

## New *Libnetus* Waterhouse, 1878 and *Plateros* Bourgeois, 1879 species from Indochina and southern China (Coleoptera: Lycidae)

### Новые виды *Libnetus* Waterhouse, 1878 и *Plateros* Bourgeois, 1879 из Индокитая и южного Китая (Coleoptera: Lycidae)

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КЛЮЧЕВЫЕ СЛОВА: Coleoptera, Lycidae, новые виды, Палеарктика и Ориентальная область.

**ABSTRACT.** Fourteen new species of net-winged beetles of the genera *Libnetus* Waterhouse, 1878 and *Plateros* Bourgeois, 1879: *Libnetus nahangensis*, *L. napolovi*, *Plateros bannaensis*, *P. gavryushini*, *P. haucki*, *P. hergovitsi*, *P. jinghongensis*, *P. kabakovianus*, *P. korshunovi*, *P. medvedevi*, *P. melniki*, *P. olexai*, *P. prosvirovi* and *P. xishuangensis* spp.n. — are described from southern China and Indochina. *Libnetus niger* Pic, 1926 is illustrated.

**РЕЗЮМЕ.** Из южного Китая и Индокитая описываются четырнадцать новых вида жуков-краснокрылов родов *Libnetus* Waterhouse, 1878 и *Plateros* Bourgeois, 1879: *Libnetus nahangensis*, *L. napolovi*, *Plateros bannaensis*, *P. gavryushini*, *P. haucki*, *P. hergovitsi*, *P. jinghongensis*, *P. kabakovianus*, *P. korshunovi*, *P. medvedevi*, *P. melniki*, *P. olexai*, *P. prosvirovi* и *P. xishuangensis* spp.n. Приводятся иллюстрации *Libnetus niger* Pic, 1926.

### Introduction

An opportunity to study the Lycidae collections of the Erfurt Naturkundemuseum has already led to description of new species of *Plateros* Bourgeois, 1879 from Indochina [Kazantsev, 2005]. New studies based on the Erfurt Naturkundemuseum and Moscow Insect Centre material make it possible to further contribute to the knowledge of this genus of the region, as well as of *Libnetus* Waterhouse, 1878. While *Plateros* is the most widespread and species-rich lycid genus, represented in all biogeographical regions, except western Palaearctic, the Greater Antilles, Madagascar, New Zealand and Melanesia/Polyneisia, *Libnetus* is confined to the Oriental region [e.g., Kleine, 1933; Kazantsev, 1993]. In the present paper *Libnetus niger* Pic, 1926 is illustrated, and fourteen new species are described, twelve in *Plateros* and two in *Libnetus*.

### Material and Methods

The studied specimens were pinned or glued on cardboard plates. For a detailed examination they were relaxed in water; then the detached ultimate abdominal segments were treated for several hours in 10% KOH at room temperature, the extracted genitalia were placed in microvials with glycerin for photography, then glued back on cardboard plates.

MSP-1 zoom stereoscopic dissecting microscope with x8–x80 magnification range was used. Photographs were taken with Canon EOS 6D camera and Canon MP-E 65 mm lens.

The following acronyms are used in the paper:  
ICM — Insect Center, Moscow;  
MNP — Museum National d’Histoire Naturelle, Paris;  
NME — Naturkundemuseum, Erfurt.

### Taxonomy

#### *Libnetus* Waterhouse, 1878

*Libnetus* Waterhouse, 1878: 104.  
type species: *Libnetus pumilio* Waterhouse, 1878 (by monotypy)  
= *Libnetis* Waterhouse, 1879: 77 (invalid consequent amendment).

type species: *Libnetus pumilio* Waterhouse, 1878 (by monotypy).

#### *Libnetus niger* Pic, 1926

Figs 1–3.

*Libnetus niger* Pic, 1926: 34.

MATERIAL: Lectotype, ♂, [N Vietnam], «Hoabinh», «Type», «*Libnetis niger* Pic» (Pic’s manuscript labels) (MNP); China: S Yunnan, Xishuangbanna, 20 km NW Jinghong, Man Dian NNNR-office, 22°07.80'N, 100°40.05'E 740 m, LFF, 24.V.2008, A. Weigel leg.; China: S Yunnan, Xishuangbanna, 23 km NW Jinghong, vlc Na Ban (NNNR), 22°09.49'N, 100°39.92'E, 740 m, forest, EKL, 6.VI.2008, A. Weigel leg. (ICM and NME).

DISTRIBUTION. Known only from northern Vietnam and southern Yunnan (China).

REMARKS. First record from China.

*Libnetus nahangensis* Kazantsev, sp.n.  
Figs 4–6.

MATERIAL: Holotype, ♂, N Vietnam: Na Hang, 160 km NNW Hanoi, NE env. of Na Hang, 150–200 m, 3–13.VI.1996, A. Napolov & I. Roma leg. (NME).

DESCRIPTION. Male. Light brown; head, elytra, meso- and metaventrite, abdomen, femoris distally and tibiae dark brown.

Vertex shining, finely punctate, with shallow transverse impression behind antennal prominence. Eyes large, interocular distance ca. 1.6 times smaller than eye diameter. Labrum small, transverse, conspicuously concave anteriorly. Palps slender, ultimate palpomeres elongate, narrow, pointed and glabrous distally. Antennal sockets separated by minute lamina. Antennae slightly flattened, attaining to elytral two thirds; antennomere 3 ca. 4.4 times longer than antennomere 2 and ca. 1.3 times shorter than antennomere 4; antennomeres 3–11 with short sub-erect pubescence (Fig. 4).

Pronotum conspicuously transverse, ca. 2 times wider than long, slightly trapezoidal, almost straight basally and feebly

rounded anteriorly, with small acute posterior and blunt anterior angles; medially with a pair of weak X-shaped semispherical ridges. Mesothoracic spiracle small, short and hoodless. Scutellum transverse, short, rounded at apex (Fig. 4).

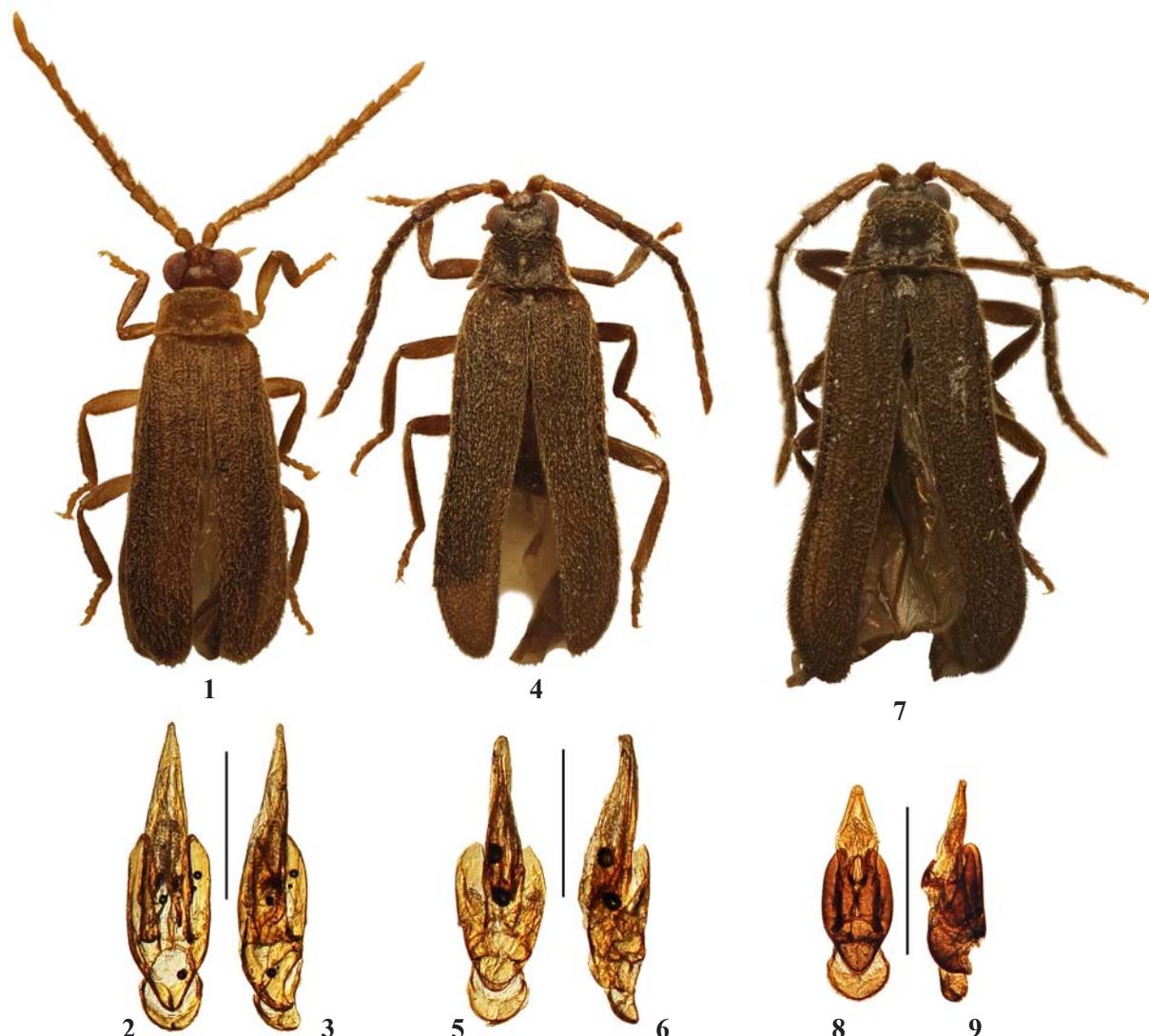
Elytra long, ca. 2.9 times longer than wide at humeri, slightly widening distally, with slender, equally developed primary costae; all interstices irregularly alveolate; pubescence relatively dense and semi-erect. Femoris and tibiae straight, moderately broad; tarsomeres 1–4 narrow, short, about as long as wide, and subequal in length; tarsomeres 1 and 2 without plantar pad (Fig. 4).

Aedeagus with gradually tapering distally and pointed at apex median lobe, almost straight in lateral view; parameres parallel, abruptly narrowed near apex, attaining to ca. half of median lobe; phallobase short and rounded, with incomplete median suture (Figs 5–6).

Female. Unknown.

Length: 3.7 mm. Width (humerally): 1.0 mm.

ETYMOLOGY. The new species is named after its type locality.



Figs 1–9. General view and details of *Libnetus*, males: 1–3 — *L. niger*; 4–6 — *L. nahangensis* sp.n.; 7–9 — *L. napolovi* sp.n.; 1, 4 — general view; 2–3, 5–6, 8–9 — aedeagus; 4–9 — holotypes; 1–2, 4–5, 7–8 — dorsally; 3, 6, 9 — laterally. Scales: 0.5 mm.

Рис. 1–9. Общий вид и детали строения *Libnetus*, самцы: 1–3 — *L. niger*; 4–6 — *L. nahangensis* sp.n.; 7–9 — *L. napolovi* sp.n.; 1, 4, 7 — общий вид; 2–3, 5–6, 8–9 — эдеагус; 4–9 — голотипы; 1–2, 4–5, 7–8 — сверху; 3, 6, 9 — сбоку. Масштабные линейки: 0.5 мм.

**DIAGNOSIS.** *Libnetus nahangensis* sp.n. can be easily distinguished from the congeners of the region by the light brown pronotum; additionally, it may be separated from the somewhat similar in terms of the aedeagal structure *L. napolovi* sp.n., by the distinctly more transverse pronotum, larger eyes, and gradually tapering distally and pointed at apex median lobe of the aedeagus, with parallel parameres (Figs 4–6).

**DISTRIBUTION.** Known only from northern Vietnam.

*Libnetus napolovi* Kazantsev, sp.n.

Figs 7–9.

**MATERIAL:** Holotype, ♂, N Vietnam: Na Hang, 160 km NNW Hanoi, NE env. of Na Hang, 150–200 m, 3–13.VI.1996, A. Napolov & I. Roma leg. (NME); paratype, ♀, same label (ICM).

**DESCRIPTION. Male.** Dark brown to black; antennomere 2 testaceous.

Vertex shining, finely punctate, with shallow transverse impression behind antennal prominence. Eyes relatively small, interocular distance subequal in length to eye diameter. Labrum small, transverse, nearly straight anteriorly. Palps slender, ultimate palpomeres elongate, narrow, pointed and glabrous distally. Antennal sockets separated by minute lamina. Antennae attaining to elytral two thirds, antennomeres 3–11 almost parallel-sided, feebly flattened; antennomere 3 ca. 4.4 times longer than antennomere 2 and ca. 1.1 times shorter than antennomere 4; antennomeres 3–11 with short sub-erect pubescence (Fig. 7).

Pronotum transverse, ca. 1.8 times as wide as long, trapezoidal, almost straight basally and slightly rounded anteriorly, with noticeably concave sides, long acute posterior and blunt anterior angles; medially with obscure narrow bifurcate posteriorly ridge. Mesothoracic spiracle small, short and hoodless. Scutellum nearly square, parallel-sided, emarginate at apex (Fig. 7).

Elytra narrow, long, ca. 2.9 times longer than wide at humeri, slightly narrowing distally, with slender, equally developed primary costae 2 and 4, costa 1 equally well developed in proximal half, costa 3 equally developed only basally; all interstices irregularly alveolate; pubescence dense and decumbent. Femoris and tibiae straight, narrow; tarsomeres 1–4 narrow, tarsomere 1 subequal in length to tarsomere 2 and to tarsomeres 3 and 4 combined; tarsomeres 1 and 2 without plantar pad (Fig. 7).

Aedeagus with relatively narrow and rounded at apex median lobe, noticeably curved in lateral view; parameres widened distally, attaining to ca. half of median lobe; phallobase rounded and relatively long, with incomplete obscure median suture (Figs 8–9).

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

Length: 4.0–4.2 mm. Width (humerally): 1.1–1.2 mm.

**ETYMOLOGY.** The new species is named after one of the collectors of the type series, Dr. A. Napolov (Riga).

**DIAGNOSIS.** *Libnetus napolovi* sp.n. habitually is very similar to *L. niger* Pic, 1926, separable by the rounded distally and conspicuously more narrow median lobe and shorter and widened distally parameres of the aedeagus (Figs 7–9).

**DISTRIBUTION.** Known only from northern Vietnam.

*Plateros Bourgeoisi*, 1879

*Plateros Bourgeoisi*, 1879: xix.

type species: *Eros brasiliensis* Lucas, 1857 (subsequent designation by Zaragoza, 1999).

*Plateros bannaensis* Kazantsev, sp.n.

Figs 10–12.

**MATERIAL:** Holotype, ♂, China: S Yunnan, Xishuangbanna, 20 km NW Jinghong, Man Dian NNNR-office, 22°07'80"N, 100°40'05"E, 740 m, LFF, 24.V.2008, A. Weigel leg. (NME); paratypes, 15 ♂♂ and 2 ♀♀, same label (ICM and NME).

**DESCRIPTION. Male.** Black; antennomere 2 brown.

Vertex shining, with round impression behind antennal prominence. Eyes large, interocular distance ca. 1.3 times shorter than eye diameter. Labrum small, transverse, rounded anteriorly. Palps slender, ultimate palpomeres elongate, almost parallel-sided and flattened distally. Antennal sockets separated by minute lamina. Antennae dentate, attaining to elytral five sixths; antennomere 3 ca. 3.2 times longer than antennomere 2 and ca. 1.6 times shorter than antennomere 4; antennomeres 3–11 with long sub-erect pubescence (Fig. 10).

Pronotum transverse, ca. 1.4 times as wide as long, bisinuate basally and triangularly produced forward anteriorly, with parallel sides, produced laterally acute posterior and blunt anterior angles; medially with obscure longitudinal impression posteriorly. Mesothoracic spiracle small, hoodless, not protruding beyond coxa. Scutellum transverse, slightly narrowing distally, inconspicuously emarginate at apex (Fig. 10).

Elytra long, ca. 3.3 times longer than wide at humeri, parallel-sided, with equally developed primary costae; all interstices with double rows of mostly elongate rounded cells; pubescence short and semi-erect. Tibiae and femoris straight, moderately broad; tarsomeres 3–4 slightly widened, tarsomeres 1–2 with apical plantar pad (Fig. 10).

Aedeagus asymmetric, with elongate, widened and twisted distally median lobe, with dilated hood-shaped structure apically; phallobase constituting ca 0.3 length of median lobe (Figs 11–12).

Female. Similar to male, but eyes smaller and antennae less dentate.

Length: 4.8–5.2 mm. Width (humerally): 1.1–1.2 mm.

**ETYMOLOGY.** The new species is named after its type locality.

**DIAGNOSIS.** By the shape of the aedeagus *Plateros bannaensis* sp.n. appears to be related to *P. binhanus* Pic, 1925 easily separable by the uniformly black upperside, larger eyes, non-flabellate antennae and more robust median lobe of the aedeagus (Figs 10–12).

**DISTRIBUTION.** Known only from southern Yunnan, China.

*Plateros gavryushini* Kazantsev, sp.n.

Figs 13–15.

**MATERIAL:** Holotype, ♂, Thailand: Trat prov., Koh Chang Is., White Sands Beach, env. Khao Inn, 12.10372°N, 102.27498°E, 9.XII.2011, D.I. Gavryushin leg. (ICM); paratype, ♀, same label (ICM).

**DESCRIPTION. Male.** Dark brown to black; antennomere 2 and anterior pronotal margin light brown.

Vertex shining, with small deep round excavation behind antennal prominence. Eyes relatively large, interocular distance subequal in length to eye diameter. Labrum small, transverse, rounded anteriorly. Palps slender, ultimate palpomeres elongate, narrow, pointed and glabrous distally. Antennal sockets separated by minute lamina. Antennae dentate, attaining to elytral three fourths; antennomere 3 ca. 3.6 times longer than antennomere 2 and ca. 1.3 times shorter than antennomere 4; antennomeres 3–11 with long curly pubescence (Fig. 13).

Pronotum transverse, ca. 1.4 times as wide as long, feebly bisinuate basally and triangularly produced forward anterior-

ly, with slightly concave sides, acute posterior and conspicuous blunt anterior angles; medially with obscure longitudinal impression posteriorly. Mesothoracic spiracle small, hoodless, not protruding beyond coxa. Scutellum transverse, parallel-sided, medially minutely emarginate at apex (Fig. 13).

Elytra long, ca. 3.6 times longer than wide at humeri, parallel-sided, with slender, equally developed primary costae; all interstices with double rows of small subquadrate cells; dense pubescence short and semi-erect. Tibiae and femoris straight, narrow; tarsomeres 1–4 narrow, tarsomeres 1–2 with minute apical plantar pad (Fig. 13).

Aedeagus symmetric, with elongate, narrow, straight, hooked distally median lobe; phallobase constituting ca 0.3 length of median lobe (Figs 14–15).

Female. Similar to male, but antennae less dentate.

Length: 4.2–5.1 mm. Width (humerally): 1.0–1.2 mm.

ETYMOLOGY. The new species is named after the collector of the type series, Mr. D.I. Gavryushin.

DIAGNOSIS. *Plateros gavryushini* sp.n. is quite similar to *P. bannaensis* sp.n., separable by the smaller eyes, weaker elytral reticulation, and straight, narrow and distally hooked median lobe of the symmetric aedeagus (Figs 13–15). In

addition, its pointed apically palpomeres are quite unlike those of other *Plateros* species.

DISTRIBUTION. Known only from central Thailand.

*Plateros haucki* Kazantsev, sp.n.

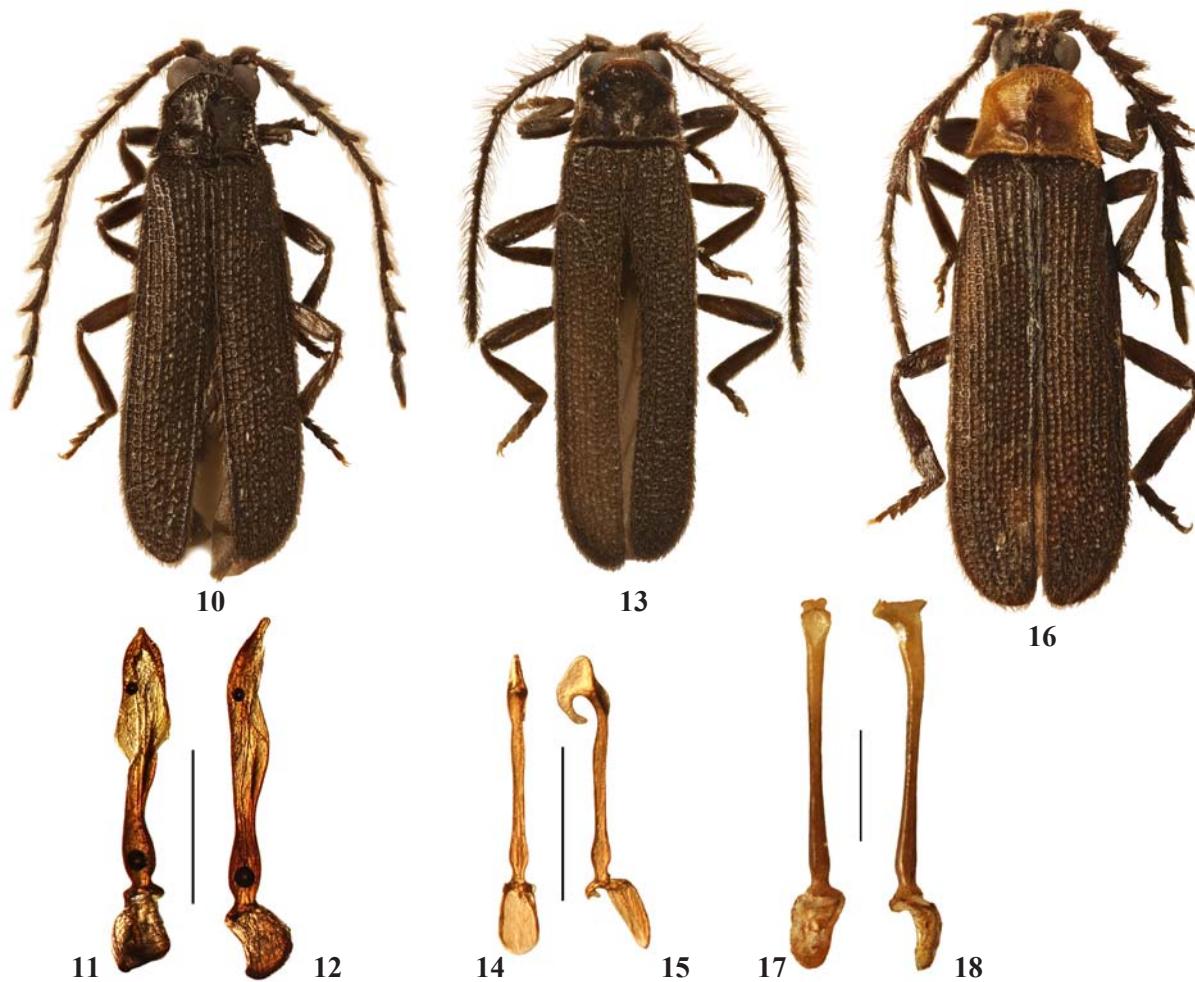
Figs 16–18.

MATERIAL: Holotype, ♂, NE Thailand: Loei pr., Phu Kradung N.P., 16°52'N, 101°49'E, 1000 m, 16–17. V.1999, D. Hauck leg. (ICM); paratypes, 1 ♂ and 2 ♀♀, same label (ICM).

DESCRIPTION. Male. Black; pronotum reddish brown.

Vertex shining, with two deep round impressions behind antennal prominence. Eyes moderately large, interocular distance ca. 1.1 times shorter than eye diameter. Labrum small, transverse, inconspicuously emarginate medially. Palps slender, ultimate palpomeres elongate, nearly parallel-sided, flattened and glabrous at apex. Antennal sockets separated by minute lamina. Antennae dentate, attaining to elytral two thirds; antennomere 3 ca. 3.2 times longer than antennomere 2 and ca. 1.1 times shorter than antennomere 4; antennomeres 3–11 with long erect pubescence (Fig. 16).

Pronotum transverse, ca. 1.6 times as wide as long, feebly bisinuate basally and rounded anteriorly, with slightly concave



Figs 10–18. General view and details of *Plateros*, holotype males: 10–12 — *P. bannaensis* sp.n.; 13–15 — *P. gavryushini* sp.n.; 16–18 — *L. haucki* sp.n.; 10, 13, 16 — general view; 11–12, 14–15, 17–18 — aedeagus; 10–11, 13–14, 16–17 — dorsally; 12, 15, 18 — laterally. Scales: 0.5 mm.

Рис. 10–18. Общий вид и детали строения *Plateros*, голотипы, самцы: 10–12 — *P. bannaensis* sp.n.; 13–15 — *P. gavryushini* sp.n.; 16–18 — *L. haucki* sp.n.; 10, 13, 16 — общий вид; 11–12, 14–15, 17–18 — эдеагус; 10–11, 13–14, 16–17 — сверху; 12, 15, 18 — сбоку. Масштабные линейки: 0.5 мм.

sides, acute posterior and rounded blunt anterior angles; medially with obscure longitudinal impression posteriorly and short median rib anteriorly. Mesothoracic spiracle small, hoodless, not protruding beyond coxa. Scutellum subquadrate, slightly narrowing distally, almost truncate at apex (Fig. 16).

Elytra long, ca. 3.2 times longer than wide at humeri, parallel-sided, with slender, equally developed primary costae; all interstices with double rows of small, mostly square, roundish cells; pubescence short and semi-erect. Tibiae and femoris straight, moderately broad; tarsomere 4 slightly widened, tarsomeres 1–2 with apical plantar pad (Fig. 16).

Aedeagus symmetric, with very long, straight, narrow median lobe, slightly (in ventral view) and considerably (in lateral view) widened apically; phallobase constituting ca 0.25 length of median lobe (Figs 17–18).

Female. Similar to male, but eyes smaller and antennae less dentate.

Length: 4.4–5.3 mm. Width (humerally): 1.1–1.2 mm.

ETYMOLOGY. The new species is named after the collector of the type series.

DIAGNOSIS. *Plateros haucki* sp.n. resembles *P. elisus* Pic, 1921, from «Tonkin», but may be distinguished by the straight and distally modified median lobe of the aedeagus (Figs 16–18).

DISTRIBUTION. Known only from north-western Thailand.

#### *Plateros hergovitsi* Kazantsev, sp.n.

Figs 19–21.

MATERIAL: Holotype, ♂, C Laos, Khammouan Pr., env. Nakai, Rte No. 8, 17°42.8'N, 105°08.9'E, 540–580 m, 4–8.V.1998, M. Strba, R. Hergovits leg. (ICM).

DESCRIPTION. Male. Black; pronotum reddish brown.

Vertex shining, with longitudinal, bifurcate posteriorly impression behind antennal prominence. Eyes large, interocular distance 1.4 times shorter than eye diameter. Labrum small, transverse, almost truncate anteriorly. Palps slender, ultimate palpomeres elongate, obliquely narrowed distally and glabrous at apex. Antennal sockets separated by minute lamina. Antennae dentate, attaining to elytral two thirds; antennomere 3 ca. 2.8 times longer than antennomere 2 and ca. 1.1 times shorter than antennomere 4; antennomeres 3–11 with moderately long sub-erect pubescence (Fig. 19).

Pronotum transverse, ca. 1.5 times as wide as long, feebly bisinuate basally and produced anteriorly, with almost parallel sides, acute posterior and rounded blunt anterior angles; medially with obscure longitudinal impression posteriorly. Mesothoracic spiracle small, hoodless, slightly protruding beyond coxa. Scutellum transverse, slightly narrowing distally, emarginate at apex (Fig. 19).

Elytra long, ca. 3.1 times longer than wide at humeri, parallel-sided, with equally developed primary costae; all interstices with double rows of small subquadrate roundish cells; pubescence short and semi-erect. Tibiae and femoris straight, relatively broad; tarsomeres 3–4 widened, tarsomeres 1–2 with apical plantar pad (Fig. 19).

Aedeagus slightly asymmetric, with elongate, bent in the middle and pointed at apex median lobe, with distal earflaps-shaped structure; phallobase constituting ca 0.45 length of median lobe (Figs 20–21).

Female. Unknown.

Length: 6.8 mm. Width (humerally): 1.6 mm.

ETYMOLOGY. The new species is named after one of the collectors of the type specimen.

DIAGNOSIS. *Plateros hergovitsi* sp.n. appears to belong to the *P. hoi* Kazantsev, 2005 group of species, separa-

ble by the bent in the middle and bearing a distal earflaps-like structure median lobe of the aedeagus (Figs 19–21).

DISTRIBUTION. Known only from central Laos.

#### *Plateros jinghongensis* Kazantsev, sp.n.

Figs 22–24.

MATERIAL: Holotype, ♂, China: S Yunnan, Xishuangbanna, 20 km NW Jinghong, Man Dian NNNR-office, 22°07.80'N, 100°40.05'E, 740 m, LFF, 24.V.2008, A. Weigel leg. (NME).

DESCRIPTION. Male. Black; antennomere 2, distal half of antennomere 11 and narrow pronotal margins reddish light brown.

Vertex shining, with deep transverse impression behind antennal prominence. Eyes moderately large, interocular distance ca. 1.2 time greater than eye diameter. Labrum small, transverse, broadly concave anteriorly. Palps slender, ultimate palpomeres elongate, parallel-sided, oblique at apex. Antennal sockets separated by minute lamina. Antennae flabellate, attaining to elytral two thirds; flabellae of median antennomeres ca. 1.6 times shorter than relative stems; antennomere 3 ca. 3.3 times longer than antennomere 2 and ca. 1.1 times shorter than antennomere 4; antennomeres 3–11 with long erect pubescence (Fig. 22).

Pronotum transverse, ca. 1.5 times as wide as long, bisinuate basally and triangularly produced forward anteriorly, with slightly concave sides, acute posterior and blunt anterior angles; medially with obscure longitudinal impression posteriorly and short median rib anteriorly. Mesothoracic spiracle small, hoodless, not protruding beyond coxa. Scutellum elongate, narrowing distally, nearly truncate at apex (Fig. 22).

Elytra long, ca. 2.9 times longer than wide at humeri, parallel-sided, with slender, equally developed primary costae; all interstices with double rows of subquadrate to elongate cells; pubescence short and semi-erect. Tibiae and femoris straight, relatively broad; tarsomeres 3–4 widened, tarsomeres 1–2 with apical plantar pad (Fig. 22).

Aedeagus asymmetric, with narrow twisted median lobe, with two inconspicuous dents: one just above basal bent, second in the middle of distal twist; phallobase constituting ca 0.3 length of median lobe (Figs 23–24).

Female. Unknown.

Length: 5.8 mm. Width (humerally): 1.5 mm.

ETYMOLOGY. The new species is named after its type locality.

DIAGNOSIS. *Plateros jinghongensis* sp.n. is similar to *P. merulus* Kazantsev, 2011, from central Laos, separable by the light brown pedicel (antennomere 2) and pronotal margins, as well as by the broader twisted median lobe of the aedeagus (Figs 22–24).

DISTRIBUTION. Known only from southern Yunnan, China.

#### *Plateros kabakovianus* Kazantsev, sp.n.

Figs 25–26.

MATERIAL: Holotype, ♂, Vietnam, mountains, NO Thai Nguen, 380 m, 20.IX.1963, O. Kabakov leg. (ICM).

DESCRIPTION. Male. Black; pronotum and scutellum light brown.

Vertex shining, with prominent round impression behind antennal prominence. Eyes large, interocular distance ca. 1.5 times shorter than eye diameter. Labrum small, transverse, noticeably concave anteriorly. Palps slender, ultimate palpomeres elongate, oval, flattened and glabrous distally. Antennal sockets separated by minute lamina. Antennae dentate, attaining to elytral two thirds; antennomere 3 ca. 5 times

longer than antennomere 2 and ca. 1.1 times shorter than antennomere 4; antennomeres 3–11 with long curly pubescence (Fig. 25).

Pronotum transverse, ca. 1.6 times as wide as long, trapezoidal, feebly bisinuate basally and rounded anteriorly, with acute posterior and rounded blunt anterior angles; medially with obscure longitudinal impression posteriorly and short median rib anteriorly. Mesothoracic spiracle small, hoodless, not protruding beyond coxa. Scutellum elongate, slightly narrowing distally, almost truncate at apex (Fig. 25).

Elytra long, ca. 3.1 times longer than wide at humeri, parallel-sided, with slender, equally developed primary costae; all interstices with double rows of small rounded cells; dense pubescence short and semi-erect. Tibiae and femoris straight, relatively broad; tarsomere 4 slightly widened, tarsomeres 1–2 with minute apical plantar pad (Fig. 25).

Aedeagus symmetric, with simple, relatively short, elongate, straight, slightly widened and rounded apically median lobe (Fig. 26).

Female. Unknown.

Length: 4.8 mm. Width (humerally): 1.2 mm.

ETYMOLOGY. The new species is named after the collector of the type specimen, the late Dr. O. Kabakov (St.-Petersburg).

DIAGNOSIS. *Plateros kabakovianus* sp.n. habitually is somewhat similar to *P. haucki* sp.n., easily separable by the lighter brown pronotum and scutellum and simple, relatively short, straight median lobe of the aedeagus (Figs 25–26).

DISTRIBUTION. Known only from northern Vietnam.

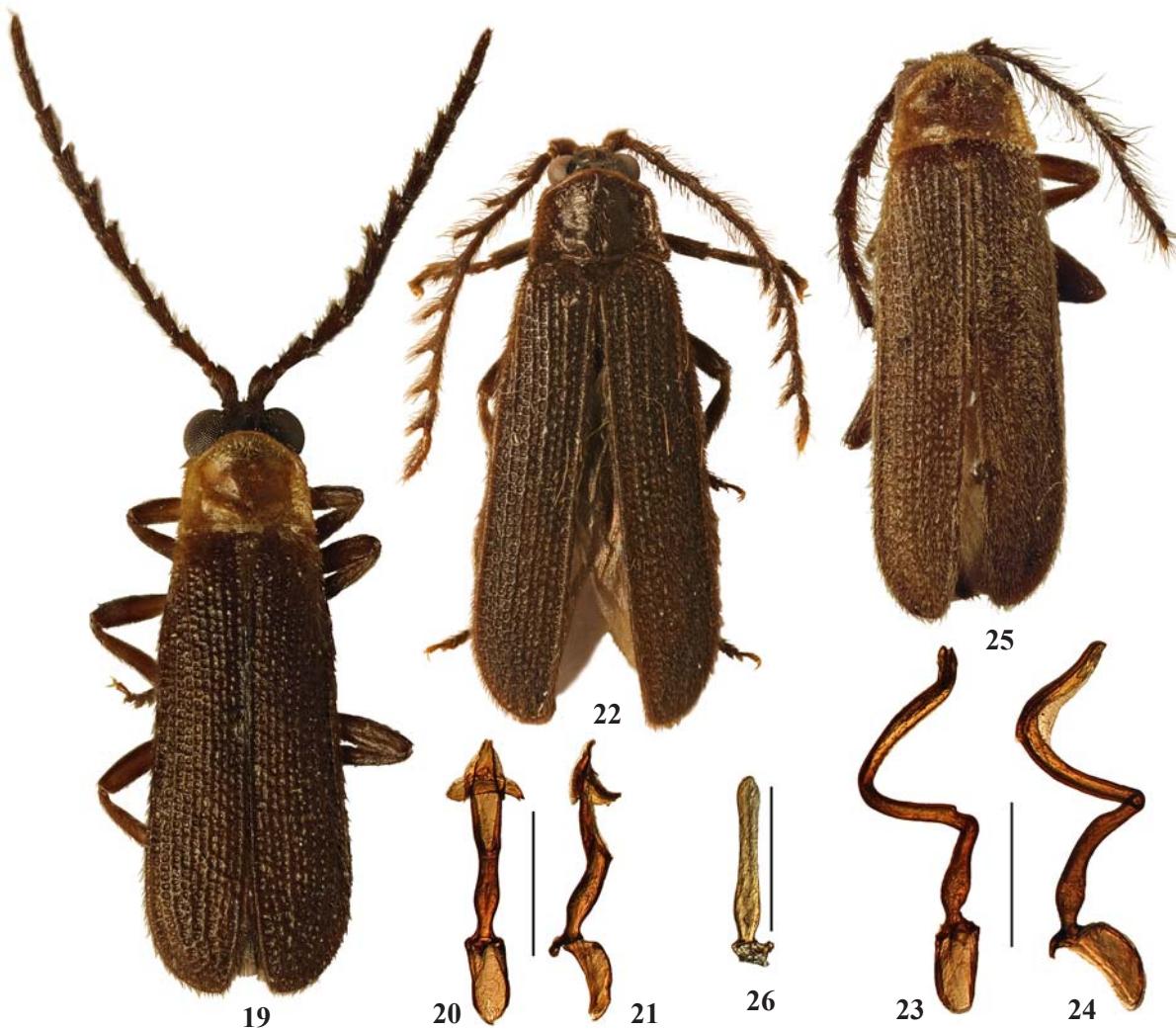
*Plateros korshunovi* Kazantsev, sp.n.

Figs 27–29.

MATERIAL: Holotype, ♂, Thailand, 32 km SE Lampang, near N.P. Wiang Kosui, 18°04'1.2"N, 99°39'52.5"E, 450 m, 2–4 VI.2010, A.V. Korshunov leg. (ICM).

DESCRIPTION. Male. Dark brown; antennomere 2, pronotal margins and legs light brown.

Vertex shining, with prominent round impression behind antennal prominence. Eyes relatively small, interocular distance ca. 1.4 times greater than eye diameter. Labrum



Figs 19–26. General view and details of *Plateros*, holotype males: 19–21 — *P. hergovitsi* sp.n.; 22–24 — *P. jinghongensis* sp.n.; 25–26 — *L. kabakovianus* sp.n.; 19, 22, 25 — general view; 20–21, 23–24, 26 — aedeagus; 19–20, 22–23, 25 — dorsally; 21, 24, 26 — laterally. Scales: 0.5 mm.

Рис. 19–26. Общий вид и детали строения *Plateros*, голотипы, самцы: 19–21 — *P. hergovitsi* sp.n.; 22–24 — *P. jinghongensis* sp.n.; 25–26 — *L. kabakovianus* sp.n.; 19, 22, 25 — общий вид; 20–21, 23–24, 26 — эдеагус; 19–20, 22–23, 25 — сверху; 21, 24, 26 — сбоку. Масштабные линейки: 0.5 мм.

small, transverse. Palps slender, ultimate palpomeres elongate, almost parallel-sided, oblique distally. Antennal sockets separated by narrow lamina. Antennae strongly dentate, attaining to elytral seven eights; antennomere 3 ca. 3.5 times longer than antennomere 2 and ca. 1.3 times shorter than antennomere 4; antennomeres 3–11 with long curly pubescence (Fig. 27).

Pronotum transverse, ca. 1.3 times as wide as long, almost straight basally and rounded anteriorly, with almost parallel sides, small acute posterior and rounded anterior angles; medially with obscure longitudinal impression posteriorly. Mesothoracic spiracle small, hoodless, not protruding beyond coxa. Scutellum elongate, slightly parallel-sided, slightly emarginate at apex (Fig. 27).

Elytra long, ca. 3.4 times longer than wide at humeri, parallel-sided, with slender, equally developed primary costae; all interstices with double rows of small rounded cells; dense pubescence short and semi-erect. Tibiae and femoris straight, relatively broad; tarsomere 4 slightly widened, tarsomeres 1–2 with minute apical plantar pad (Fig. 27).

Aedeagus asymmetric, with elongate median lobe with simple straight stem and twisted narrow helmet-shaped distal portion; phallobase constituting ca 0.25 length of median lobe (Fig. 28–29).

Female. Unknown.

Length: 5.5 mm. Width (humerally): 1.3 mm.

**ETYMOLOGY.** The new species is named after the collector of the type specimen, Mr. A.V. Korshunov.

**DIAGNOSIS.** *Plateros korshunovi* sp.n. seems to be related to *P. pulverulentus* Kazantsev, 2011, from Vietnam,

separable by the unmodified stem (proximal portion) of the median lobe of the aedeagus (Figs 28–29).

**DISTRIBUTION.** Known only from northern Thailand.

*Plateros medvedevi* Kazantsev, sp.n.

Figs 30–32.

**MATERIAL:** Holotype, ♂, S Vietnam, Gialai-Kontum Pr., 40 km N Ankhe, tropical forest, 740 m, 8.XI.1979, L. Medvedev leg. (ICM).

**DESCRIPTION. Male.** Dark brown to black; pronotum, scutellum and elytra testaceous.

Vertex shining, with deep round impression behind antennal prominence. Eyes large, interocular distance ca. 1.5 times shorter than eye diameter. Labrum small, transverse. Palps slender, ultimate palpomeres elongate, oval, oblique at apex. Antennal sockets separated by minute lamina. Antennae dentate, attaining to elytral two thirds; antennomere 3 ca. 2 times longer than antennomere 2 and ca. 2 times shorter than antennomere 4; antennomeres 3–11 with short erect pubescence (Fig. 30).

Pronotum transverse, ca. 1.6 times as wide as long, feebly bisinuate basally and triangularly produced forward anteriorly, with almost parallel sides, acute, laterally produced posterior and pronounced blunt anterior angles; medially with obscure longitudinal impression posteriorly and median rib attaining to pronotal half anteriorly. Mesothoracic spiracle small, hoodless, not protruding beyond coxa. Scutellum subquadrate, parallel-sided, triangularly emarginate at apex (Fig. 30).

Elytra long, ca. 3.2 times longer than wide at humeri, parallel-sided, with slender, equally developed primary cos-



Figs 27–32. General view and details of *Plateros*, holotype males: 27–29 — *P. korshunovi* sp.n.; 30–32 — *P. medvedevi* sp.n.; 27, 30 — general view; 28–29, 31–32 — aedeagus; 27–28, 30–31 — dorsally; 29, 32 — laterally. Scales: 0.5 mm.

Рис. 27–32. Общий вид и детали строения *Plateros*, голотипы, самцы: 27–29 — *P. korshunovi* sp.n.; 30–32 — *P. medvedevi* sp.n.; 27, 30 — общий вид; 28–29, 31–32 — эдагус; 27–28, 30–31 — сверху; 29, 32 — сбоку. Масштабные линейки: 0.5 мм.

tae; all interstices with double rows of small, mostly elongate cells; pubescence short and semi-erect. Tibiae and femoris straight, narrow; tarsomere 4 widened, tarsomeres 1–2 with apical plantar pad (Fig. 30).

Aedeagus asymmetric, with narrow, sub-cylindrical, slightly bent in the middle and constricted and rounded at apex median lobe; phallobase constituting ca 0.25 length of median lobe (Figs 31–32).

Female. Unknown.

Length: 5.9 mm. Width (humerally): 1.3 mm.

ETYMOLOGY. The new species is named after the collector of the type specimen, Dr. L. Medvedev (Moscow).

DIAGNOSIS. *Plateros medvedevi* sp.n. appears to be related to *P. nanensis* Kazantsev, 2011, from northern Thailand and Vietnam, separable by the uniformly testaceous upperside, non-flabellate antennae and slightly bent and not pointed apically median lobe of the aedeagus (Figs 30–32).

DISTRIBUTION. Known only from southern Vietnam.

### *Plateros melniki* Kazantsev, sp.n.

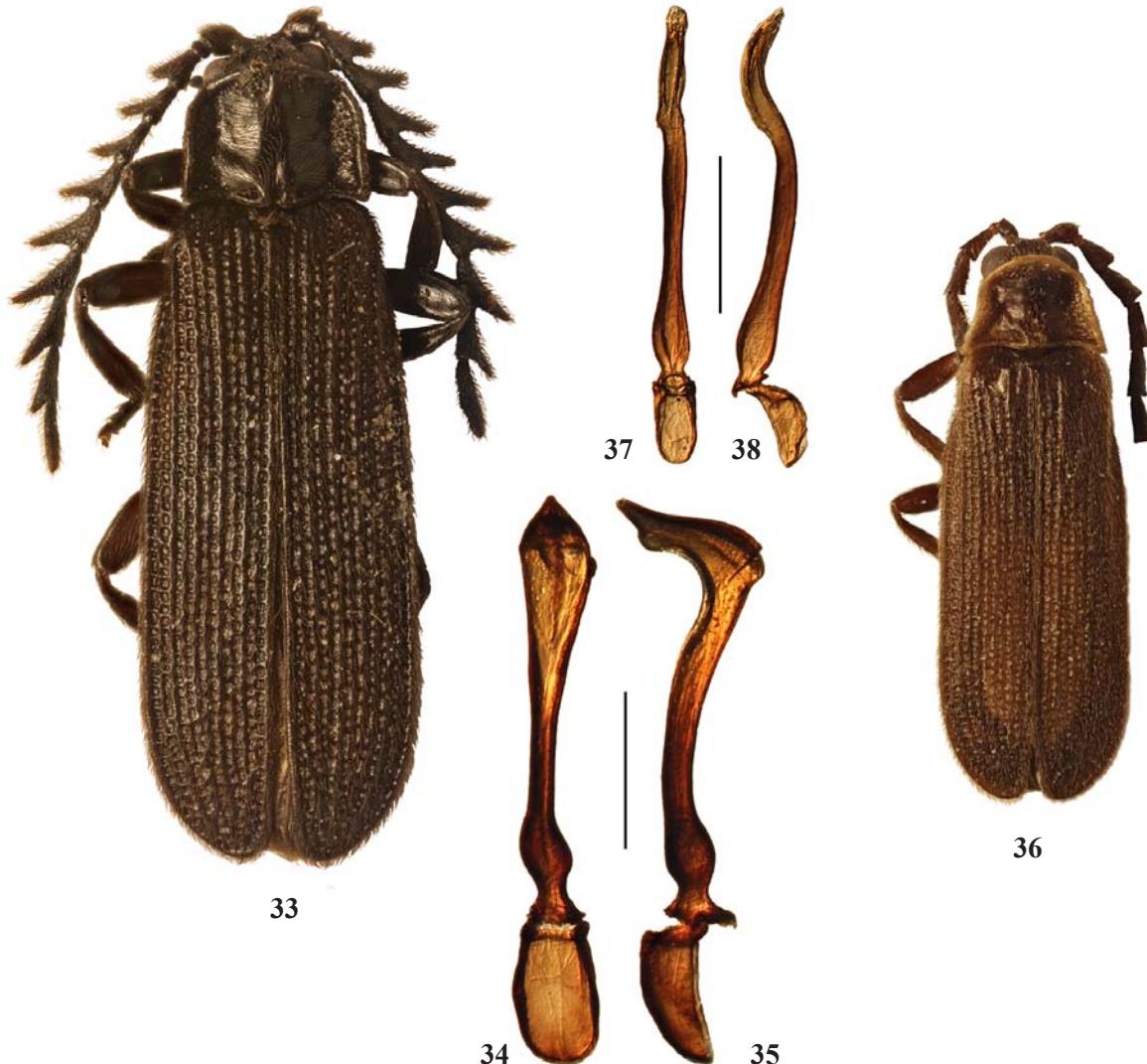
Figs 33–35.

MATERIAL: Holotype, ♂, N Thailand, Chiang Mai Pr., Doi Fah Hom Pok N.P., 19°58'06"N, 99°09'13"E - 19°58'16"N, 99°08'47"E, 590–630 m, 16–21.V.2013, I. Melnik leg. (ICM).

DESCRIPTION. Male. Black.

Vertex shining, with two small deep round impression behind antennal prominence. Eyes small, interocular distance ca. 2 times greater than eye diameter. Labrum small, transverse. Palps slender, ultimate palpomeres elongate, almost parallel-sided, oblique at apex. Antennal sockets separated by narrow lamina. Antennae flabellate, reaching slightly over elytral middle; flabellae of median antennomeres subequal in length to relative stems; antennomere 3 ca. 2.6 times longer than antennomere 2 and ca. 1.1 times longer than antennomere 4; antennomeres 3–11 with moderately long erect pubescence (Fig. 33).

Pronotum transverse, ca. 1.3 times as wide as long, bisinuate basally and rounded anteriorly, with parallel sides,



Figs 33–38. General view and details of *Plateros*, holotype males: 33–35 — *P. melniki* sp.n.; 36–38 — *L. olexai* sp.n.; 33, 36 — general view; 34–35, 37–38 — aedeagus; 33–34, 36–37 — dorsally; 35, 38 — laterally. Scales: 0.5 mm.

Рис. 33–38. Общий вид и детали строения *Plateros*, голотипы, самцы: 33–35 — *P. melniki* sp.n.; 36–38 — *L. olexai* sp.n.; 33, 36 — общий вид; 34–35, 37–38 — эдеагус; 33–34, 36–37 — сверху; 35, 38 — сверху; 29, 32, 35 — сбоку. Масштабные линейки: 0.5 мм.

acute, not laterally produced posterior and rounded blunt anterior angles; medially with obscure longitudinal impression posteriorly and short median rib anteriorly. Mesothoracic spiracle small, hoodless, not protruding beyond coxa. Scutellum transverse, slightly narrowing distally, broadly emarginate at apex (Fig. 33).

Elytra long, ca. 3 times longer than wide at humeri, parallel-sided, with mostly equally developed primary costae, with costa 4 more prominent at humeri; all interstices with double rows of small mostly elongate roundish cells; pubescence short and semi-erect. Tibiae and femoris relatively broad, tibiae somewhat curved; tarsomeres 3–4 widened, tarsomeres 1–2 with apical plantar pad (Fig. 33).

Aedeagus slightly asymmetric, with elongate, widened and hooked distally median lobe, with tip of the hook slightly raised apically; phallobase constituting ca 0.3 length of median lobe (Figs 34–35).

Female. Unknown.

Length: 6.7 mm. Width (humerally): 1.7 mm.

ETYMOLOGY. The new species is named after the collector of the type specimen, Mr. I. Melnik (Moscow).

DIAGNOSIS. *Plateros melniki sp.n.* seems to be related to *P. faber* Kazantsev, 2011 from northern Vietnam, also almost uniformly black and with somewhat similar aedeagal structure, distinguishable by the inconspicuous posterior pronotal angles and more robust and more conspicuously hooked apically median lobe of the aedeagus (Figs 33–35).

DISTRIBUTION. Known only from northern Thailand.

#### *Plateros olexai* Kazantsev, sp.n.

Figs 36–38.

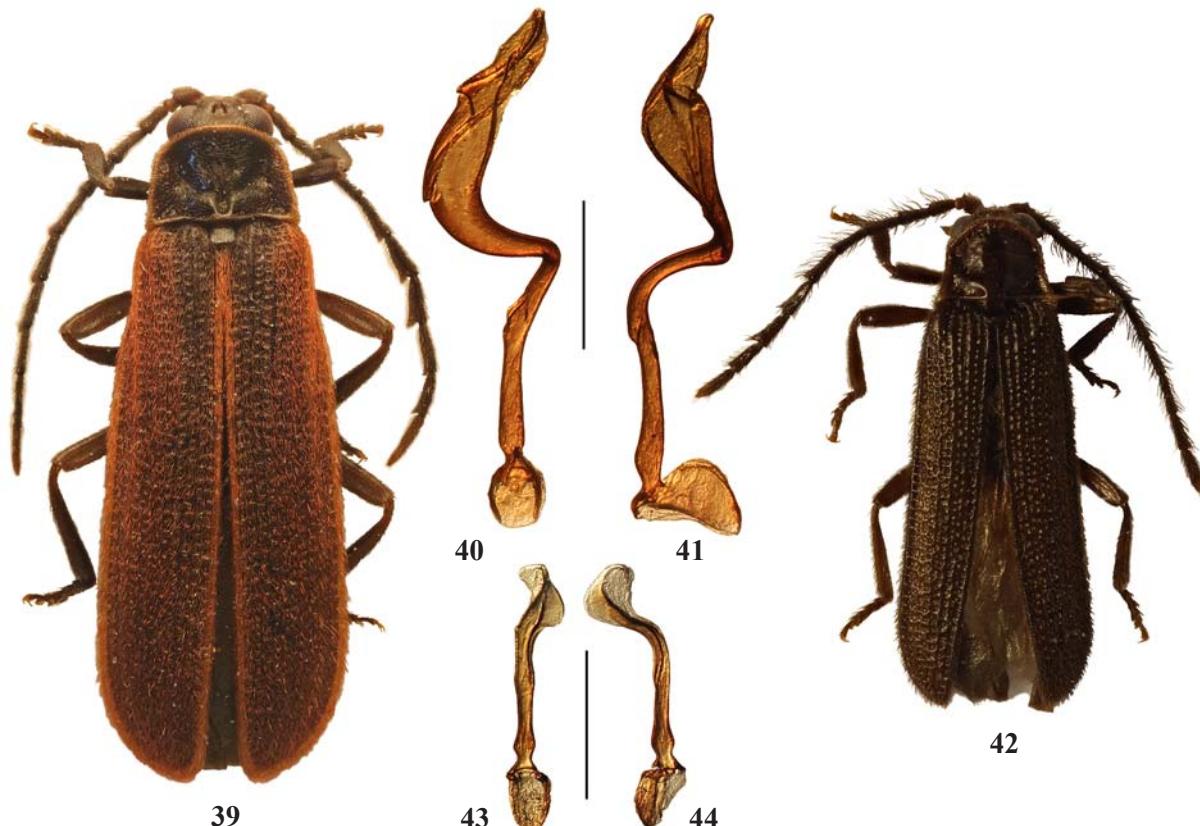
MATERIAL: Holotype, ♂, N Vietnam, Tamdao, 900 m, 13–24.V.1989, A. Olexa leg. (ICM).

DESCRIPTION. Male. Dark brown to black; antennomere 2, pronotal margins and elytral humeri light brown.

Vertex shining, with noticeable round impression behind antennal prominence. Eyes moderately large, interocular distance ca. 1.1 times greater than eye diameter. Labrum small, transverse. Palps slender, ultimate palpomeres elongate, almost parallel-sided, oblique, flattened and glabrous at apex. Antennal sockets separated by narrow lamina. Antennae dentate, attaining to elytral two thirds; antennomere 3 ca. 3.4 times longer than antennomere 2 and ca. 1.4 times shorter than antennomere 4; antennomeres 3–11 with short erect pubescence (Fig. 36).

Pronotum transverse, ca. 1.6 times as wide as long, trapezoidal, slightly bisinuate basally and rounded anteriorly, with acute, laterally produced posterior and blunt anterior angles; medially with obscure longitudinal impression posteriorly and short median rib anteriorly. Mesothoracic spiracle small, hoodless, not protruding beyond coxa. Scutellum transverse, narrowing distally, truncate at apex (Fig. 36).

Elytra long, ca. 3 times longer than wide at humeri, parallel-sided, with slender, equally developed primary costae; all interstices with double rows of small subquadrate rounded cells; pubescence short and semi-erect. Tibiae and femoris straight, narrow; tarsomere 4 slightly widened, tarsomeres 1–2 with minute apical plantar pad (Fig. 36).



Figs 39–44. General view and details of *Plateros*, holotype males: 39–41 — *P. prosvirovi* sp.n.; 42–44 — *P. xishuangensis* sp.n.; 39, 42 — general view; 40–42, 43–44 — aedeagus; 39–40, 42–43 — dorsally; 41, 44 — laterally. Scales: 0.5 mm.

Рис. 39–44. Общий вид и детали строения *Plateros*, голотипы, самцы: 39–41 — *P. prosvirovi* sp.n.; 42–44 — *P. xishuangensis* sp.n.; 39, 42 — общий вид; 40–42, 43–44 — эдагус; 39–40, 42–43 — сверху; 41, 44 — сбоку. Масштабные линейки: 0.5 мм.

Aedeagus almost symmetric, with elongate, narrow, curved distally median lobe; phallobase constituting ca 0.2 length of median lobe (Figs 37–38).

Female. Unknown.

Length: 5.7 mm. Width (humerally): 1.4 mm.

**ETYMOLOGY.** The new species is named after the collector of the type specimen.

**DIAGNOSIS.** *Plateros olexai* sp.n. is similar to *P. hoi* Kazantsev, 2005, also from Vietnam, separable by the darker pronotum and more narrow and little widened before apex median lobe of the aedeagus (Figs 36–38).

**DISTRIBUTION.** Known only from northern Vietnam.

***Plateros prosvirovi* Kazantsev, sp.n.**

Figs 39–41.

**MATERIAL:** Holotype, ♂, N Vietnam: Lao Kay prov., nr. Sin Chai, Cat Cat R., 1370–1440 m, 22.3386°N, 103.8102°E, 3.V.2013, A. Prosvirov leg. (ICM).

**DESCRIPTION. Male.** Dark brown to black; pronotal margins and elytra reddish brown.

Vertex shining, with prominent round impression behind antennal prominence. Eyes moderately large, interocular distance subequal in length to eye diameter. Labrum small, transverse, rounded anteriorly. Palps slender, ultimate palpomeres elongate, widened distally and oblique at apex. Antennal sockets separated by minute lamina. Antennae dentate, attaining to elytral two thirds; antennomere 3 ca. 2.3 times longer than antennomere 2 and ca. 1.3 times shorter than antennomere 4; antennomeres 3–11 with short erect pubescence (Fig. 39).

Pronotum transverse, ca. 1.6 times as wide as long, slightly trapezoidal, feebly bisinuate basally and rounded anteriorly, with small acute posterior and rounded blunt anterior angles; medially with obscure longitudinal impression posteriorly and median rib attaining to pronotal half anteriorly. Mesothoracic spiracle small, hoodless, not protruding beyond coxa. Scutellum subquadrate, parallel-sided, truncate at apex (Fig. 39).

Elytra long, ca. 3.1 times longer than wide at humeri, slightly widening posteriorly, with slender, equally developed primary costae; all interstices with double rows of small subquadrate cells; dense pubescence short and semi-erect, concealing reticulation. Tibiae and femoris straight, narrow; tarsomeres 3–4 widened, tarsomeres 1–2 with apical plantar pad (Fig. 39).

Aedeagus asymmetric, with elongate, widened and twisted distally median lobe, with dilated distal structure bearing two prominent teeth; phallobase constituting ca 0.15 length of median lobe (Figs 40–41).

Female. Unknown.

Length: 6.7 mm. Width (humerally): 1.6 mm.

**ETYMOLOGY.** The new species is named after the collector of the type specimen, Dr. A. Prosvirov (Moscow).

**DIAGNOSIS.** *Plateros prosvirovi* sp.n. habitually resembles *P. laterculus* Kazantsev, 1991, from the Himalaya, easily separable by the prominent round impression behind the antennal prominence and elongate, widened and twisted distally median lobe of the aedeagus (Figs 39–41).

**DISTRIBUTION.** Known only from northern Vietnam.

***Plateros xishuangensis* Kazantsev, sp.n.**

Figs 42–44.

**MATERIAL:** Holotype, ♂, China: S Yunnan, Xishuangbanna, 20 km NW Jinghong, Man Dian NNNR-office, 22°07.80'N,

100°40.05'E, 740 m, LFF, 24.V.2008, A. Weigel leg. (NME); paratype, ♂, same label (ICM).

**DESCRIPTION. Male.** Dark brown to black; antennomere 2 light brown.

Vertex shining, with noticeable round impression behind antennal prominence. Eyes relatively small, interocular distance ca. 1.4 times greater than eye diameter. Labrum small, transverse. Palps slender, ultimate palpomeres elongate, narrowed and glabrous distally. Antennal sockets separated by narrow lamina. Antennae dentate, attaining to elytral two thirds; antennomere 3 ca. 3.5 times longer than antennomere 2 and ca. 1.1 times shorter than antennomere 4; antennomeres 3–11 with long curly pubescence (Fig. 42).

Pronotum transverse, ca. 1.6 times as wide as long, almost straight posteriorly and rounded anteriorly, with slightly concave sides, acute posterior and blunt anterior angles; medially with obscure longitudinal impression posteriorly and short median rib anteriorly. Mesothoracic spiracle small, hoodless, not protruding beyond coxa. Scutellum subquadrate, parallel-sided, minutely emarginate at apex (Fig. 42).

Elytra long, ca. 3 times longer than wide at humeri, parallel-sided, with primary costa 4 considerably weakened, except at base; all interstices with double rows of small rounded cells; pubescence short and semi-erect. Tibiae and femoris straight, narrow; tarsomeres 1–4 not widened, tarsomeres 1–2 with minute apical plantar pad (Fig. 42).

Aedeagus symmetric, with elongate, widened and bent distally median lobe, with dilated helmet-shaped structure apically; phallobase constituting ca 0.3 length of median lobe (Figs 43–44).

Female. Unknown.

Length: 3.7–4.7 mm. Width (humerally): 1.0–1.2 mm.

**ETYMOLOGY.** The new species is named after its type locality.

**DIAGNOSIS.** Judging by the structure of the aedeagus, *Plateros xishuangensis* sp.n. may be related to *P. napolovi* Kazantsev, 2005, from northern Vietnam, separable by the greater size, darker pronotum, smaller eyes and longer distal bent portion of the median lobe of the aedeagus, with helmet-shaped structure apically (Figs 42–44).

**DISTRIBUTION.** Known only from southern Yunnan, China.

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## References

- Kazantsev S.V. 1993. New species of the genus *Libnetis* (Coleoptera, Lycidae) from Indochina and adjacent regions // Russian Entomological Journal. Vol.2. Nos3–4. P.67–71.  
 Kazantsev S.V. 2005. Contribution to the knowledge of the genus *Plateros* (Lycidae, Coleoptera) // Russian Entomological Journal. Vol.13 (for 2004). No.4. P.237–244.  
 Kleine R. 1933. Pars 123: Lycidae. Coleopterorum Catalogus auspiciis et auxilio W. Junk editus a Schenckling. Berlin: W. Junk. P. 145.