calcaeron alabensis, Dihammatus smetanai, D. poringianus, Libnetis crockeranus, L. gununganus, L. maurus, Libnetisia smetanai and L. bousqueti spp.n. (Sabah, East Malaysia). Dilophotes vittatus Pic is transferred to Mesolycus Gorham. Mesolycus carinatus (Pic), M. vittatus (Pic), Plateros gracilicornis (Pic) and Libnetis depressus Kleine are illustrated. Lectotypes are designated for Mesolycus carinatus, M. vittatus, Plateros gracilicornis and P. definitivus (Kleine).

РЕЗЮМЕ. Описывается одиннадцать новых видов ориентальных Lycidae: Conderis sanguinarius sp.n. (Таиланд), Mesolycus borneensis sp.n. (Калимантан), M. sandakanensis, Calcaeron alabensis, Dihammatus smetanai, D. poringianus, Libnetis crockeranus, L. gununganus, L. maurus, Libnetisia smetanai и L. bousqueti spp.n. (Сабах, Восточная Малайзия). Dilophotes vittatus переносится в род Mesolycus Gorham. Приводятся иллюстрации Mesolycus carinatus (Pic), M. vittatus (Pic), Plateros gracilicornis (Pic) и Libnetis depressus Kleine. Обозначаются лектотипы для Mesolycus carinatus, M. vittatus, Plateros gracilicornis и P. definitivus (Kleine).

Introduction

Nine of the eleven new species of Lycidae described in the present paper were collected in Sabah, East Malaysia. Taxonomic work on the rich and diverse fauna of net-winged beetles of Borneo was resumed recently [Kazantsev, 1992, 1996, 1997, 2002, 2004]. Quite a number of species were collected in the Gunung Crocker Range in the forests of Mt. Kinabalu and Mt. Alab at approximately 1500–1800 m above sea level during the recent collecting trips. This material contains a few new species some of which are described below. Apparently, despite the relatively long history of studies on the island lycid fauna [e.g. Waterhouse, 1878, 1879;

Bourgeois, 1906; Pic, 1911, 1921–1922; Kleine, 1926, 1932; etc.] most of the field and alpha-taxonomic work is still ahead.

Materials and Methods

Specimens used as material for this study were dissected after being softened for several hours in water, with the male genitalia extracted and affixed with water-soluble glue on cardboard plates or placed in vials with glycerin. Material used in this study is deposited in the National Insect Collection, Agriculture Canada, Ottawa (NICO), Zoological Museum of the Amsterdam University (ZMAU), Zoological Museum of the Moscow University (ZMUM) and author's collection (SVK).

Taxonomy

Conderis sanguinarius **sp.n.** Figs 1–2

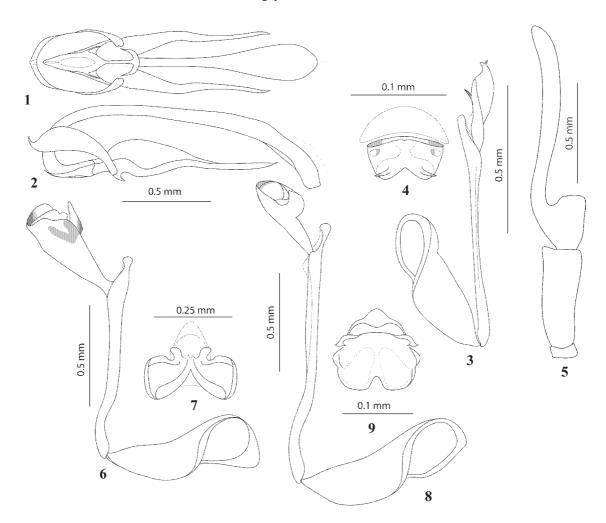
MATERIAL. Holotype \circlearrowleft : N Thailand, Chiang-Mai, Doi Suthep, 1100 m, 5–20.IV.1999, Hauck leg. (SVK); paratype \updownarrow : NE India, W Meghalaya, Garo Hills, Nokrek Nat. Park, 1150 m, 2–13.VII.1997, Afonin & Siniaev leg. (SVK).

DESCRIPTION. Black. Pronotum, scutellum and elytra bloody red.

Male. Head almost flat behind inconspicuous antennal prominence. Eyes relatively small (interocular distance ca. 3.5 times as long as the radius). Labrum free, subquadrate, conspicuously emarginated anteriorly. Maxillary and labial palps robust, with ultimate palpomeres large and securiform. Antennae long, extending to approximately three fourths the length of elytra; antennomeres 4–10 compressed, antennomere 3 ca. 5 times longer than antennomere 2 and subequal to antennomere 4; all antennomeres with short decumbent pubescence.

Pronotum transverse, 1.3 times wider than long, with small median areola, occupying less than one third of pronotal length; anterior margin triangularly produced forward, lateral margins almost parallel-sided, hind angles acute. Scutellum elongate, slightly narrowing distally, rounded at apex.

Elytra long, 3.4 times longer than wide at humeri, slightly widening posteriorly, with 4 equally developed primary costae; interstices with double rows of regular transverse cells.



Figs 1–9. Antennomeres and aedeagi of Lycidae: 1–2 — Conderis sanguinarius sp.n., 3–5 — Mesolycus carinatus (Pic), 6–7 — M. vittatus (Pic), 8–9 — M. sandakanensis sp.n.; 1–3, 6, 8 — aedeagus; 4, 7, 9 — inner sac; 5 — antennomeres 2–4; 1, 5 — dorsally; 2–3, 6, 8 — laterally; 4, 7, 9 — apically.

Рис. 1—9. Антенны и эдеагус Lycidae: 1-2 — Conderis sanguinarius $\mathbf{sp.n.}$, 3-5 — Mesolycus carinatus (Pic), 6-7 — M. vittatus (Pic), 8-9 — M. sandakanensis $\mathbf{sp.n.}$; 1-3, 6, 8 — эдеагус; 4, 7, 9 — внутренний мешок; 5 — 2-4 членики усика; 1, 5 — сверху; 2-3, 6, 8 — сбоку; 4, 7, 9 — вид c вершины.

Minute pubescence distributed along costae, with pubescence more noticeable on longitudinal ones.

Aedeagus with apically widened median lobe (Figs 1–2). **Female**. Similar to male, but antennae shorter and eyes slightly smaller.

Length: 16.2–16.8 mm. Width (humerally): 3.8–4.2 mm. DIAGNOSIS. *Conderis sanguinarius* sp.n. being similar in the pronotal and elytral structure to *C. longipennis* (Pic), is easily distinguishable from all congenerics by the widened distally median lobe of the aedeagus (Figs 1–2).

ETYMOLOGY. The name is derived from Latin for "blood" alluding to the coloration of the species.

Mesolycus carinatus (Pic, 1925) Figs 3–5.

Flabellodilophotes carinatus Pic, 1925: 7.

MATERIAL EXAMINED: Lectotype, hereby designated, ♂, "Sumatra's O.K., Brastagi, 1300 m, 6.V.1918, J. B. Corporaal"; "leg. F. C. Drescher", "Co-type: Flabellodilophotes carinatus Pic 1926";

"Falsotrichalus gracilicornis n. sp." (Pic's manuscript label); "désiré" (Pic's manuscript label) (ZMAU).

REMARKS. As the studied specimen has Pic's manuscript label "Flabellodilophotes carinatus n. sp." and as the description [Pic, 1925] mentions the Corporaal's collection (now in ZMAU) as the depositary, it is presumed to be the lectotype; the other (printed) label ("Co-type: Flabellodilophotes carinatus Pic 1926") most probably originated from a later examination of the specimen. As Pic introduced his F. carinatus not having nominated the holotype and not having mentioned the uniquity of the specimen [Pic, 1925], I have to designate the lectotype for the taxon, in accordance with Article 74 and Recommendation 73F of the International Code of Zoological Nomenclature. The antenna in this species has long flattened antennomere 3 that is twice as long as antennomere 4, which bears a long flabellus Described as Flabellodilophotes this taxon belongs in Mesolycus Gorham, as these two genera were found to be synonymous [Kazantsev, 2004].

DISTRIBUTION. Sumatra.

Mesolycus vittatus (Pic, 1925) comb.n. Figs 6–7.

Dilophotes vittatus Pic, 1925: 6

MATERIAL EXAMINED: Lectotype, hereby designated, of "Sumatra's O.K., Sibolangit, 550 m, 21.X.1921, J. B. Corporaal"; "leg. F. C. Drescher"; "Co-type: Dilophotes vittatus Pic 1926"; "Dilophotes vittatus n. sp." (Pic's manuscript label) (ZMAU).

REMARKS. As the studied specimen has Pic's manuscript label "Dilophotes vittatus n. sp." and as the description [Pic, 1925] mentions the Corporaal's collection (now in ZMAU) as the first depositary, it is presumed to be the lectotype; the other (printed) label ("Co-type: Dilophotes vittatus Pic 1926") most probably originated from a later examination of the specimen. As Pic introduced his Dilophotes vittatus not having nominated the holotype and not having mentioned the uniquity of the specimen [Pic, 1925], I have to designate the lectotype for the taxon, in accordance with Article 74 and Recommendation 73F of the International Code of Zoological Nomenclature. Described as Dilophotes this taxon belongs in fact to the genus Mesolycus Gorham [Kazantsev, 2004].

DISTRIBUTION. Sumatra.

Mesolycus sandakanensis sp.n. Figs 8–9.

MATERIAL. Holotype ♂: Borneo, Sandakan (SVK). DESCRIPTION. Black.

Male. Head slightly convex and feebly grooved behind inconspicuous antennal prominence. Eyes relatively small (interocular distance ca. 2.5 times as long as the radius). Labrum small, transverse. Ultimate maxillary palpomere parallel-sided and ca 1.8 times longer than palpomere 3. Ultimate labial palpomere pointed distally. Antennae extending to approximately half the length of elytra; antennomeres 3-11 compressed, antennomere 3 ca. 5 times longer than antennomere 2 and slightly shorter than antennomere 4; all antennomeres with short decumbent pubescence.

Pronotum elongate, 1.1 times longer than wide, trapezoidal, with conspicuous median carina in anterior half and coarse punctuation in anterior third; posterior margin deeply bisinuate; hind angles acuminate and produced latero-posteriorly. Scutellum elongate, almost parallel-sided, slightly rounded at apex.

Elytra long, 4.3 times longer than wide humerally, parallel-sided, dehiscent in posterior two thirds. Dense pubescence short and decumbent.

Aedeagus with relatively small hood of the median lobe and large inner sack structures (Figs 8-9).

Female. Unknown.

Length: 5.1 mm. Width (humerally): 1.0 mm.

DIAGNOSIS. Mesolycus sandakanensi sp.n. is distinguishable from the similarly coloured M. pygmaeus (Waterhouse) by the slenderer body, less dentate antennomeres and weaker secondary elytral reticulation, also separable by the details of the aedeagus (Figs 8–9).

ETYMOLOGY. The specific name is derived from the type locality.

Mesolycus borneensis **sp.n.** Figs 10-11

MATERIAL. Holotype od: Borneo, Pontianak (SVK).

DESCRIPTION. Black; elytra light brown proximally, except at humeral margin.

Male. Head slightly convex and feebly grooved behind inconspicuous antennal prominence. Eyes relatively large (interocular distance ca. 1.5 times as long as the radius). Labrum small, transverse. Ultimate maxillary palpomere acuminate. Antennomere 3–11 compressed, antennomere 3 ca. 5 times longer than antennomere 2 and slightly shorter than antennomere 4; all antennomeres with short decumbent pubescence.

Pronotum elongate, 1.1 times longer than wide, with parallel lateral margins, conspicuous median carina in anterior half and coarse punctuation in anterior third; posterior margin medially conspicuously produced posteriorly; hind angles small, acuminate and produced latero-posteriorly. Scutellum trapezoidal, slightly rounded at apex.

Elytra long, 4.2 times longer than wide humerally, parallel-sided, dehiscent in posterior two thirds. Dense pubescence short and decumbent.

Aedeagus with long hood of the median lobe and relatively small and simple inner sack structures (Figs 10–11).

Female. Unknown.

Length: 4.8 mm. Width (humerally): 1.1 mm.

DIAGNOSIS. Mesolycus borneensis sp.n. differs from all congenerics by the coloration and details of the aedeagus (Figs 10-11).

ETYMOLOGY. The specific name is derived from the type locality.

Calcaeron alabensis sp.n. Figs 12–13.

MATERIAL. Holotype ♂: Malaysia, Sabah prov., Banjaran Crocker Mts, Gunung Alab peak, 1650-1800 m, 30 Apr.-27 May.1996, M. Strba & M. Hergovitz leg. (SVK).

DESCRIPTION. Black; anterior and lateral pronotal margins, elytra except in apical two fifths trochanters and femora proximally testaceous.

Male. Head slightly convex and feebly grooved behind inconspicuous antennal prominence. Eyes relatively large (interocular distance ca. 2 times as long as the radius). Labrum small, transverse. Ultimate maxillary and labial palpomeres acuminate. Antennae extending to approximately two thirds the length of elytra; antennomeres 3-10 only slightly compressed, antennomere 3 ca. 5 times longer than antennomere 2 and slightly shorter than antennomere 4; all antennomeres with short decumbent pubescence.

Pronotum elongate, 1.1 times longer than wide, trapezoidal, with conspicuous median carina in anterior half and coarse punctuation in anterior third; posterior margin deeply bisinuate; hind angles acuminate and produced latero-posteriorly. Scutellum square, trapezoidal, slightly rounded and feebly emarginate at apex.

Elytra long, 4.15 times longer than wide humerally, almost parallel-sided, dehiscent in posterior two thirds. Dense pubescence short and decumbent.

Aedeagus with relatively narrow median lobe (Figs 12-13)

Female. Unknown.

Length: 6.8 mm. Width (humerally): 1.4 mm.

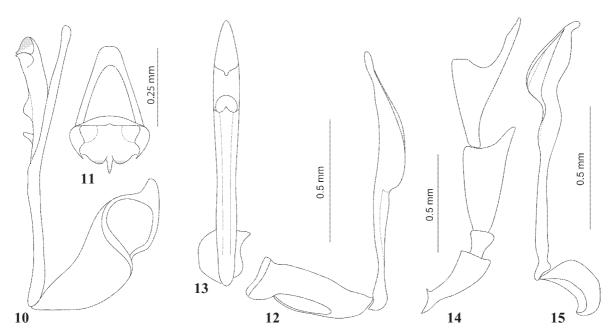
DIAGNOSIS. Calcaeron alabensis sp.n. is distinguishable from other known species of Calcaeron Kazantsev, 2004, by the slenderer body, coloration and the slenderer median lobe of the aedeagus (Figs 12–13).

ETYMOLOGY. The specific name is derived from the type locality.

Plateros gracilicornis (Pic, 1921) Figs 14-15

Falsotrichalus gracilicornis Pic, 1921: 3

MATERIAL EXAMINED: Lectotype, hereby designated, o, "Sumatra's O.K., Brastagi, 1300 m, 14.V.1918, J. B. Corporaal";



Figs 10–15. Antennomeres and aedeagi of Lycidae: 10–11 — *Mesolycus borneensis* sp.n., 12–13 — *Calcaeron alabensis* sp.n., 14–15 — *Plateros gracilicornis* (Pic); 10, 12–13, 15 — aedeagus; 11 — inner sac; 14 — antennomeres 2–4; 10, 12, 15 — laterally, 11 — apically; 13 — ventrally; 14 — dorsally.

Рис. 10-15. Антенны и эдеагус Lycidae: 10-11 — Mesolycus borneensis sp.n., 12-13 — Calcaeron alabensis sp.n., 14-15 — Plateros gracilicornis (Pic); 10, 12-13, 15 — эдеагус; 11 — внутренний мешок; 14 — 2-4 членики усика; 10, 12, 15 — сбоку, 11 — вид с вершины; 13 — снизу; 14 — сверху.

"leg. F. C. Drescher"; "R. Kleine vidit, 1925"; "Co-type: Falsotrichalus gracilicornis Pic"; "Falsotrichalus gracilicornis sp.n." (Pic's manuscript label); "désiré" (Pic's manuscript label) (ZMAU).

REMARKS. Falsotrichalus Pic, 1921 (the type species F. gracilicornis Pic, by original monotypy) was placed near Ditoneces Waterhouse, 1879, from which it differs by the conspicuously narrowed elytra; both taxa were synonymized with Plateros Bourgeois, 1878 [Bocák, 1998; Bocáková, 2001]. Given that the studied ZMAU specimen has Pic's manuscript label "Falsotrichalus gracilicornis sp.n." and the description [Pic, 1921] mentions the Corporaal's collection (now in ZMAU) as the first depositary, it is presumed to be the lectotype; the other (printed) label ("Co-type: Falsotrichalus gracilicornis Pic") most probably originated from a later examination of the specimen. As Pic introduced his F. gracilicornis not having nominated the holotype and not having mentioned the uniquity of the specimen [Pic, 1921], I have to designate the lectotype for the taxon, in accordance with Article 74 and Recommendation 73F of the International Code of Zoological Nomenclature.

DISTRIBUTION. Sumatra.

Plateros definitivus (Kleine, 1927)

Ditoneces definitivus Kleine, 1927: 301

MATERIAL EXAMINED: Lectotype, hereby designated, $\,^{\circ}$, "Noesa Kambangan, Java, Drescher"; "leg. F. C. Drescher"; "Typus!"; "Dilophotes (!) definitivus 1924 Kleine" (Kleine's manuscript label) (ZMAU).

REMARKS. As Kleine introduced his *Ditoneces definitivus* not having nominated the holotype and not having mentioned the uniquity of the specimen [Kleine, 1927], I have to designate the lectotype for the taxon, in accordance with Article 74 and Recommendation 73F of the International Code of Zoological Nomenclature.

DISTRIBUTION. Java.

Dihammatus smetanai **sp.n.** Figs 16–17.

MATERIAL. Holotype ♂: Borneo, Sabah, Mt. Kinabalu, above Poring Hot Springs, 510 m, 13.V.1987, A. Smetana leg. (NICO).

DESCRIPTION. Dark brown; pronotum, proximal half of elytra and femurs basally testaceous.

Male. Head slightly narrower than anterior pronotal margin, with inconspicuous antennal prominence, antennal sockets approximate. Eyes small (interocular distance about twice as long as radius). Ultimate maxillary palpomere tapering distally. Antennae filiform, with antennomeres 2 and 3 subquadrate; antennomeres 4–11 with erect pubescence.

Pronotum transverse, 1.5 times wider than long, with almost straight lateral margins; anteriorly convex; disk in posterior half with conspicuous narrow longitudinal furrow reaching posterior margin. Scutellum elongate, triangular, straight at apex.

Elytra slightly wider than pronotum basally and 3.2 times as long as wide humerally, parallel-sided, with four longitudinal costae and regular double rows of small cells in interstices; pubescence uniform, short and dense.

Aedeagus with slender and elongate asymmetric median lobe (Figs 16–17).

Female. Unknown.

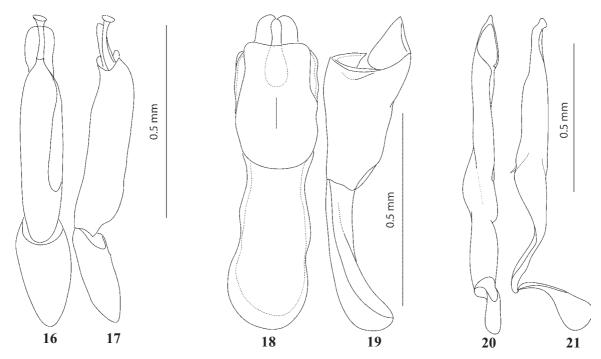
Length: 3.5 mm. Width (humerally): 0.8 mm.

DIAGNOSIS. *Dihammatus smetanai* sp.n. may be distinguished from similarly coloured congenerics by the acuminate ultimate maxillary palpomere, small eyes and the shape of the aedeagus (Figs 16–17).

ETYMOLOGY. The species is named after Dr. A. Smetana (Ottawa) who collected the unique specimen.

Dihammatus poringianus **sp.n.** Figs 18–19.

MATERIAL. Holotype \circlearrowleft ?: Borneo, Sabah, Mt. Kinabalu, above Poring Hot Springs, 510 m, 13.V.1987, A. Smetana leg.



Figs 16–21. Aedeagi of Dihammatus: 16-17 - D. smetanai sp.n., 18-19 - D. poringianus sp.n., 20-21 - D. crockeranus sp.n.; 16, 20 - ventrally; 17, 19, 21 - laterally; 18 - dorsally.

Рис. 16—21. Эдеагус Dihammatus: 16-17 - D. smetanai **sp.n.**, 18-19 - D. poringianus **sp.n.**, 20-21 - D. crockeranus **sp.n.**; 16, 20 - снизу; 17, 19, 21 - сбоку; 18 - сверху.

(NICO); paratypes: $\[\varphi \]$, same label (NICO); $\[\circlearrowleft \]$, Borneo, Sabah, Mt. Kinabalu, above Poring Hot Springs, 510 m, 9.V.1987, A. Smetana leg. (SVK).

DESCRIPTION. Dark brown; head, pronotum, scutellum, anterior half of elytra and femurs basally testaceous.

Male. Head slightly narrower than anterior pronotal margin, with inconspicuous antennal prominence, antennal sockets separated with minute lamina. Eyes small (interocular distance 1.7 times as long as radius). Ultimate maxillary palpomere slightly widened and provided with five blunt glabrous teeth distally. Antennae filiform, with antennomeres 2 and 3 subquadrate; antennomeres 4–11 with short erect pubescence.

Pronotum transverse, 1.3 times wider than long, narrowing anteriorly; disk in posterior half with conspicuous narrow longitudinal furrow reaching posterior margin; posterior angles acute. Scutellum elongate, parallel-sided, slightly emarginate at apex.

Elytra slightly wider than pronotum basally and 3.1 times as long as wide humerally, parallel-sided, with four longitudinal costae and regular double rows of minute cells in interstices; pubescence uniform, short and dense.

Aedeagus with relatively robust symmetric median lobe (Figs 18–19).

Female. Similar to male, but eyes slightly smaller and antennae slightly shorter.

Length: 3.6–4.2 mm. Width (humerally): 0.9–1.1 mm.

DIAGNOSIS. *Dihammatus poringianus* sp.n. may be distinguished from other *Dihammatus* of the similar coloration by the combination of such characters as the structure of the apical maxillary palpomere and the shape of the aedeagus (Figs 18–19).

ETYMOLOGY. The specific name is derived from the type locality, Poring Hot Springs, Kinabalu, Sabah.

Dihammatus crockeranus **sp.n.** Figs 20–21.

MATERIAL. Holotype \circlearrowleft : Malaysia, Sabah prov., Banjaran Crocker Mts, Gunung Alab peak, 1650-1800 m, 30.IV.-27.V.1996, M. Strba & M. Hergovitz leg. (SVK); paratypes: $7\ \circlearrowleft$ and $9\ \diamondsuit$, same label (SVK and ZMUM).

DESCRIPTION. Dark brown; basal palpomeres and elytra except at apices testaceous; antennomeres 1–3 and pronotal margins brown.

Male. Head as wide as anterior pronotal margin, with relatively inconspicuous antennal prominence, antennal sockets separated with minute lamina. Eyes moderately large (interocular distance ca. 1.2 times as long as radius). Labrum inconspicuous, transverse. Ultimate maxillary palpomere distally flattened and parallel-sided. Antennae filiform, with antennomere 3 almost twice as short as antennomere 2; antennomeres 4–11 with erect pubescence.

Pronotum transverse, 1.4 times wider than long, trapezoidal; with inconspicuous median rib and rugulose punctuation in anterior third and narrow median furrow in posterior half, reaching posterior margin; posterior angles acute. Scutellum elongate, trapezoidal, slightly emarginate at apex.

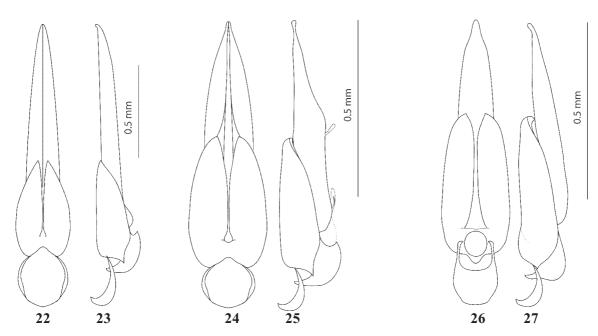
Elytra wider than pronotum basally, parallel-sided and 3.5 times as long as wide humerally, with indistinguishable primary and secondary costae; pubescence uniform, short and dense.

Aedeagus with elongate asymmetric median lobe and relatively small phallobase (Figs 20–21).

Female. Similar to male, but more robust, eyes smaller and antennae shorter.

Length: 5.1–6.8 mm. Width (humerally): 1.2–1.8 mm.

DIAGNOSIS. *Dihammatus crockeranus* sp.n. may be distinguished from other *Dihammatus* of the similar coloration by the parallel-sided ultimate maxillary palpomere and the shape of the aedeagus (Figs 20–21).



Figs 22–27. Aedeagi of *Libnetis*: 22–23 — *L. depressus* Kleine, 24–25 — *L. gununganus* **sp.n.**, 26–27 — *L. maurus* **sp.n.**; 22, 24, 26 — dorsally; 23, 25, 27 — laterally.

Рис. 22–27. Эдеагус Libnetis: 22–23 — L. depressus Kleine, 24–25 — L. gununganus **sp.n.**, 26–27 — L. maurus **sp.n.**; 22, 24, 26 — сверху; 23, 25, 27 — сбоку.

ETYMOLOGY. The specific name is derived from the type locality, Crocker Mts. in Sabah, East Malaysia.

Libnetis depressus Kleine, 1927 Figs 22–23.

Libnetis depressus Kleine, 1927: 315

MATERIAL EXAMINED: Holotype of, "Moesdock, Bali, VII.1915, Drescher"; "Typus!"; "Dilophotes (!) depressus 1924 Kleine, det. Aut." (Kleine's manuscript label) (ZMAU).

DISTRIBUTION. Bali (Indonesia).

Libnetis gununganus **sp.n.** Figs 24–25.

MATERIAL. Holotype \circlearrowleft : Malaysia, Sabah prov., Banjaran Crocker Mts, Gunung Alab peak, 1650-1800 m, 30.IV-27.V.1996, M. Strba & M. Hergovitz leg. (SVK); paratypes: 8 \updownarrow \updownarrow , same label; \circlearrowleft , N. Borneo, Kinabalu, 2700 m, mossy forest, 17-24.VI.1995, S. Kazantsev leg.; \updownarrow , E Malaysia: Sabah, km 52 Rd. Kota-Kinabalu-Tambunan, 1700-1800 m, 3-8.VII.2002, S. Kurbatov & S. Zimina leg. (SVK).

DESCRIPTION. Black; elytra testaceous.

Male. Head conspicuously narrowed behind eyes, with moderately large antennal prominence and conspicuous transverse impression between eyes, antennal sockets separated with minute lamina. Eyes relatively large (interocular distance slightly longer than radius). Ultimate maxillary and labial palpomeres acuminate. Antennae filiform, extending to four fifths of elytra, with antennomere 2 transverse; antennomeres 3–11 with erect pubescence.

Pronotum trapezoidal, ca. 1.5 times wider than long, with rounded anterior margin; posterior angles acute. Scutellum elongate, almost parallel-sided, slightly emarginate at apex.

Elytra conspicuously wider than pronotum basally and 3.1 times as long as wide humerally, slightly widenening posteriorly, with four inconspicuous longitudinal costae, irregularly granulose in interstices. Pubescence uniform, erect and short.

Aedeagus with straight median lobe and convex parameres (Figs 24–25).

Female. similar to male, but eyes smaller and antennae shorter.

Length: 6.1–7.4 mm. Width (humerally): 1.6–1.9 mm.

DIAGNOSIS. *Libnetis gununganus* sp.n. may be distinguished from other *Libnetis* by the coloration, acuminate ultimate maxillary palpomere and the shape of the aedeagus (Figs 24–25).

ETYMOLOGY. The specific name is derived from the type locality, Gunung Alab, Sabah.

Libnetis maurus **sp.n.** Figs 26–27.

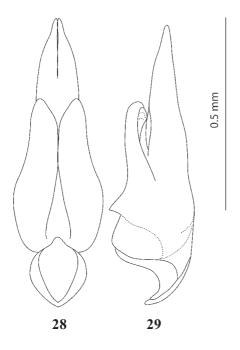
MATERIAL. Holotype ♂: Malaysia, Sabah prov., Banjaran Crocker Mts, Gunung Alab peak, 1650–1800 m, 30.IV–27.V.1996, M. Strba & M. Hergovitz leg. (SVK).

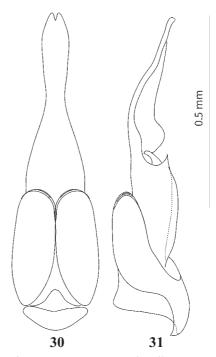
DESCRIPTION. Black.

Male. Head conspicuously narrowed behind eyes, with moderately large antennal prominence and conspicuous transverse impression between eyes, antennal sockets separated with minute lamina. Eyes large (interocular distance 1.5 shorter than radius). Ultimate maxillary and labial palpomeres flattened and tapering distally. Antennae almost filiform, antennomeres 3–11 slightly compressed, extending to three fourths of elytra, with antennomere 2 transverse; antennomeres 3–11 with erect pubescence.

Pronotum trapezoidal, ca. 1.5 times wider than long, with rounded anterior margin and concave sides; posterior angles acute. Scutellum elongate, almost parallel-sided, rounded at apex.

Elytra slightly wider than pronotum basally, long, 4.1 times as long as wide humerally, slightly widenening posteriorly, with four conspicuous longitudinal costae, with first and third costae weakened near apex; irregularly granulose in interstices. Pubescence uniform, erect and short.





Figs 28—31. Aedeagi of *Libnetisia*: 28—29 — *L. smetanai* **sp.n.**, 30—31 — *L. bousqueti* **sp.n.**; 28, 30 — dorsally; 29, 31 — laterally. Рис. 28—31. Эдеагус *Libnetisia*: 28—29 — *L. smetanai* **sp.n.**, 30—31 — *L. bousqueti* **sp.n.**; 28, 30 — сверху; 29, 31 — сбоку.

Aedeagus with straight median lobe and relatively long parameres (Figs. 26–27).

Female. Unknown.

Length: 7.8 mm. Width (humerally): 1.6 mm.

DIAGNOSIS. *Libnetis maurus* sp.n. is distinguishable from *L. nigricolor* Kleine, the other completely black species from Kinabalu, by the pronounced anterior angles of the pronotum and the shape of the aedeagus (Figs 26–27).

ETYMOLOGY. The specific name is derived from the uniformly black coloration of the new species.

Libnetisia smetanai **sp.n.** Figs 28–29.

MATERIAL. Holotype ♂: Borneo, Sabah, Mt. Kinabalu, above Poring Hot Springs, 510 m, 13.V.1987, A. Smetana leg. (NICO).

DESCRIPTION. Dark brown; antennomere 2, pronotum, scutellum, proximal half of elytra and anterior femurs proximally testaceous.

Male. Head slightly narrower than anterior pronotal margin, with inconspicuous antennal prominence, antennal sockets separated with minute lamina. Eyes small (interocular distance 1.7 times as long as radius). Ultimate maxillary palpomere parallel-sided, flattened and provided with five blunt glabrous teeth apically. Antennae filiform, with antennomere 2 subquadrate; antennomeres 3–11 with semi-erect short pubescence.

Pronotum transverse, 1.7 times wider than long, slightly narrowing anteriorly; disk in posterior third with inconspicuous narrow longitudinal furrow; posterior angles acute. Scutellum subquadrate, rounded at apex.

Elytra slightly wider than pronotum basally and 2.85 times as long as wide humerally, parallel-sided, with four longitudinal costae, irregularly granulose in interstices; first and third costae almost obsolete near apex. Pubescence uniform, erect and short.

Aedeagus with relatively long and robust parameres (Figs 28-29).

Length: 3.3 mm. Width (humerally): 1.0 mm.

Female. Unknown.

DIAGNOSIS. *Libnetisia smetanai* sp.n. may be distinguished from other similarly coloured *Libnetisia* by the structure of scutellum and the shape of the aedeagus (Figs 28–29).

ETYMOLOGY. The species is named after Dr. A. Smetana (Ottawa) who collected the unique specimen.

Libnetisia bousqueti **sp.n.** Figs 30–31.

MATERIAL. Holotype \circlearrowleft : Borneo, Sabah, Mt. Kinabalu, above Poring Hot Springs, 510 m, 9.V.1987, A. Smetana leg. (NICO); paratypes: \updownarrow , same label (NICO); \circlearrowleft and 2 \updownarrow \updownarrow , Borneo, Sabah, Mt. Kinabalu, above Poring Hot Springs, 510 m, 13.V.1987, A. Smetana leg. (NICO and SVK).

DESCRIPTION. Dark brown; antennomeres 1 and 2, head, pronotum, scutellum, elytra except distal eighth and femurs proximally testaceous.

Male. Head slightly narrower than anterior pronotal margin, with inconspicuous antennal prominence and conspicuous round impression between eyes, antennal sockets separated with minute lamina. Eyes large (interocular distance slightly shorter than radius). Ultimate maxillary palpomere nearly parallel-sided, flattened and provided with blunt glabrous teeth apically. Antennae filiform, attaining to two thirds of elytra, with antennomere 2 subquadrate; antennomeres 3–11 with erect pubescence.

Pronotum transverse, 1.7 times wider than long, slightly narrowing anteriorly; posterior angles acute. Scutellum subquadrate, slightly emarginate at apex.

Elytra slightly wider than pronotum basally and 3.3 times as long as wide humerally, parallel-sided, with four longitudinal costae, irregularly granulose in interstices; first and third costae obsolete in posterior half. Pubescence uniform, erect and short.

Aedeagus with tapering apically median lobe (Figs 30–31).

Length: 3.7–4.0 mm. Width (humerally): 0.9–1.15 mm. **Female**. Similar to male, but eyes smaller and antennae shorter.

DIAGNOSIS. *Libnetisia bousqueti* sp.n. may be distinguished from other *Libnetisia* by the coloration and the shape of the aedeagus (Figs 30–31).

ETYMOLOGY. The species is named after Dr. Y. Bousquet (Ottawa) through whose courtesy I was able to study the Borneo material of the National Insect Collection, Agriculture Canada.

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References

- Bocák L. 1998. A generic revision and phylogenetic analysis of the subtribe Trichalina (Coleoptera: Lycidae: Metriorrhynchini) // Acta Societatis Zooologicae Bohemiae. Vol.62. P.167–200.
- Bocáková M. 2001. Revision and phylogenetic analysis of the subfamily Platerodinae (Coleoptera: Lycidae) // European Journal of Entomology. Vol.98. P.53–85.
- Bourgeois J. 1906. Les Lycides du Sarawak Museum (Bornéo) // Annales de la Société entomologique de France. Vol.75. P.184–194.

- Kleine R. 1926. XX. Some Lycid Beetles from Mt. Poi and Mt. Penrissen in Sarawak // Sarawak Museum Journal. Vol.10. P.359–361.
- Kleine R. 1927. Neue Lyciden von den Sunda-Inseln // Treubia. Bd.9 No.4. S.293-316+3Tb.
- Kleine R. 1932. Die Lycidenfauna der Gebirge Borneos // Journal of the Federated Malay States Museums. Vol.17. P.146–166.
- Kazantsev S. 1992. Contribution à l'étude des Lycides orientaux (Coleoptera). Les Ateliini // Revue française d'Entomologie (N.S.). Vol.14. No.3. P.97–104.
- Kazantsev S. 1996. New taxa of Erotini (Insecta: Coleoptera: Lycidae) from Southeast Asia // Raffles Bulletin of Zoology. Vol.44. No.2. P.1–5.
- Kazantsev S. 1997. New and little known Lycidae (Coleoptera) from Southeast Asia // Raffles Bulletin of Zoology. Vol.45. No.2. P.173–187.
- Kazantsev S. 2002. A generic review of Duliticolinae, new subfamily (Coleoptera, Lycidae) // Elytron. Vol.16. P.5–21.
- Kazantsev S. 2004. Contribution to the knowledge of Macrolycini with description of *Calcaeron*, new genus (Coleoptera, Lycidae) // Zootaxa. Vol.493. P.1–32.
- Pic M. 1911. Coléoptères exotiques nouveaux ou peu connus (suite) // L'Echange. Vol.27. No.321. P.164–167.
- Pic M. 1921–1922. Contribution à l'étude des Lycides // L'Echange, hors-texte. Nos.404–410. P.1–28.
- Pic M. 1924–1939. Malacodermes exotiques // L'Echange, hors texte. Nos.418–477. P.1–472.
- Waterhouse C.O. 1878. On the different forms occurring in the Coleopterous family Lycidae, with descriptions of new genera and species // Transactions of Entomological Society of London. Vol.1. P.95–118.
- Waterhouse C.O. 1879. Illustrations of Typical Specimens in the Collection of the British Museum. Part 1 Lycidae. London: Taylor and Francis. 93 pp.