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Six new species of *Plateros* Bourgeois from New Guinea (Coleoptera, Lycidae)

Шесть новых видов *Plateros* Bourgeois из Новой Гвинеи (Coleoptera, Lycidae)

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Abstract. Six new species of the genus *Plateros* Bourgeois, namely *P. anulifer* **sp.n.**, *P. ciconius* **sp.n.**, *P. caligulus* **sp.n.**, *P. corniger* **sp.n.**, *P. luciophilus* **sp.n.** and *P. waigeoacus* **sp.n.**, are described from New Guinea, increasing the number of species reported from the region to 73.

Резюме. Из Новой Гвинеи описывается шесть новых видов рода *Plateros* Bourgeois, *P. anulifer* **sp.n.**, *P. ciconius* **sp.n.**, *P. caligulus* **sp.n.**, *P. corniger* **sp.n.**, *P. luciophilus* **sp.n.** и *P. waigeoacus* **sp.n.** Число видов *Plateros*, зарегистрированных в даном регионе, увеличивается до семидесяти трёх.

Introduction

The genus *Plateros* Bourgeois, 1879 is one of the largest in the family of net-winged beetles and, along with *Lycostomus* Motschulsky, 1861, the most widespread. It lists over 800 species distributed in all biogeographic regions. However, while fairly species-rich in most of them, in some it is very badly represented, with only one member in Australia. The number of *Plateros* species recorded in New Guinea had also been just three, until recently, when it was abruptly augmented to sixty seven [Bocáková, 1997; Kazantsev, 2011].

The present study represents a further contribution to the knowledge of this genus in New Guinea. It is based on examination of lycid specimens from Madang province (Papua New Guinea) collected by Dr. Olivier Missa in 1993–1996 and from eastern New Guinea and adjacent islands collected by Dr. D. Telnov during the 2010–2013 Entomological Society of Latvia expeditions to the area.

Examination of this material leads to description of six new species of this genus from New Guinea, which brings the number of *Plateros* species reported from the region to seventy three.

Material and Methods

The studied specimens were glued on cardboard plates. For a detailed examination they were relaxed in water; then the genitalia were extracted from the abdomen and glued on separate or same cardboard plates.

MSP-1 zoom stereoscopic dissecting microscope with x8–80 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; IRSN — Institut Royal des Sciences naturelles de Belgique, Bruxelles; NME — Naturkundemuseum, Erfurt.

Taxonomy

Plateros anulifer Kazantsev, **sp.n.**

Figs 1–3.

Material. **East Indonesia:** Holotype, ♂, Raja Ampat, Waigeo Island, 10−13 km NE Waisai, 00°21'17" S, 130°54'37" E, ca. 70 m, primeval lowland rainforest on limestone, 16.II.2012, D. Telnov leg. (NME).

Description. ♂. Dark brown; palpomeres, antennomeres 1–2 and 9–11, pronotum, prosternum, meso- and metaventrite, scutellum, elytra at shoulders and legs, except on outer surface if tibiae, orange testaceous.

Vertex with inconspicuous round impression behind antennal prominence. Eyes moderately large, interocular distance subequal in length to eye diameter. Labrum small, transverse, truncate anteriorly. Palps slender; ultimate palpomeres small, elongate, slightly widened distally, obliquely truncate and flattened at apex. Antennal sockets separated by minute lamina. Antennae attaining to elytral four fifths, dentate; antennomere 3 ca. 2.4 times longer than antennomere 2 and 1.7 times shorter than antennomere 4; antennomeres 3–11 with long erect pubescence (Fig. 1).

Pronotum transverse, ca. 1.3 times as wide as long, moderately bisinuate basally, with almost straight sides, inconspicuous 90° posterior and blunt rounded anterior angles. Scutellum subquadrate, parallel-sided, truncate at apex (Fig. 1).

Elytra long, ca. 3.3 times longer than wide at humeri, parallel-sided, with four equally developed primary costae, not noticeably different from secondary ones; interstices with even rows of small roundish cells; pubescence short and decumbent (Fig. 1).

Median lobe of aedeagus with abruptly widened distal part and ring-like structure on its ventral surface (Figs 2–3).

Figs 1–5. General view and aedeagi of *Plateros*, holotypes, males: 1–3 — *P. anulifer* sp.n.; 4–5 — *P. caligulus* sp.n. 1, 4 — general view; 2–3, 5 — aedeagi; 1, 4 — dorsally; 2 — ventrally; 3, 5 — laterally. Scale bars: 0.5 mm.

Рис. 1–5. Общий вид и эдеагусы *Plateros*, голотипы, самцы: 1–3 — *P. anulifer* sp.n.; 4–5 — *P. caligulus* sp.n. 1, 4 — общий вид; 2–3, 5 — эдеагусы; 1, 4 — сверху; 2 — снизу; 3, 5 — сбоку. Масштабная линейка: 0.5 мм.

♀. Unknown.

Length: 5.4 mm. Width (humerally): 1.25 mm.

Etymology. The name of the new species isderived from the Latin for «bearing ring», alluding to the ring-like structure on the ventral surface of the inner sac of the aedeagus.

Diagnosis. *Plateros anulifer* sp.n. is somewhat similar to *P. albofasciatus* Bocáková, 1997 in the shape of the male genitalia, separable by the black elytra, as well as by the bent median lobe of the aedeagus with shorter widened distal part and ring-like structure on its ventral surface (Figs 2–3).

Plateros caligulus Kazantsev, **sp.n.**

Figs 4–5.

Material. **Papua New Guinea,** *Madang province*: Holotype, ♂, Baiteta, light, 18.V.1993, O. Missa leg. (IRCN); paratypes: 1♂, Baiteta, fogging, 29.VII.1996, O. Missa leg.; 1♂, Baiteta, light, 17.VII.1996, O. Missa leg. (ICM, IRCN).

Description. ♂. Dark brown to black; antennomere 2, pronotal margin narrowly, trochanters and proximal half of femurs yellowish brown.

Vertex with shallow round impression just behind antennal prominence. Eyes large, interocular distance ca. 1.4 times shorter than eye diameter. Labrum small, transverse, emarginate anteriorly. Palps slender; ultimate palpomeres small, elongate, almost parallel-sided, obliquely truncate and flattened at apex. Antennal sockets separated by minute lamina. Antennae attaining to elytral two thirds, dentate; antennomere 3 ca. 3.1 times longer than antennomere 2 and 1.2 times shorter than antennomere 4; antennomeres 3–11 with long erect pubescence (Fig. 4).

Pronotum transverse, ca. 1.6 times as wide as long, moderately bisinuate basally and triangularly produced anteriorly, with almost straight sides, acute posterior and blunt anterior angles. Scutellum subquadrate, parallel-sided, slightly emarginate at apex (Fig. 4).

Elytra long, ca. 3.2 times longer than wide at humeri, parallel-sided, with four equally developed primary costae, not noticeably different from secondary ones; interstices with even rows of small roundish cells; pubescence short and semi-erect (Fig. 4).

Aedeagus with relatively narrow, slightly curved median lobe, semicircularly incised and toothed in proximal part and bearing pre-distal tooth on ventral surface (Fig. 5).

♀. Unknown.

Length: 4.2–4.4 mm. Width (humerally): 1.05–1.1 mm.

Etymology. The name of the new species is a diminutive from «*caligo*», the Latin for «darkness», alluding both to the colour and the size of the new species.

Diagnosis. *Plateros caligulus* sp.n. seems to belong in the *Plateros guineensis* Pic, 1921 group, distinguishable by the absence of distal process and presence of the pre-distal tooth instead (Fig. 5).

Plateros ciconius Kazantsev, **sp.n.**

Figs 6–8.

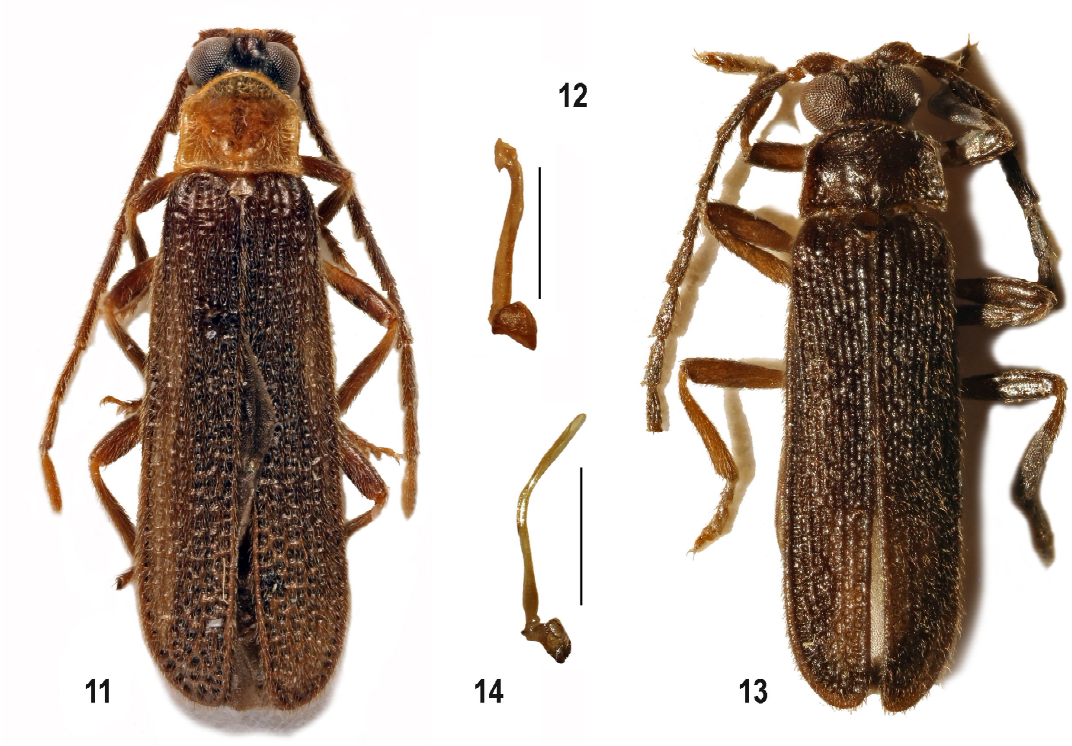
Material. **E Indonesia,** *West Papua*: Holotype, ♂, S Bird's Neck, 2–4 km NE Kaimana, 03°39'26" S, 134°46'21" N, 150–200 m, primeval lowland rainforest and fresh clearing, limestone, 19–20.IX.2010, D. Telnov leg. (NME).

Description. ♂. Black; antennomere 2 light brown.

Vertex smooth, with conspicuous regular round impression behind antennal prominence. Eyes small, interocular distance 1.2 times greater than eye diameter. Labrum small, transverse. Palps slender; ultimate palpomeres small, elongate, almost parallel-sided, obliquely truncate and flattened at apex. Antennal sockets separated by minute lamina. Antennae attaining to elytral four fifths, dentate; antennomere 3 ca. 5.5 times longer than antennomere 2 and 1.2 times shorter than antennomere 4; antennomeres 3–11 with long erect pubescence (Fig. 6).

Figs 6–10. General view and aedeagi of *Plateros*, holotypes, males: 6–8 — *P. ciconius* sp.n.; 9–10 — *P. corniger* sp.n. 6, 9 — general view; 7–8, 10 — aedeagi; 6, 9 — dorsally; 7 — ventrally; 8, 10 — laterally. Scale bars: 0.5 mm.

Рис. 6–10. Общий вид и эдеагусы *Plateros*, голотипы, самцы: 6–8 — *P. ciconius* sp.n.; 9–10 — *P. corniger* sp.n. 6, 9 — общий вид; 7–8, 10 — эдеагусы; 6, 9 — сверху; 7 — снизу; 8–10 — сбоку. Масштабная линейка: 0,5 мм.



Figs 11–14. General view and aedeagi of *Plateros*, holotypes, males: 11–12 — *P. luciophilus* sp.n.; 13–14 — *P. waigeoacus* sp.n. 11, 13 — general view; 12, 14 — aedeagi; 11, 13 — dorsally; 12, 14 — laterally. Scale bars: 0.5 mm.

Рис. 11–14. Общий вид и эдеагусы *Plateros*, голотипы, самцы: 11–12 — *P. luciophilus* sp.n.; 13–14 — *P. waigeoacus* sp.n. 11, 13 — общий вид; 12, 14 — эдеагусы; 11, 13 — сверху; 12, 14 — сбоку. Масштабная линейка: 0,5 мм.

Pronotum transverse, ca. 1.8 times as wide as long, slightly bisinuate basally, broadly semi-circular anteriorly, with almost straight sides, inconspicuous acute posterior and blunt rounded anterior angles. Scutellum transverse, parallel-sided, feebly emarginate at apex (Fig. 6).

Elytra moderately long, ca. 2.6 times longer than wide at humeri, slightly narrowing distally, with four equally developed primary costae, noticeably stouter than secondary ones; interstices with rows of small irregular cells; pubescence short and decumbent (Fig. 6).

Aedeagus with straight median lobe, unmodified proximally and provided with laterally diverted elongate and pointed distally process (Figs 7–8).

♀. Unknown.

Length: 3.9 mm. Width (humerally): 1.0 mm.

Etymology. The name of the new species is derived from the Latin for «stork», alluding to the shape of its aedeagus.

Diagnosis. *Plateros ciconius* sp.n. is somewhat similar to *P. guineensis* Pic, 1921, separable by the shorter elytra and straighter and simpler median lobe of the aedeagus with differently structured apex (Figs 7–8).

Plateros corniger Kazantsev, **sp.n.**

Figs 9–10.

Material. **E Indonesia,** ***Raja Ampat:*** Holotype, ♂, Waigeo Island, 9–10 km NEE Waisai, 00°23'21" S, 130°54'17" E, 80 m, clearing in primeval lowland rainforest on limestone, on leaves of young trees, 18.II.2012, D. Telnov leg. (NME); paratype: 1♀, idem (ICM).

Description. ♂. Dark brown to black; antennomere 2 light brown; trochanters and bases of femurs testaceous.

Vertex with a pair of small round impressions behind antennal prominence. Eyes relatively large, interocular distance slightly shorter than eye diameter. Labrum small, transverse, slightly emarginate anteriorly. Palps slender; ultimate palpomeres small, elongate, slightly widened distally, obliquely truncate and flattened at apex. Antennal sockets separated by minute lamina. Antennae attaining to elytral four fifths, narrow, feebly dentate; antennomere 3 ca. 2.5 times longer than antennomere 2 and 1.25 times shorter than antennomere 4; antennomeres 3–11 with moderately long erect pubescence (Fig. 9).

Pronotum transverse, ca. 1.5 times as wide as long, slightly bisinuate basally, broadly semi-circular anteriorly, with almost straight sides, conspicuous acute posterior and blunt rounded anterior angles. Scutellum transverse, parallel-sided, truncate at apex (Fig. 9).

Elytra long, ca. 3.2 times longer than wide at humeri, parallel-sided, with four equally developed primary costae, not noticeably different from secondary ones; interstices with even rows of small roundish cells; pubescence short and decumbent (Fig. 9).

Aedeagus with relatively robust median lobe, provided with horn-like structure apically bearing conspicuous broad ventral incision (Fig. 10).

♀. Similar to male, but eyes smaller and antennae shorter.

Length: 4.1–4.3 mm. Width (humerally): 1.0–1.1 mm.

Etymology. The name of the new species is derived from the Latin for «*horned*», alluding to the horn-like structure at the apex of the median lobe.

Diagnosis. *Plateros corniger* sp.n. is similar to *P. flavohumeralis* Bocáková, 1997 in the shape of the male genitalia, separable by the uniformly black elytra and by the more robust median lobe of the aedeagus with conspicuous ventral incision on the horn-like apical structure (Figs 9–10).

Plateros luciophilus Kazantsev, **sp.n.**

Figs 11–12.

Material. **Papua New Guinea,** ***Madang province:*** Holotype, ♂, Baiteta, light, 9.IV.1996, O. Missa leg. (IRCN); paratype: 1♂, Baiteta, light, 30.V.1996, O. Missa leg. (ICM).

Description. ♂. Dark brown to black; pronotum, scutellum, prosternum, meso- and metaventrite, coxae, trochanters, basal halves of femurs and knees testaceous.

Vertex with round impression behind antennal prominence. Eyes large, interocular distance 1.7 times shorter than eye diameter. Labrum small, transverse, slightly emarginate anteriorly. Palps slender; ultimate palpomeres small, elongate, slightly widened distally, obliquely truncate and flattened at apex. Antennal sockets separated by minute lamina. Antennae narrow, attaining to elytral three fourths, dentate; antennomere 3 ca. 4.5 times longer than antennomere 2 and 1.2 times shorter than antennomere 4; antennomeres 3–11 with short erect pubescence (Fig. 11).

Pronotum transverse, ca. 1.3 times as wide as long, moderately bisinuate basally, strongly semi-circularly produced anteriorly, with almost straight sides, small acute posterior and pronounced blunt anterior angles. Scutellum subquadrate, parallel-sided, truncate at apex (Fig. 11).

Elytra long, ca. 3.5 times longer than wide at humeri, parallel-sided, with four equally developed, noticeably stouter than secondary ones, primary costae, with primary costa 1 weaker in distal half; interstices with rows of small roundish cells; pubescence short and decumbent (Fig. 11).

Aedeagus with almost straight, narrow, slightly curved in distal half median lobe, provided with triangular distal process (Fig. 12).

♀. Unknown.

Length: 4.5–5.4 mm. Width (humerally): 1.0–1.2 mm.

Etymology. The name of the new species is derived from the Latin for «light lover», alluding to the method used to attract the specimens from the type series.

Diagnosis. *Plateros luciophilus* sp.n. may be differentiated from similarly coloured congeners, e.g., *P. grootaerti* Kazantsev, 2011 or *P. holynskiorum* Kazantsev, 2011, by the unique structure of the aedeagus, with almost straight, narrow, slightly curved in distal half median lobe, provided with triangular distal process (Fig. 12).

Plateros waigeoacus Kazantsev, **sp.n.**

Figs 13–14.

Material. **East Indonesia,** ***Raja Ampat:*** Holotype, ♂, Waigeo Island, 9–10 km NEE Waisai, 00°23'21" S, 130°54'17" E, 80 m, clearing in primeval lowland rainforest on limestone, on leaves of young trees, 18.II.2012, D. Telnov leg. (NME); paratypes: 4♀♀, idem (NME); ***West Papua:*** 1♂, S Bird's Neck, 35–40 km E Kaimana, Triton Bay, Lengguru River valley, upriver from Oray vill., 03°43'26" S, 134°06'06" E, 9–30 m, secondary and primeval rainforest on limestone, 11–12.IX.2010, D. Telnov leg. (ICM, NME).

Description. ♂. Dark brown to black; femurs basally testaceous.

Vertex with longitudinal groove behind antennal prominence. Eyes large, interocular distance 1.5 times shorter than eye diameter. Labrum small, transverse, truncate anteriorly. Palps slender; ultimate palpomeres small, elongate, nearly parallel-sided, obliquely truncate and flattened at apex. Antennal sockets separated by minute lamina. Antennae attaining to elytral four fifths, dentate; antennomere 3 ca. 2.7 times longer than antennomere 2 and ca. 1.4 times shorter than antennomere 4; antennomeres 3–11 with moderately long erect pubescence (Fig. 13).

Pronotum transverse, ca. 1.6 times as wide as long, bisinuate basally, slightly arcuate anteriorly, slightly narrowing anteriorly at sides, with inconspicuous acute posterior and blunt rounded anterior angles. Scutellum transverse, narrowing distally, emarginate at apex (Fig. 13).

Elytra relatively long, ca. 3 times longer than wide at humeri, parallel-sided, with four equally developed primary costae, not noticeably different from secondary ones; interstices with uneven rows of small roundish cells; pubescence short and sub-erect (Fig. 13).

Aedeagus with elongate, very narrow and bent approximately in the middle median lobe (Fig. 14).

♀. Similar to male, nut eyes smaller and antennae somewhat shorter.

Length: 3.9–4.4 mm. Width (humerally): 0.9–1.1 mm.

Etymology. The name of the new species is derived from «*Waigeo*», the island where its type series was collected, and «*acus*», the Latin for «needle», alluding to the shape of its aedeagus.

Diagnosis. *Plateros waigeoacus* sp.n. may be differentiated from *P. tenuissimus* Bocáková, 1997, with similarly structured aedeagus, by the black elytra and more elongate and more even median lobe of the aedeagus (Figs 13–14).

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