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A revision of Palaearctic and Oriental *Pseudolathra* III. Seven new species and additional records (Coleoptera: Staphylinidae: Paederinae)

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Abstract

Seven species of *Pseudolathra* CASEY, 1905 are described and illustrated: *Pseudolathra minuscula* sp. n. (North Iran), *P. bifida* sp. n. (North India: Assam), and *P. luzonica* sp. n. (Philippines: Luzon) of the *P. unicolor* group, *P. duplepectinata* sp. n. (North India: Assam) and *P. apectinata* sp. n. (North India: Meghalaya) of the *P. nigerrima* group, as well as *P. fundata* sp. n. (Vietnam) and *P. furcifera* sp. n. (Sri Lanka) of the *P. quadriceps* group. *Pseudolathra quadriceps* (CAMERON, 1938), comb. n. (ex *Lathrobium* GRAVENHORST, 1802) is redescribed and illustrated, and a lectotype is designated. The *P. quadriceps* group is established based on evident synapomorphies; it currently includes three species from the Oriental region (Sri Lanka, Java, Vietnam). Additional records of six species from the Palaearctic and Oriental regions are reported, among them several new records. The distributions of seven species are mapped.

Zusammenfassung

Sieben Arten der Gattung *Pseudolathra* CASEY, 1905 werden beschrieben und abgebildet: *Pseudolathra minuscula* sp. n. (Nord-Iran), *P. bifida* sp. n. (Indien: Assam) und *P. luzonica* sp. n. (Philippinen: Luzon) aus der *P. unicolor*-Gruppe, *P. duplepectinata* sp. n. (Indien: Assam) und *P. apectinata* sp. n. (Indien: Meghalaya) aus der *P. nigerrima*-Gruppe sowie *P. fundata* sp. n. (Vietnam) und *P. furcifera* sp. n. (Sri Lanka) aus der *P. quadriceps*-Gruppe. Letztere wird anhand auffälliger Synapomorphien begründet und enthält derzeit drei in der Orientalis verbreitete Arten. *Pseudolathra quadriceps* (CAMERON, 1938), comb. n. (ex *Lathrobium* GRAVENHORST, 1802) wird redeskribiert und abgebildet; darüber hinaus wird ein Lectotypus designiert. Für sechs Arten werden weitere Nachweise aus der Paläarktis und der Orientalis gemeldet, darunter mehrere Erstnachweise. Die Verbreitung von sieben Arten wird anhand einer Karte illustriert.

Key words

Coleoptera, Staphylinidae, Paederinae, *Pseudolathra*, Palaearctic region, Oriental region, taxonomy, new species, new combination, new species group, lectotype designation, distribution, new records.

Introduction

According to a recent revision, the lathrobiine genus *Pseudolathra* CASEY, 1905 was previously represented in the Palaearctic and Oriental regions by nineteen species in three species groups (ASSING 2012, 2013).

The present contribution is based mainly on material found while browsing unidentified Staphylinidae in the collections of the Muséum d'Histoire Naturelle, Genève, in May 2013, as well as on material made available to me by Guillaume de Rougemont, Oxford. An examination of this material yielded at least seven undescribed species belonging to three species groups, as well as additional records of several previously described species.

Material and methods

The material treated in this study is deposited in the following public institutions and private collections:

BMNH	The Natural History Museum, London (R. Booth)
MHNG	Muséum d'Histoire Naturelle, Genève (G. Cuccodoro)
NME	Naturkundemuseum Erfurt (M. Hartmann)
SDEI	Senckenberg Deutsches Entomologisches Institut, Müncheberg (L. Behne)
cAss	author's private collection
cRou	private collection Guillaume de Rougemont, Oxford

The morphological studies were conducted using a Stemi SV 11 microscope (Zeiss Germany) and a Jenalab compound microscope (Carl Zeiss Jena). A digital camera (Nikon Coolpix 995) was used for the photographs. The map was created using MapCreator 2.0 (primap) software.

Body length was measured from the anterior margin of the mandibles (in resting position) to the abdominal apex, the length of the forebody from the anterior margin of the mandibles to the posterior margin of the elytra, head length from the anterior margin of the frons to the posterior margin of the head, elytral length at the suture from the apex of the scutellum to the posterior margin of the elytra, and the length of the aedeagus from the

apex of the ventral process to the base of the aedeagal capsule (except when noted otherwise). The "parameral" side (i.e., the side where the sperm duct enters) is referred to as the ventral, the opposite side as the dorsal aspect.

Species descriptions and new records

Pseudolathra lusitanica (ERICHSON, 1840)

Material examined

Algeria: 1♂, "Algiers" (BMNH).

Comment

This species is widespread in the West Mediterranean region.

Pseudolathra minuscula sp. n.

(Figs 1–6)

Type material

Holotype ♂: "N-IRAN, Prov. Gilan, Astaneh, rv. Safid rud, river bank, litter sifting, 37°15'32"N, 49°55'27"E, 3.V.2012, leg. D. Frenzel / Holotypus ♂ *Pseudolathra minuscula* sp. n. det. V. Assing 2013" (NME).

Etymology

The specific epithet (Latin, adjective: rather small) refers to the conspicuously small body size of this species.

Description

Body length 4.8 mm; length of forebody 2.4 mm. Habitus as in Fig. 1. Coloration: head blackish; pronotum red; elytra yellow; abdomen bicoloured, with segments III–VI brown and the apex (segments VII–X) yellow; legs yellowish; antennae yellowish-red.

Head (Fig. 2) approximately as broad as long; punctation sparse, composed of few larger punctures on frons and smaller punctures on whole of dorsal surface; interstices without microsculpture. Eyes large, somewhat shorter than postocular region in dorsal view. Antenna slender, 1.65 mm long; all antennomeres oblong.

Pronotum (Fig. 2) 1.15 times as long as broad and as broad as head; lateral margins nearly straight and weakly converging posteriad in dorsal view; dorsal series composed of 1 + 10 macropunctures; midline broadly impunctate; laterad of dorsal series with rather sparse punctation; microsculpture absent.

Elytra (Fig. 2) 1.05 times as long as pronotum; epipleural line distinct (lateral view); punctation rather fine and shallow, arranged in series. Hind wings present. Metatarsomere I as short as II. Protarsomeres I–IV moderately dilated.

Abdomen approximately 0.95 times as broad elytra; punctation very dense and very fine, somewhat sparser on tergite VIII; interstices with microreticulation, nearly matt; posterior margin of tergite VII with palisade fringe; posterior margin of tergite VIII strongly convex.

♂: sternite VII (Fig. 3) distinctly transverse, posterior margin weakly concave, pubescence short and yellowish, at posterior margin with transverse row of long dark setae; sternite VIII (Fig. 4) approximately 1.1 times as long as broad and of conspicuous shape, posteriorly produced and with very small median excision; aedeagus (Figs 5–6) large in relation to body size, 1.2 mm long, moderately sclerotized; ventral process dorso-ventrally flattened and apically convex in ventral view; dorso-apically with two conspicuously long and distinctly sclerotized structures.

Comparative notes

Pseudolathra minuscula is the smallest representative of the genus at least in the Palaearctic and Oriental regions. Aside from its body size, it is distinguished from other *Pseudolathra* species by the coloration, by the conspicuous shape of the male sternite VIII, and by the distinctive morphology of the aedeagus. Based on the morphology of the aedeagus, it is apparently more closely allied to the species of the *P. unicolor* group (currently in the subgenus *Allolathra* COIFFAIT, 1972) than to the Mediterranean congeners, which are currently attributed to the nominate subgenus.

Distribution and natural history

The type locality is situated in Gilan province, North Iran. The holotype was collected at the bank of a river.

Pseudolathra himalayana Assing, 2012

Material examined

Nepal: 1♂, 1♀, Chitwan National Park, Sauraha, ca. 230 m, at light, 3–6.VI.1980, leg. Brendell (BMNH).

Comment

For an updated distribution map see Assing (2013).

Pseudolathra pulchella (Kraatz, 1859)

Material examined

Indonesia: 2♂♂, 4♀♀, Sulawesi, Tengah, Nr. Morowali, Ranu River Area, at light, 27.I.–20.IV.1980, leg. Brendell (BMNH, cAss); 1♂, 2♀♀, Lombok, Ampenan [8°33'S, 116°05'E], at black light, 13.VI.1984, leg. Rougemont (cRou, cAss). Taiwan: 1♀ [identification tentative], Nanshanxi, 20.X.1974 (SDEI). Japan: 2♂♂, 1♀, Okinawa Pref., Yonaguni Island, Sonai, 22.VI.1981, leg. Morita (SDEI, cAss).

Comment

The above specimens from Indonesia represent the second record of this widespread species from Sulawesi and the first record from Lombok, those from Yonaguni Island represent the first record from Japan (Assing 2013).

Pseudolathra lineata Herman, 2003

Material examined

Japan: 2♀♀, Kyoto, Mt. Amaishi, 22.VII.1995, leg. Ito (SDEI, cAss).

Comment

Pseudolathra lineata is currently known from Japan and from the Chinese province Jiangsu (Assing 2012).

Pseudolathra bifida sp. n.

(Figs 7–15)

Type material

Holotype ♂: "INDIA Assam, Dibrugarh N.P. Tinsukia, sifted litter 3.vi.2006, G. de Rougemont leg. / Holotypus ♂ *Pseudolathra bifida* sp. n. det. V. Assing 2013" (cRou). Paratypes: 3♂♂, 1♀: same data as holotype (cRou, cAss).

Etymology

The specific epithet (Latin, adjective) alludes to the completely divided ventral process of the aedeagus.

Description

Body length 6.0–6.7 mm; length of forebody 3.0–3.3 mm. Habitus as in Fig. 7. Coloration: head dark-brown to blackish; pronotum red; elytra dark-brown with the median sutural portion and the posterior margins more or less distinctly and more or less extensively reddish; abdomen uniformly reddish to reddish-brown, or dark-brown with the posterior segments (VII–X) reddish; legs yellowish; antennae reddish.

Head (Fig. 8) approximately as broad as long, weakly tapering behind eyes; dorsal surface with few coarse punctures on frons and in lateral and posterior portions, median dorsal portion extensively impunctate; microsculpture absent. Eyes large, noticeably longer than postocular region in dorsal view. Antenna slender, 2.2–2.3 mm long; all antennomeres oblong.

Pronotum (Fig. 8) approximately 1.15 times as long as broad and 1.1 times as broad as head; lateral margins nearly straight in dorsal view; dorsal series partly irregular and composed of approximately 11–15 macropunctures; midline broadly impunctate; laterad of dorsal series with rather sparse punctation; microsculpture absent.

Elytra (Fig. 8) approximately as long as pronotum; epipleural line distinct (lateral view); punctation rather fine and shallow, arranged in series. Hind wings present. Metatarsomere I as short as II. Protarsomeres I–IV strongly dilated in both sexes.

Abdomen approximately 0.9 times as broad elytra; punctation very dense and very fine, somewhat sparser on tergite VII than on tergites III–VI, sparse on tergite VIII; interstices with microreticulation, nearly matt; posterior margin of tergite VII with palisade fringe; posterior margin of tergite VIII strongly convex.

♂: sternite VII (Fig. 9) moderately transverse, posterior margin weakly concave and furnished with rather

dense long black setae (Fig. 10); sternite VIII (Fig. 11) distinctly oblong, nearly 1.2 times as long as broad, posterior excision very narrow and deep, nearly reaching middle of sternite; aedeagus (Figs 12–14) 1.1 mm long, rather weakly sclerotized; ventral process completely separated into two processes.

Comparative notes

Pseudolathra bifida undoubtedly belongs to the *P. unicolor* group. It is reliably distinguished from the externally similar, widespread *P. pulchella* only by the slightly sparser punctation of the pronotum, by the chaetotaxy of the male sternite VII (posterior margin with dense long and dark setae), the distinctly narrower posterior excision of the male sternite VIII, and by the completely different morphology of the aedeagus.

Distribution and natural history

The type locality is situated in Assam, North India (Fig. 15). According to ROUGEMONT (pers. comm.), the specimens were sifted from leaf litter in a periodically inundated swamp forest.

Pseudolathra luzonica sp. n.

(Figs 15–21)

Type material

Holotype ♂: "Los Baños, Laguna, Luzon, PHILIPPINES, xi.1990, R.J. Cooter / Holotypus ♂ *Pseudolathra luzonica* sp. n. det. V. Assing 2013" (cRou). Paratypes: 3♂♂, 1♀: same data as holotype (cRou, cAss).

Etymology

The specific epithet (adjective) is derived from the name of the island where the species was discovered.

Description

Body length 5.8–6.5 mm; length of forebody 2.9–3.0 mm. Habitus as in Fig. 16. Coloration: forebody reddish, with the posterior portion of the head and/or the postero-lateral angles sometimes darker; abdomen reddish-brown, with the apex reddish; legs dark-yellowish; antennae reddish.

Head (Fig. 17) approximately as broad as long; dorsal surface with moderately sparse, coarse punctures on vertex (between eyes), and somewhat less coarse punctures in posterior and lateral portions; median dorsal portion and frons extensively impunctate; microsculpture absent (except for some barely noticeable micropunctation). Eyes large, noticeably longer than postocular region in dorsal view. Antenna moderately slender, 1.7–1.8 mm long; all antennomeres oblong.

Pronotum (Fig. 17) approximately 1.15 times as long as broad and 1.1 times as broad as head; lateral margins nearly straight in dorsal view; dorsal series partly irregular and composed of approximately 15–20 macropunctures; midline broadly impunctate; laterad of dorsal series with moderately sparse punctation, punctures approximately as coarse as those of posterior and lateral portions of head; microsculpture absent.

Elytra (Fig. 17) approximately as long as pronotum; epipleural line distinct (lateral view); punctation arranged in longitudinal series, approximately as coarse as that of pronotum or somewhat finer. Hind wings present. Metatarsomere I as short as II. Protarsomeres I–IV strongly dilated in both sexes.

Abdomen approximately 0.9 times as broad elytra; punctation very dense and very fine, somewhat less dense on tergite VII than on tergites III–VI, sparse on tergite VIII; interstices with microreticulation, nearly matt; posterior margin of tergite VII with palisade fringe; posterior margin of tergite VIII strongly convex.

♂: sternite VII (Fig. 18) distinctly transverse, with truncate posterior margin and unmodified pubescence; sternite VIII (Fig. 19) approximately as long as broad, posterior excision narrowly V–shaped and approximately 0.4 times as deep as length of sternite; aedeagus (Figs 20–21) approximately 0.9 mm long (measured from apex of dorsal plate); ventral process short and with median carina (best visible in lateral view).

Comparative notes

As can be inferred from the similar external and male sexual characters, *P. luzonica* is closely allied to *P. pulchella*, from which it differs by the more or less uniform coloration of the forebody (*P. pulchella*: head and elytra usually distinctly darker than the pronotum), by the coloration of the abdomen (*P. pulchella*: apex usually darkened), by the denser punctation and the more pronounced microsculpture of the abdomen, by the more transverse male sternite VII, the shape of the posterior excision of the male sternite VIII, as well as by the morphology of the aedeagus.

Distribution and natural history

The type locality, Los Baños [14°10'N, 121°10'E], is situated in southern Luzon, Philippines, at the southern shore of Lake Bay (Fig. 15). According to ROUGEMONT (pers. comm.), the specimens were collected at light in rice fields.

Pseudolathra regularis (Sharp, 1889)

Material examined

China: 1♀, Beijing, Xishan, IX.1992, leg. Rougemont (cRou). Japan: 1♀, Nagano, Chino, 1.V.1993, leg. Ito (SDEI).

Comment

In China, *P. regularis* was previously known from Shaanxi, Sichuan, Jiangsu, and Yunnan provinces (Assing 2012).

Pseudolathra bipectinata Assing, 2013

Material examined

Thailand: 1♂, 1♀, Chiang Rai, Mae Yao, 13.III.1982, leg. Rougemont (cRou, cAss).

Comment

Pseudolathra bipectinata was previously known only from Laos (Assing 2013).

Pseudolathra duplepectinata sp. n.

(Figs 15, 22–28)

Type material

Holotype ♂: "India: Assam #15c, North Cachar Hills dist., road Umrangso–Gunjong, above Dehangi, 550 m, 27.X.2004, 25°26'15"N, 92°54'48"E / Leg. G. Cuccodoro, C. Carlton, R. Leschen & D. Erne / Holotypus ♂ *Pseudolathra duplepectinata* sp. n. det. V. Assing 2013" (MHNG). Paratype ♀: "India: Assam #14c, North Cachar Hills dist., road Mahur–Maibang, Sanhaju, 850 m, 26.X.2004, 25°12'25"N, 93°07'28"E / Leg. G. Cuccodoro, C. Carlton, R. Leschen & D. Erne" (cAss).

Etymology

The specific epithet (Latin, adjective: with two combs) refers to the distinctive chaetotaxy of the male sternite VII.

Description

Body length 7.6–8.0 mm; length of forebody 3.6–3.7 mm. Habitus as in Fig. 22. Coloration: body uniformly black; legs dark-reddish with blackish-brown profemora; antennae dark-reddish with antennomere I more or less distinctly darker and apical antennomeres slightly paler.

Head (Fig. 23) transverse, 1.20–1.25 times as broad as long; postocular region very short; posterior angles moderately marked; dorsal surface with few macropunctures near dorsal margins of eyes and with a transverse row of approximately 15 punctures at posterior margin, otherwise impunctate. Eyes large and strongly convex, 3–4 times as long as postocular region in dorsal view. Antenna slender, approximately 2.5 mm long.

Pronotum (Fig. 23) weakly oblong, approximately 1.05 times as long as broad and 1.01–1.03 times as broad as head; lateral margins weakly convex in dorsal view; dorsal series composed of 1 + 5–6 macropunctures; median portion impunctate; laterad of dorsal series with few macropunctures; microsculpture absent.

Elytra (Fig. 23) approximately 0.9 times as long as pronotum; epipleural line distinct (lateral view); disc of each elytron with a sutural, a median, and a lateral series each composed of 7–9 macropunctures. Hind wings present. Metatarsomere I slightly shorter than II.

Abdomen narrower than elytra; punctation distinct, rather coarse and dense on anterior, and somewhat finer and sparser on posterior tergites; interstices glossy, without microsculpture; posterior margin of tergite VII with palisade fringe; posterior margin of tergite VIII strongly convex.

♂: sternite VII (Fig. 24) moderately transverse, posterior margin weakly concave in the midde and with a conspicuous lateral comb composed of 12–13 stout black setae on either side; sternite VIII (Fig. 25) distinctly oblong, posterior incision narrow and deep, its depth approximately half the length of sternite; aedeagus (Figs 26–28) 0.95 mm long, rather weakly sclerotized, and symmetric; ventral process dorso-ventrally flattened and with acute apex.

Comparative notes

Based on the external and the male sexual characters, *P. duplepectinata* undoubtedly belongs to the *P. nigerrima* group (see Assing 2012), which previously comprised seven species from the East Palaearctic and Oriental regions: *P. nigerrima* (Cameron, 1924) (Nepal, N-India), *P. tonsa* Assing, 2012 (Nepal, N-India), *P. transversicollis* Assing, 2012 (Thailand), *P. separanda* Assing, 2013 (N-India), *P. sagittata* Assing, 2012

(Thailand), *P. transversiceps* ASSING, 2013 (N-Vietnam), and *P. bipectinata* ASSING, 2013 (Laos). The new species is distinguished from all of them particularly by the morphology of the aedeagus and the chaetotaxy of the male sternite VII. The only other species with a bipectinate posterior margin of the male sternite VII is *P. bipectinata*, which additionally differs from *P. duplepectinata* by smaller body size, smaller eyes, reddish profemora, and less coarse punctation of the forebody. For illustrations of the previously described species of the *P. nigerrima* group see ASSING (2012, 2013).

Distribution and natural history

The species was collected in two localities in Assam, Northeast India (Fig. 15), at altitudes of 550 and 850 m.

Pseudolathra apectinata sp. n.

(Figs 15, 29–34)

Type material

Holotype ♂: "India: Meghalaya #5a, West Garo Hills dist., Mt Nokrek National Park, 1200 m, 17.X.2004, 25°30'02"N, 90°14'54"E / Leg. G. Cuccodoro, C. Carlton, R. Leschen & D. Erne / Holotypus ♂ *Pseudolathra apectinata* sp. n. det. V. Assing 2013" (MHNG). Paratypes: 4♀♀: same data as holotype (MHNG, cAss).

Etymology

The specific epithet (Latin, adjective: without combs) refers to the absence of combs of modified setae at the posterior margin of the male sternite VII.

Description

Body length 8.5–9.5 mm; length of forebody 3.9–4.2 mm. Habitus as in Fig. 29. Coloration: body uniformly black; legs reddish with blackish-brown profemora; antennae reddish.

Other external characters (Fig. 30), except the slightly denser punctation of the abdomen, as in *P. duplepectinata*.

♂: sternite VII (Fig. 31) moderately transverse, posterior margin weakly and broadly concave, without combs of modified black setae; sternite VIII (Fig. 32) distinctly oblong, posterior incision narrow and deep, its depth distinctly less than half the length of sternite; aedeagus (Figs 33–34) 1.2 mm long, rather weakly sclerotized, dorso-ventrally flattened, and symmetric; ventral process broad and apically abruptly narrowed in ventral view, apex of ventral process acute.

Comparative notes

Like the preceding species, *P. apectinata* belongs to the *P. nigerrima* group. It is distinguished from other species of this group particularly by the morphology of the aedeagus, which is most similar to that of *P. bipectinata* from Laos. From the geographically close *P. duplepectinata*, the new species additionally differs by distinctly larger body size (no overlap), the different chaetotaxy of the male sternite VII, and by the less deep posterior incision of the male sternite VIII.

Distribution and natural history

The type locality is situated in Meghalaya, Northeast India (Fig. 15). The specimens were collected at an altitude of 1200 m.

Pseudolathra quadriceps (CAMERON, 1938) comb. n.

(Figs 15, 35–40)

Lathrobium quadriceps CAMERON, 1938: 149.

Type material examined

Lectotype ♂, present designation: "Besoeki. Res. Kediri. E. Java / L. quadriceps Cam. Type / Type / M. Cameron. Bequest. B.M. 1955-147. / Lectotypus ♂ *Lathrobium quadriceps* Cameron, desig. V. Assing 2013 / Pseudolathra quadriceps (Cameron), det. V. Assing 2013" (BMNH).

Comment

The original description is based on an unspecified number of syntypes, among them at least one male, from "E. Java: Res. Kediri, Besoeki. Toeloengagoeng" (CAMERON 1938). The single male syntype in the Cameron collection is designated as the lectotype.

Redescription

Body length 7.6 mm; length of forebody 4.2 mm. Habitus as in Fig. 35. Coloration: head and pronotum dark-brown; elytra dark-reddish; abdomen brown, with segments VII–X yellowish-brown; legs dark-yellowish; antennae yellowish-red.

Head (Fig. 36) 1.05 times as broad as long, of subquadrangular shape, with sharply marked posterior angles, indistinctly dilated posteriad; punctation rather coarse and somewhat umbilicate, rather dense in lateral and posterior dorsal portions, rather sparse in median dorsal portion; interstices without microsculpture in median dorsal portion, with microreticulation in lateral and posterior portions. Eyes rather large, but weakly convex, approximately half as long as postocular region in dorsal view. Antenna 2.5 mm long; all antennomeres oblong; antennomeres IV–X distinctly constricted basally.

Pronotum (Fig. 36) 1.08 times as long as broad and 0.94 times as broad as head; lateral margins subparallel; punctation on average slightly less coarse than that of head, moderately dense and not umbilicate; separate dorsal series absent; impunctate midline rather broad.

Elytra (Fig. 36) 1.08 times as long as pronotum; punctation rather coarse, but shallow, arranged in longitudinal series. Hind wings present. Legs rather short; metatarsomere I short and weakly oblong, approximately as long as II; protarsomeres I–IV strongly dilated.

Abdomen slender, 0.9 times as broad as elytra; punctation fine, rather dense on tergite III, decreasing in density posteriad, rather sparse on tergite VII; interstices with fine microreticulation; posterior margin of tergite VII with pronounced palisade fringe.

♂: sternite VII (Fig. 37) distinctly transverse, posterior margin weakly concave, pubescence sparse, near middle of anterior margin with a cluster of gland openings; sternite VIII (Fig. 38) nearly as broad as long, posterior excision broadly V-shaped, approximately 0.2 times as deep as length of sternite; aedeagus (Figs 39–40) 1.5 mm long, moderately sclerotized; ventral process with heart-shaped (ventral view) membranous apex; internal sac with a characteristic assortment of dark structures of various shapes, one of them conspicuously circular in lateral view.

Comparative notes

Pseudolathra quadriceps is distinguished from all other species previously attributed to *Pseudolathra* by its head shape (posterior angles sharply marked) alone. In addition, it is characterized by the male sexual characters, particularly the shape of the male sternite VIII and the morphology of the aedeagus. For characters distinguishing *P. quadriceps* from newly described species with a similar head shape see the following sections.

Together with *P. fundata* and *P. furcifera*, *P. quadriceps* forms a well-defined, undoubtedly monophyletic species group, hereafter referred to as the *P. quadriceps* group, constituted by the derived shape of the head (distinctly subquadrangular with sharply marked posterior angles), the absence of separate dorsal series of punctures on the pronotum, by the presence of an anterior cluster of gland openings on the male sternite VII (Fig. 49), and by a derived morphology of the aedeagus (presence of an assortment of sclerotized structures of various shapes in the internal sac). The known distribution of the *P. quadriceps* group is confined to the Oriental region (filled symbols in Fig. 15).

Distribution and natural history

The type locality is situated in Jawa Timur, Indonesia (Fig. 15). The locality name Besoeki is ambiguous, but, since Kediri is indicated, it probably refers to a locality to the south-southwest of Kediri [8°13'S, 111°47'E]. Additional data are not available.

***Pseudolathra fundata* sp. n.**

(Figs 15, 41–45)

Type material examined

Holotype ♂: "VIETNAM Dong Nai Pr., Tri An Lake 60 m alt., N11°07'11" E107°02'34", 21.viii.2005 D.J. Mann / Blue light by lake / Holotypus ♂ *Pseudolathra fundata* sp. n., det. V. Assing 2013" (cRou). Paratype ♂: "VIETNAM Longan Pr., Duc Hua, Hoa Khan Tay, N10°19'15" E106°21'33" [date not indicated] / Blue light nr. large river" (cAss).

Etymology

The specific epithet is an adjective derived from the Latin noun funda (slingshot) and alludes to the shape of the basal internal structure of the aedeagus.

Description

Body length 7.5–9.0 mm; length of forebody 4.0–4.3 mm. Coloration: head and pronotum dark-brown; elytra yellowish to reddish, with the postero-lateral angles extensively infuscate; abdomen yellowish-brown to brown; legs yellowish to dark-yellowish; antennae reddish.

Head (Fig. 41) 1.01–1.09 times as broad as long, of subquadrangular shape, with sharply marked posterior angles; lateral margins subparallel in dorsal view; punctation rather coarse, not umbilicate, rather dense in lateral and posterior dorsal portions, sparse in median dorsal portion, with interspersed micropunctation; interstices without microsculpture in median dorsal portion, with microsculpture in lateral and in posterior dorsal portions. Eyes large, moderately convex, slightly to distinctly longer than postocular region in dorsal view. Antenna similar to that of *P. quadriceps*.

Pronotum (Fig. 41) 1.06–1.09 times as long as broad and 0.91–0.96 times as broad as head; lateral margins subparallel; punctation approximately as coarse as that of head, moderately dense and not umbilicate, with interspersed micropunctation; separate dorsal series absent; impunctate midline rather broad.

Elytra 1.09 (Fig. 41) times as long as pronotum; punctation similar to that of pronotum, but shallower, arranged in longitudinal series. Hind wings present. Legs rather short; metatarsomere I short and weakly oblong, approximately as long as II; protarsomeres I–IV strongly dilated.

Abdomen slender, approximately 0.9 times as broad as elytra; punctation fine, moderately dense on tergites III–VI, somewhat sparser and finer on tergites VII and VIII; interstices with fine microreticulation; posterior margin of tergite VII with pronounced palisade fringe.

♂: sternite VII (Fig. 42) moderately transverse, posterior margin weakly concave, pubescence sparse, near middle of anterior margin with a cluster of gland openings; sternite VIII (Fig. 43) nearly as broad as long, posterior excision broad and somewhat U-shaped, slightly less than 0.2 times as deep as length of sternite; aedeagus (Figs 44–45) approximately 1.4 mm long, moderately sclerotized, dorso-ventrally somewhat flattened; ventral process with membranous apex; internal sac with a characteristic assortment of dark structures of various shapes.

Comparative notes

As can be inferred from the similar external (head with pronounced posterior angles) and male sexual characters (presence of gland openings on the male sternite VII, shape and chaetotaxy of the male sternite VIII; derived morphology of the dorso-ventrally flattened aedeagus with a weakly sclerotized apex of the ventral process and with an assortment of dark structures of various shapes in the internal sac), *P. fundata* undoubtedly belongs to the *P. quadriceps* group. It differs from *P. quadriceps* by the more distinct micropunctation of the head and pronotum, the infuscate postero-lateral angles of the elytra, the less transverse male sternite VII, the different shape of the posterior excision of the male sternite VIII, the presence of scattered gland openings near the anterior margin of the male sternite VIII, and by the morphology of the aedeagus, particularly the shapes of the sclerotized internal structures.

Distribution and natural history

The species was recorded in two localities in Vietnam (Fig. 15). The specimens were attracted by blue light and collected near a river and near a lake.

Pseudolathra furcifera sp. n.

(Figs 15, 46–52)

Type material examined

Holotype ♂: "CEYLON, Habarana, 15.III.81, Rougemont / Lathrobium quadriceps Cam.?, det. 198, G. de Rougemont / Holotypus ♂ *Pseudolathra furcifera* sp. n., det. V. Assing 2013" (cRou).

Etymology

The specific epithet (Latin, adjective: carrying a fork) alludes to the basally forked long internal structures of the aedeagus.

Description

Body length 7.7 mm; length of forebody 4.1 mm. Habitus as in Fig. 46. Coloration: head blackish; pronotum dark-reddish; elytra reddish-brown with the postero-lateral angles extensively infuscate; abdomen reddish-brown; legs yellowish-brown; antennae reddish.

Head (Fig. 47) as broad as long, of subquadrangular shape, with sharply marked posterior angles; lateral margins subparallel in dorsal view; punctation coarse, weakly umbilicate, very dense, except for a nearly impunctate transverse patch in median dorsal portion, and with interspersed micropunctation; interstices without microsculpture in median dorsal portion, with microsculpture in lateral and in posterior dorsal portions. Eyes large, moderately convex, slightly longer than postocular region in dorsal view. Antenna 2.5 mm long, similar to that of *P. quadriceps*.

Pronotum (Fig. 47) 1.11 times as long as broad and 0.96 times as broad as head; lateral margins indistinctly converging posteriad, weakly sinuate in anterior half in dorsal view; punctation on average slightly less coarse and less dense than that of head, with few scattered micropunctures; separate dorsal series absent; impunctate midline rather broad.

Elytra (Fig. 47) 1.07 times as long as pronotum; punctation similar to that of pronotum, but shallower, arranged in longitudinal series. Hind wings present. Legs rather short; metatarsomere I short and weakly oblong, approximately as long as II; protarsomeres I–IV strongly dilated.

Abdomen slender, approximately 0.9 times as broad as elytra; punctation fine, moderately dense on tergites III–VI, somewhat sparser and finer on tergites VII and VIII; interstices with fine microreticulation; posterior margin of tergite VII with pronounced palisade fringe.

♂: sternite VII (Fig. 48) distinctly transverse, posterior margin with small, but distinct median concavity, pubescence sparse, near middle of anterior margin with a distinct cluster of gland openings (Fig. 49); sternite VIII (Fig. 50) as broad as long, posterior excision broad and shallow, approximately 0.1 times as deep as length of sternite; aedeagus (Figs 51–52) approximately 1.2 mm long, moderately sclerotized, dorso-ventrally somewhat flattened; ventral process with membranous apex; internal sac with a characteristic assortment of dark structures of various shapes.

Comparative notes

Pseudolathra furcifera, too, belongs to the *P. quadriceps* group. It differs from the two other species of this group particularly by the denser and coarser punctation of the head, the median concavity of the posterior margin of the male sternite VII, the broader and shallower posterior excision of the male sternite VIII, as well as by the smaller size, the shape, and the internal structures of the aedeagus.

Distribution and natural history

The type locality, Habarana [8°02'N, 80°45'E], is situated in central Sri Lanka (Fig. 15). The holotype was sifted (ROUGEMONT pers. comm.).

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References

ASSING, V. (2012): The *Pseudolathra* species of the East Palaearctic and the Oriental regions (Coleoptera: Staphylinidae: Paederinae). — *Beiträge zur Entomologie, Keltern* **62 (2)**: 299–330.

ASSING, V. (2013): A revision of *Pseudolathra* of the East Palaearctic and Oriental regions. II. Six new species and additional records, with notes on some New World species (Coleoptera: Staphylinidae: Paederinae). — *Linzer Biologische Beiträge* **45 (1)**: 205–227.

CAMERON, M. (1938): New species of Javanese Staphylinidae (Col.) collected by Mr. C. J. Louwerens. — *The Proceedings of the Royal Entomological Society London (B)* 7 (7): 146-151.

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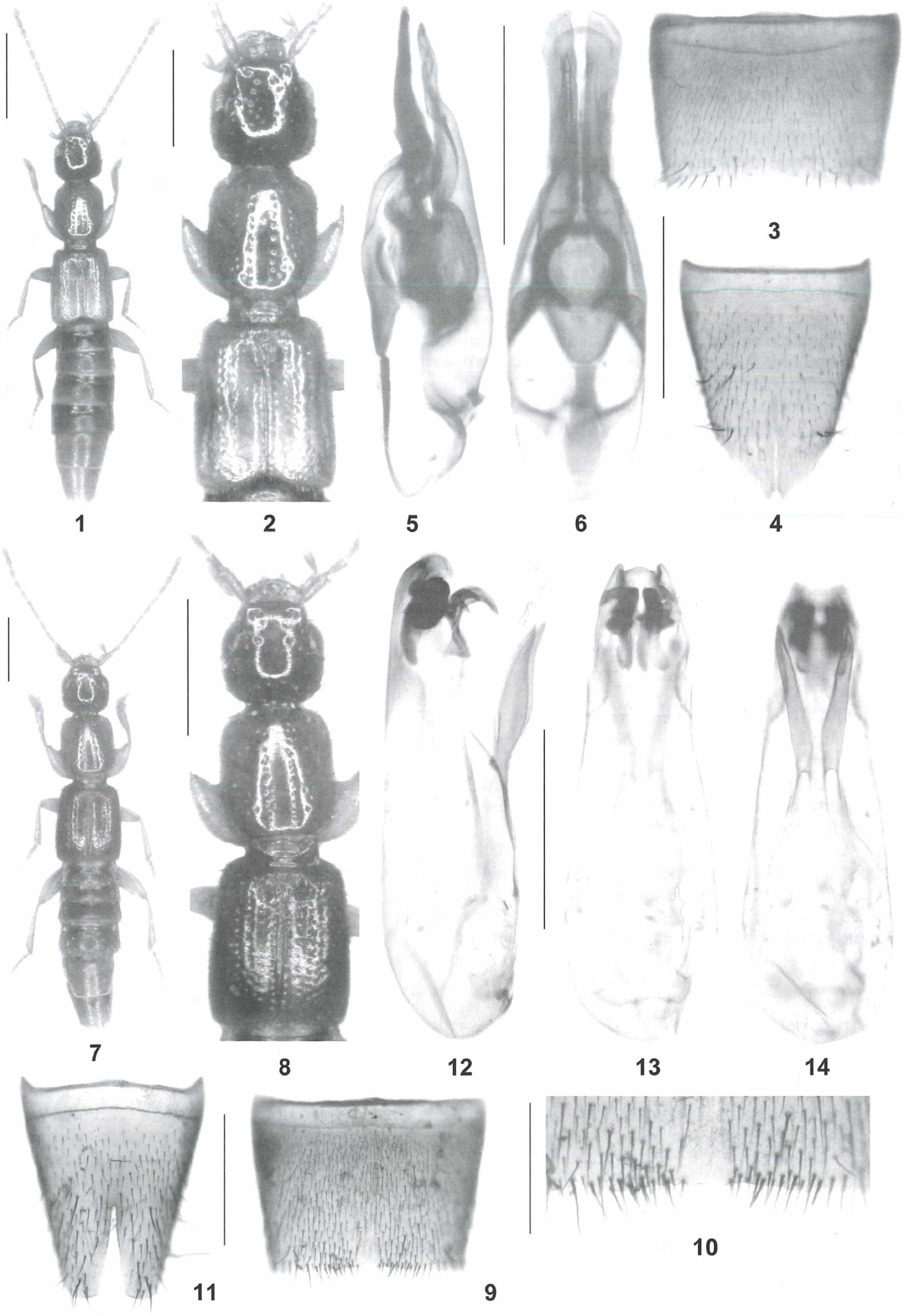


Figs 1–14: *Pseudolathra minuscula* sp. n. (**1–6**) and *P. bifida* sp. n. (**7–14**). Habitus (**1, 7**); forebody (**2, 8**); male sternite VII (**3, 9**); male sternite VIII (**4, 11**); aedeagus in lateral and in ventral view (**5–6, 12–14**); postero-median portion of male sternite VII (**10**). Scale bars: 1, 7–8: 1.0 mm; 2–6, 9, 11–14: 0.5 mm; 10: 0.25 mm.

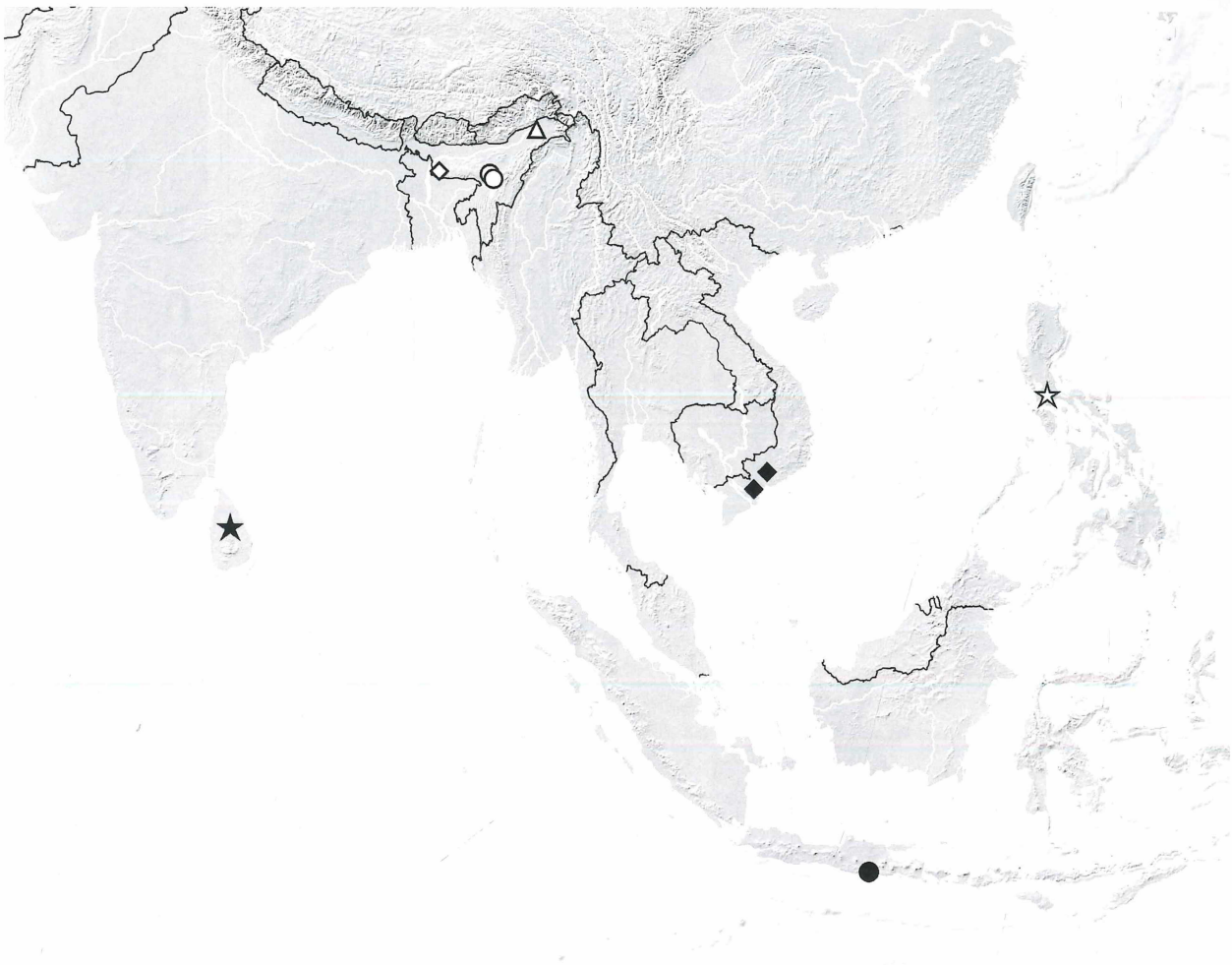
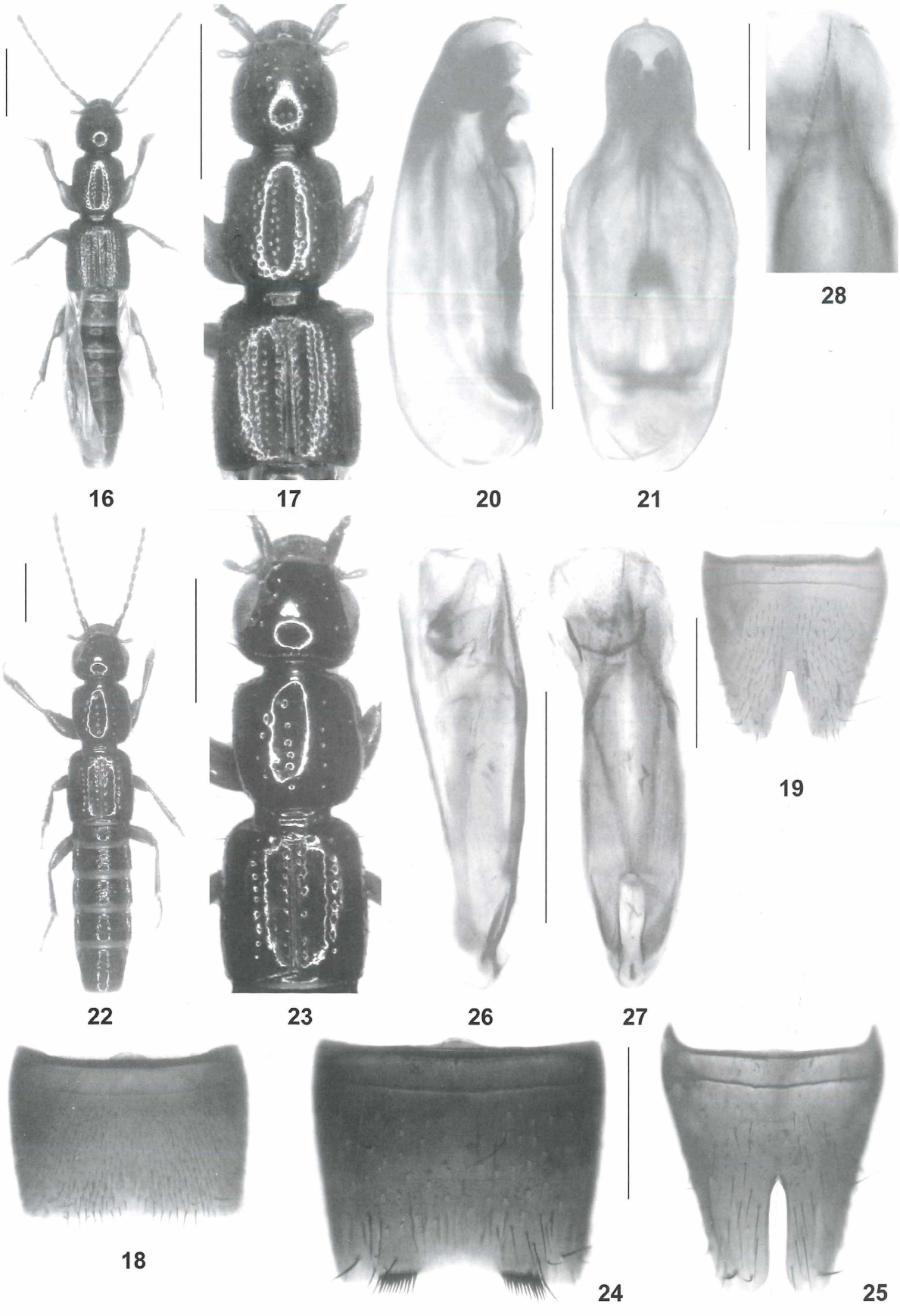
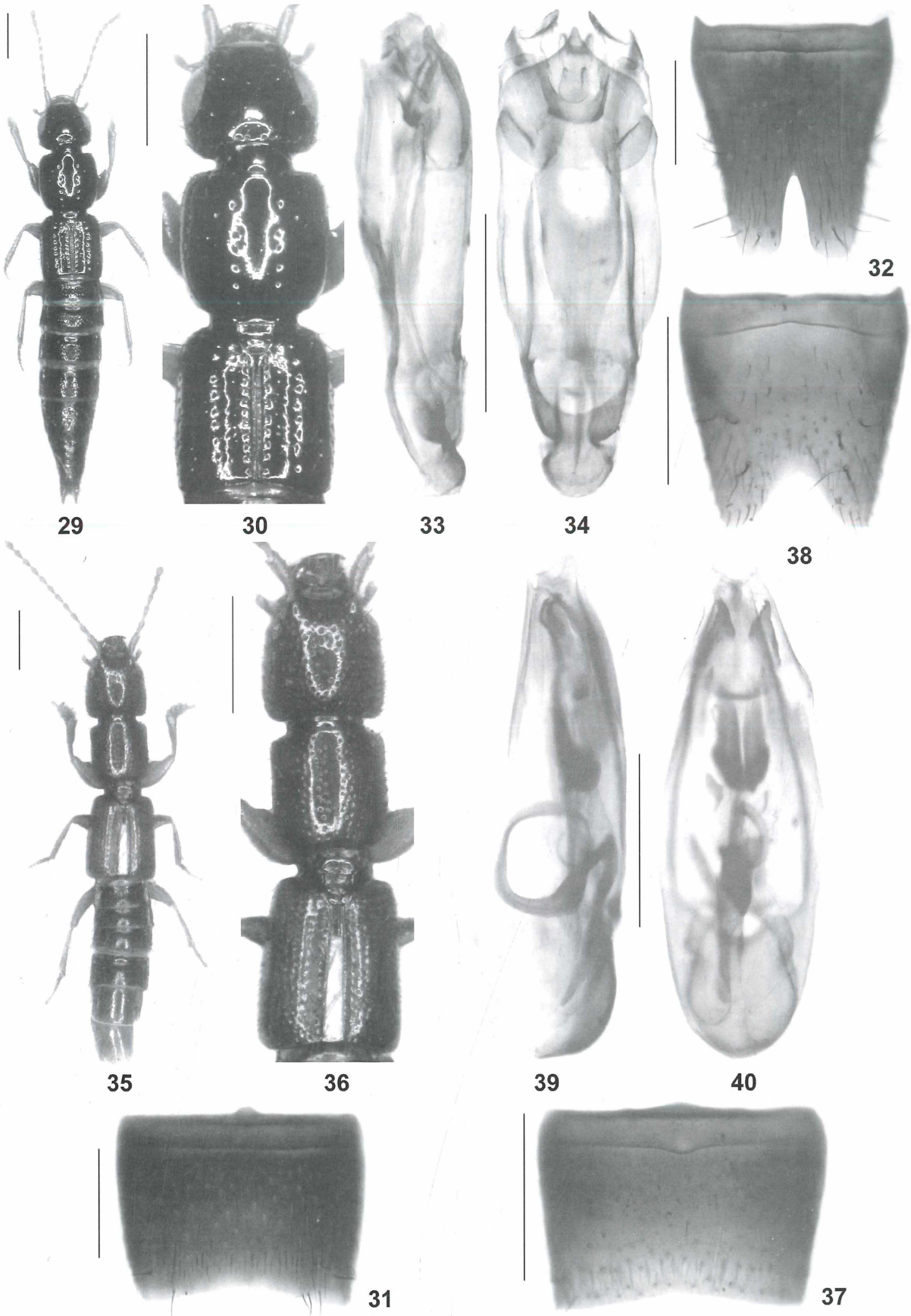


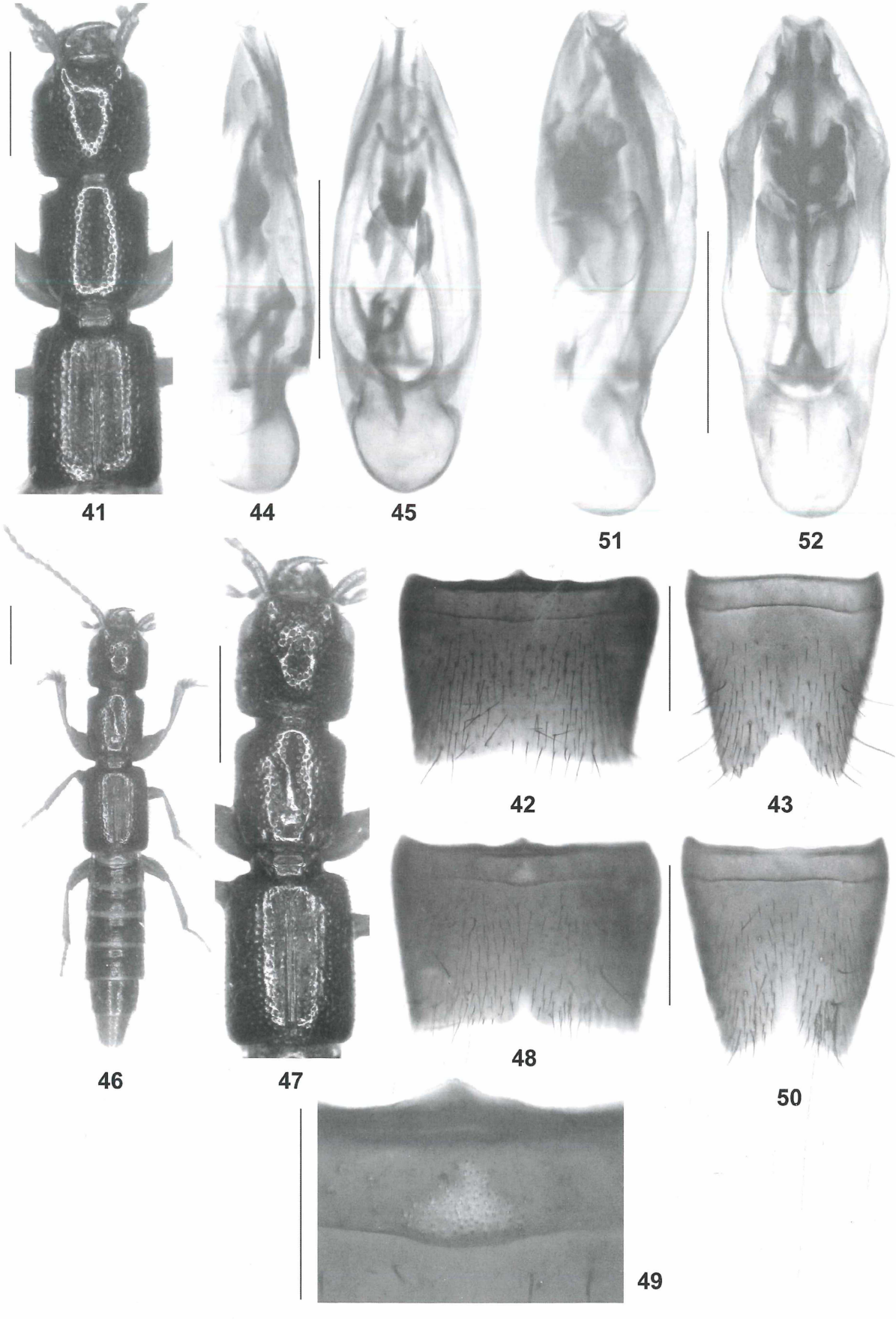
Fig. 15: Distributions of *Pseudolathra bifida* sp. n. (open triangle), *P. luzonica* sp. n. (open star), *P. duplepectinata* sp. n. (open circles), *P. apectinata* sp. n. (open diamond), *P. quadriceps* (Cameron) (filled circle), *P. fundata* sp. n. (filled diamonds), and *P. furcifera* sp. n. (filled star).



Figs 16–28: *Pseudolathra luzonica* sp. n. (**16–21**) and *P. duplepectinata* sp. n. (**22–28**). Habitus (**16, 22**); forebody (**17, 23**); male sternite VII (**18, 24**); male sternite VIII (**19, 25**); aedeagus in lateral and in ventral view (**20–21, 26–27**); apical portion of ventral process in ventral view (**28**). Scale bars: 16–17, 22–23: 1.0 mm; 18–21, 24–27: 0.5 mm; 28: 0.2 mm.



Figs 29–40: *Pseudolathra apectinata* sp. n. (**29–34**) and *P. quadriceps* (Cameron) (**35–40**). Habitus (**29, 35**); forebody (**30, 36**); male sternite VII (**31, 37**); male sternite VIII (**32, 38**); aedeagus in lateral and in ventral view (**33–34, 39–40**). Scale bars: 29–30, 35–36: 1.0 mm; 31–34, 37–40: 0.5 mm.



Figs 41–52: *Pseudolathra fundata* sp. n. (**41–45**) and *P. furcifera* sp. n. (**46–52**). Forebody (**41, 47**); male sternite VII (**42, 48**); male sternite VIII (**43, 50**); aedeagus in lateral and in ventral view (**44–45, 51–52**); habitus (**46**); antero-median portion of male sternite VII (**49**). Scale bars: 41, 46–47: 1.0 mm; 42–45, 48, 50–52: 0.5 mm; 49: 0.2 mm.

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