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## **A revision of Palearctic and Oriental *Pseudolathra*. IV. New species, new combinations and additional records (Coleoptera: Staphylinidae: Paederinae)**

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**Abstract:** Type and non-type material of *Pseudolathra* CASEY, 1905 from the Palearctic, Oriental, and Australian regions is revised. Four species from Papua New Guinea are transferred from *Lathrobium* GRAVENHORST, 1802 to *Pseudolathra*, redescribed, and illustrated: *Pseudolathra sepikensis* (LAST, 1984), nov.comb., *P. naviculum* (LAST, 1984), nov.comb., *P. puncta* (LAST, 1984), nov.comb., and *P. cyanea* (LAST, 1984), nov.comb. Two species are described and illustrated: *P. armata* nov.sp. (Peninsular Malaysia) and *P. bisinuata* nov.sp. (Malaysia: Borneo). Additional records of five species are reported.

**Key words:** Coleoptera, Staphylinidae, Paederinae, *Pseudolathra*, *Lathrobium*, Palearctic region, Oriental region, Australian region, new species, new combinations, new records, distribution.

### **Introduction**

According to a recent revision, the lathrobiine genus *Pseudolathra* CASEY, 1905 was previously represented in the Palearctic and Oriental regions by 27 species in four species groups (ASSING 2012a, 2013a, b). Two additional species were described from China by LI et al. (2013) and two from Borneo (ROUGEMONT in press).

Revisions of the *Lathrobium* GRAVENHORST, 1802 fauna of various regions have confirmed that this genus essentially has a Holarctic distribution (e.g., ASSING 2010, 2013c, d). Previous records of this genus from the Oriental and Australian regions have revealed that all of them refer to other genera of Lathrobiina and Dolicaonina (ASSING 2013b, 2014a, b). Against this background, the generic affiliations of four other *Lathrobium* species described from Papua New Guinea by LAST (1984) seemed most doubtful.

Aside from the type material of these species, additional material of *Pseudolathra* from various sources was examined. A study of this material yielded not only numerous additional records, but also two new species and four new combinations.

### **Material and methods**

The material treated in this paper is deposited in the following collections:

BMNH..... The Natural History Museum, London (R.G. Booth)

MMUM ..... The Manchester Museum, The Manchester University (D. Logunov)

- MNHUB..... Museum für Naturkunde der Humboldt-Universität Berlin (J. Frisch, J. Willers)  
 NHMB..... Naturhistorisches Museum Basel (M. Geiser, I. Zürcher)  
 NHMW..... Naturhistorisches Museum Wien (H. Schillhammer)  
 cAss..... author's private collection  
 cFel..... private collection Benedikt Feldmann, Münster  
 cSch..... private collection Michael Schülke, Berlin  
 cSha..... private collection Alexey Shavrin, Daugavpils  
 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). The images of the forebodies and the antennae were created using a photographing device constructed by Arved Lompe (Nienburg) and CombineZ software. For the remaining photographs a digital camera (Nikon Coolpix 995) was used. 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 (in resting position) 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, from the apex of the apical structures, or from the apex of the dorsal plate (whichever forms the apex of the aedeagus) to the base of the aedeagal capsule. 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.

## Results

### *Pseudolathra lusitanica* (ERICHSON, 1840)

**Material examined:** Spain: 1♀, Cádiz, Algeciras env., 36.08°N, 5.43°W, 50 m, 11.-12.V.2014, leg. Shavrin (cSha).

**Comment:** This is one of the less rare species in the West Mediterranean.

### *Pseudolathra tenenbaumi* (BERNHAEUER, 1932)

**Material examined:** Israel: 1♂, 2♀♀, Golan Heights, Bental Reservoir, W Merom Golan, ca. 1000 m, stony wetland near shore, 30.IV.2006, leg. Wrase (cSch, cAss); 1♂, Sea of Galilee, Beit Tsaida Reserve, 32°53'N, 35°38'E, 0 m, 19.IV.2005, leg. Aßmann (cFel).

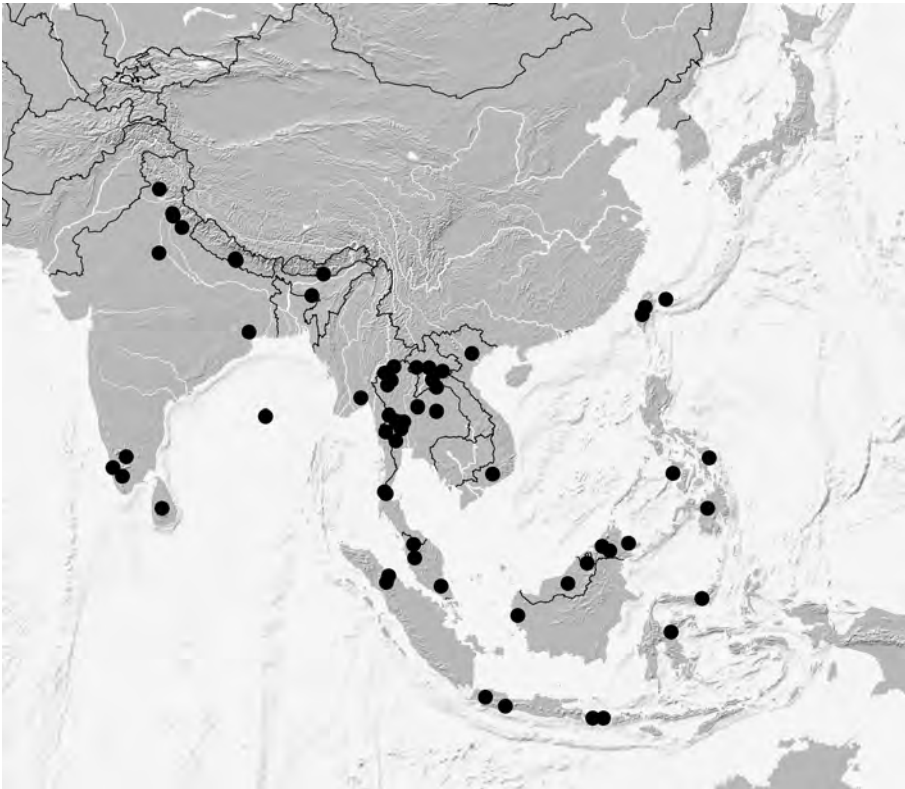
**Comment:** *Pseudolathra tenenbaumi* was originally described from Israel and subsequently doubtfully recorded also from southern Turkey.

### *Pseudolathra unicolor* (KRAATZ, 1859)

**Material examined:** India: 4 exs., "Bengalen", leg. Nietner (MNHUB). Laos: 7 exs., 10 km N Luang-Prabang, Mekong, 250 m, primary forest, at light, 2.IX.1992, leg. Somsy (MNHUB, cFel); 1 ex., same data, but III.1993 (MNHUB); 1 ex., same data, but X.1992 (MNHUB); 1 ex., same data, but IV.1993 (MNHUB). Thailand: 11 exs., 220 km NW Bangkok, 55 km W Uthai-

Thani, 2 km SW Pak-Muang, 120 m, "iix.1991" [sic] (MNHUB, cAss); 1 ex., same data, but VIII.1991 (MNHUB); 1 ex., same data, but IX.1991 (cAss); 1 ex., same data, but II.1992 (cAss); 33 exs., 220 km NW Bangkok, 65 km NW Thai-Tani, 25 km NW Lan-Sak, 110 m, at light, IX.1990 (MNHUB, cAss); 1 ex., Khon Kaen, at light, 18.V.1979, leg. Aumphansiri (MNHUB); 2 exs., NE-Thailand, Khon Kaen, at light, 25.II.1981, leg. Saowakontha (MNHUB). Vietnam: 2 ♀♀, Nam Cat Tien National Park, 1.-15.V.1994, leg. Pacholátko & Dembický (NHMW); 2 exs., N-Vietnam, So'n La Province, 31 km S Moc Chau, 20°46'N, 104°54'E, 1070 m, 25.-26.VI.1997, leg. Li (MNHUB); 1 ex., Ninh Binh Province, 90 km SW Hanoi, Cuc Phuong National Park, 20°14'N, 105°43'E, 190 m, light trap, 25.IV.2012, leg. Weigel (cRou). Indonesia: 26 exs., N-Sumatra, Dolok-Merungir, at light, 1.X.-14.XI.1984, leg. Kern (MNHUB, cAss). Locality not specified: 2 ex., "Ind. or." (MNHUB).

**C o m m e n t :** This species is widespread and common in the Oriental and southern East Palaearctic regions. The above specimens from Sumatra represent the first record from this island and from Indonesia. For a distribution map see ASSING (2013a).



**Map 1:** Distribution of *Pseudolathra pulchella*.

***Pseudolathra pulchella* (KRAATZ, 1859)**

**M a t e r i a l e x a m i n e d :** Taiwan: 1♂, Taichung Hsien, Wufeng, Wushi river, 100 m, 21.IV.1990, leg. Smetana [T13] (cAss). Thailand: 2♀♀, Fang, 19°55'N, 99°12'E, 300 m, 25.V.1991, leg. Kubán (NHMB, cAss); 35 exs., 220 km NW Bangkok, 65 km NW Thai-Tani, 25 km NW Lan-Sak, 110 m, at light, IX.1990 (MNHUB, cAss); 1 ex., same data, but X.1990 (MNHUB); 3 exs., 220 km NW Bangkok, 55 km W Uthai-Thani, 2 km SW Pak-Muang, 120 m,

iix.1991 [sic] (MNHUB, cAss); 1 ex., same data, but VIII.1991 (MNHUB); 3 exs., same data, but IX.1991 (MNHUB); 2 exs., same data, but II.1991 (MNHUB); 24 exs., NE-Thailand, Khon Kaen, at light, 25.II.1981, leg. Saowakontha (MNHUB, cAss); 2 exs., same data, but 24.III.1980 (MNHUB). Vietnam: 1 ♀, Nam Cat Tien National Park, 1.-15.V.1994, leg. Pacholátko & Dembický (NHMW). Malaysia: 2 exs., Borneo, Sabah, Kinabatangan, at light, 22.VIII.2005, leg. Mey & Ebert (MNHUBm, cAss). Indonesia: 10 exs., N-Sumatra, Dolok-Merungir, at light, 1.X.-14.XI.1984, leg. Kern (MNHUB, cAss). Philippines: 1 ♀, Samar, Concord, Cadac-an, 22.-24.IV.1997, leg. Mey & Speidel (MNHUB).

**C o m m e n t** : *Pseudolathra pulchella* is the most widespread species in the Oriental and southern East Palaearctic regions. The above specimen from Taichung represents the first male-based record from Taiwan. The currently known distribution is illustrated in Map 1.

### ***Pseudolathra nigerrima* (CAMERON, 1924)**

**M a t e r i a l e x a m i n e d** : Nepal: 1 ♂ [teneral], Phulchauki near Dalikhel, 2000 m, leg. Franz (NHMW).

**C o m m e n t** : The identification of the above male is somewhat tentative. The distinctly teneral specimen was dissected prior to the present study, and the aedeagus is somewhat deformed. Unlike the lectotype of *P. nigerrima*, it has the posterior margin of the abdominal sternite VII distinctly bisinuate in the middle.

### ***Pseudolathra sepikensis* (LAST, 1984), nov.comb. (Figs 1-5, Map 2)**

*Lathrobium sepikense* LAST, 1984: 120.

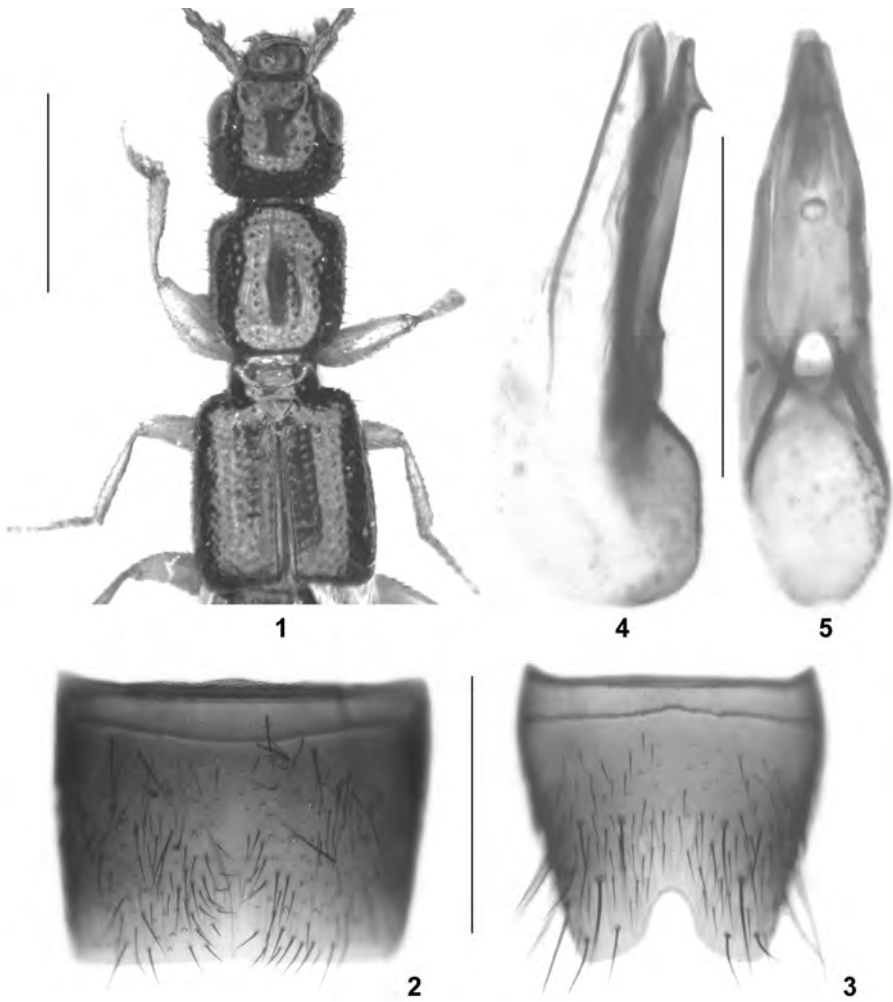
**T y p e m a t e r i a l e x a m i n e d** : Paratypes: 1 ♂: "S 266, Blackwater River, N.G. 6.74 / Manchester Museum, Paratype / Paratype / F3008.5149 / *Lathrobium sepikensis* [sic] sp.n., H.R. Last. det., Paratype / *Pseudolathra sepikensis* (Last), det. V. Assing 2014" (MMUM); 1 ♀: "S 266, Sepik, NG. 6.74 / Manchester Museum, Paratype / Paratype / F3008.5150 / *Lathrobium sepikensis* [sic] sp.n., H.R. Last. det, Paratype" (MMUM).

**C o m m e n t** : The original description is based on a male holotype and a female paratype from "Yentchan, main River, Sepik" and three paratypes from "Blackwater River, Sepik" (LAST 1984). An examination of the above two paratypes revealed that this species belongs to *Pseudolathra*.

**R e d e s c r i p t i o n** : Small species; body length 4.4-4.8 mm; length of forebody 2.7 mm. Coloration: body blackish-brown to blackish, with the posterior margins of the abdominal segments VII and VIII broadly reddish-yellow, distinctly contrasting with the remainder of the body; legs yellowish; antennae brown, with the apical 2-4 antennomeres, antennomere I, and the bases of the remaining antennomeres pale-reddish.

Head (Fig. 1) approximately 1.1 times as broad as long, subparallel behind eyes; punctation coarse and sparse on dorsal surface, median dorsal portion more or less extensively impunctate; microsculpture absent. Eyes large, distinctly longer than postocular region in dorsal view. Antenna slender, 1.7-1.8 mm long; all antennomeres oblong.

Pronotum (Fig. 1) short, 1.06-1.09 times as long as broad and 1.00-1.02 times as broad as head; lateral margins nearly straight in anterior two-thirds in dorsal view; dorsal series composed of approximately 11-14 macropunctures; midline broadly impunctate; laterad of dorsal series with rather sparse and coarse punctation; microsculpture absent.



**Figs 1-5:** *Pseudolathra sepikensis* (LAST), paratype: (1) forebody; (2) male sternite VII; (3) male sternite VIII; (4-5) aedeagus in lateral and in ventral view. Scale bars: 1: 1.0 mm; 2-5: 0.5 mm.

Elytra (Fig. 1) 1.04-1.06 times as long as pronotum; epipleural line absent (lateral view); punctation rather fine, arranged in series. Hind wings fully developed. Metatarsomere I slightly longer than II. Protarsomeres I-IV strongly dilated in both sexes.

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

♂: sternite VII (Fig. 2) moderately transverse and with weakly modified pubescence, posterior margin weakly concave; sternite VIII (Fig. 3) weakly transverse, posterior excision U-shaped; aedeagus (Figs 4-5) 0.85 mm long; ventral process subapically with pronounced tooth; dorsal plate long, thin, and lamellate.

**Comparative notes:** Characters suggesting a closer relationship to any of the species known from the Oriental and Palaearctic regions were not found. *Pseudolathra sepikense* is characterized by numerous characters, particularly its small body size, the absence of an epipleural line, the shape of the male sternite VIII, and the morphology of the aedeagus. The absence of an epipleural line is remarkable, since the presence of such a line was previously considered one of the main characters distinguishing *Pseudolathra* from *Lathrobium* GRAVENHORST, 1802 and some other lathrobiine genera. Interestingly, an analogous reduction of the epipleural line was observed also in one species group of *Lobrathium* MULSANT & REY, 1878 from Taiwan (ASSING 2010).

**Distribution and natural history:** The type locality is a river basin in the north of Papua New Guinea (Map 2). According to LAST (1984), two of the type specimens were collected in "aquatic vegetation by a swampy creek".

***Pseudolathra naviculum* (LAST, 1984), nov.comb.** (Figs 6-11, Map 2)

*Lathrobium naviculum* LAST, 1984: 121.

**Type material examined:** Holotype ♂: "Goroka dist., New Guinea, 9.1971, R. Hornabrook. / Holotype / Brit. Mus. 1985-401 / *Lathrobium naviculum* sp.n., H.R. Last. det., Holotype / *Pseudolathra naviculum* (Last), det. V. Assing 2014" (BMNH).

**Comment:** The original description is based on a unique male holotype from "Goroka district" (LAST 1984). As was to be expected, the species does not belong to *Lathrobium*, but to *Pseudolathra*. The specific epithet is the genitive plural of the noun *navicula* and consequently remains unchanged.

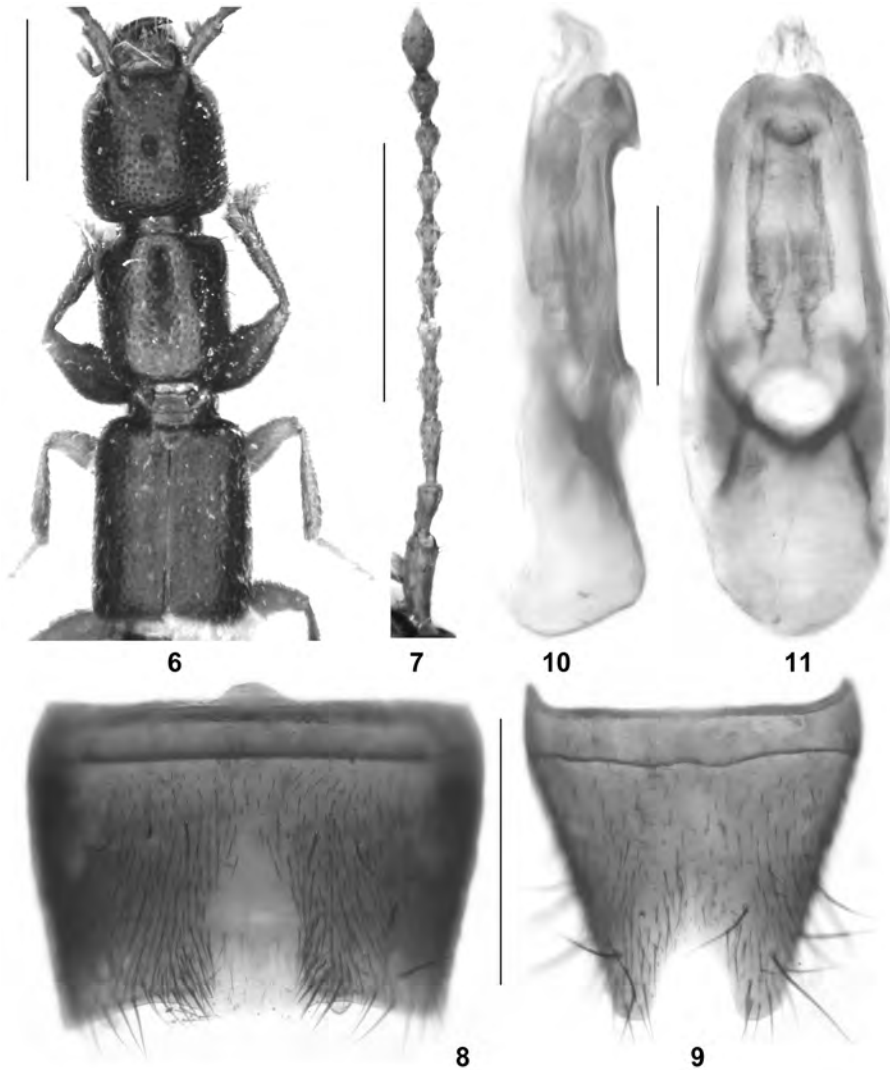
**Redescription:** Small species; body length 6.8 mm; length of forebody 3.7 mm. Coloration: body blackish-brown, with abdominal segments IX-X and the posterior margins of segments VII and VIII reddish; forelegs brown with yellowish tarsi; mid- and hindlegs dark-yellowish; antennae pale-reddish.

**Head** (Fig. 6) 1.03 times as long as broad, indistinctly widened behind eyes; punctuation coarse and dense, sparse in median dorsal portion; microsculpture absent. Eyes moderately large, barely half as long as postocular region in dorsal view. Antenna (Fig. 7) slender, 2.4 mm long; all antennomeres oblong; antennomeres IV-X basally constricted, of gradually decreasing length, and decreasingly oblong.

**Pronotum** (Fig. 6) 1.15 times as long as broad and 0.92 times as broad as head, weakly tapering posteriad; lateral margins nearly straight in anterior two-thirds in dorsal view; punctuation dense and rather coarse; distinct dorsal series absent; midline moderately broadly impunctate; microsculpture absent.

**Elytra** (Fig. 6) 1.08 times as long as pronotum; epipleural line absent (lateral view); punctuation shallow and dense, not arranged in series. Hind wings fully developed. Metatarsomere I as short as II. Protarsomeres I-IV strongly dilated.

**Abdomen** distinctly narrower than elytra; punctuation dense and very fine, somewhat sparser on tergite VII than on tergites III-VI, sparse on tergite VIII; interstices with microreticulation; posterior margin of tergite VII with palisade fringe; posterior margin of tergite VIII convex.



**Figs 6-11:** *Pseudolathra naviculum* (LAST), holotype: (6) forebody; (7) antenna; (8) male sternite VII; (9) male sternite VIII; (10-11) aedeagus in lateral and in ventral view. Scale bars: 6-7: 1.0 mm; 8-9: 0.5 mm; 10-11: 0.2 mm.

♂: sternite VII (Fig. 8) strongly transverse and with pronounced, extensive, oblong median impression without pubescence, posterior margin broadly concave, in the middle weakly convex; sternite VIII (Fig. 9) weakly transverse, posterior excision nearly U-shaped; aedeagus (Figs 10-11) small, 0.62 mm long; ventral process subapically with pronounced tooth; dorsal plate reduced; internal sac without sclerotized structures.

**Comparative notes:** Based on the similarly reduced epipleural line, the similar shape of the male sternite VIII, and the similar general morphology of the

aedeagus, *P. naviculum* is allied to *P. sepikensis*, from which it differs by larger body size, the more oblong head, the much denser and less coarse punctation of the head, the much smaller and less convex eyes, the more slender, more densely and less coarsely punctate pronotum without distinct dorsal series, the longer and more slender elytra, the completely different shape and chaetotaxy of the male sternite VII, the larger posterior excision of the male sternite VIII, as well as by the smaller and differently shaped aedeagus.

**Distribution:** The type locality is situated near Goroka (6°05'S, 145°23'E) in central Papua New Guinea (Map 2).

***Pseudolathra puncta* (LAST, 1984), nov.comb.** (Fig. 12, Map 2)

*Lathrobium punctum* LAST, 1984: 122.

**Type material examined:** Holotype ♀ [mid-legs missing]: "Agakomotuso, 7000 ft., New Guinea, 26.11.1965, R. Hornabrook / Holotype" / Brit. Mus. 1985-401 / *Lathrobium punctum* sp.n., H.R. Last. det., Type / *Pseudolathra puncta* (Last), det. V. Assing 2014" (BMNH).

**Comment:** The original description is based on a female holotype from "Agakomotuso" and a female paratype from "Okapa" (LAST 1984). The species clearly belongs to *Pseudolathra*. The specific epithet is interpreted as the past participle of the Latin verb *pungere* (to stab, to sting). It would seem unlikely that LAST (1984) meant it to be a noun (*punctum* = puncture).

**Redescription:** Moderately large species; body length 9.5 mm; length of forebody 4.9 mm. Forebody somewhat flattened. Coloration: body black; legs blackish, with the tarsi and the narrow bases of the tibiae paler brown; antennae reddish, with antennomere I and the apices of antennomeres II and III infusate.

Head (Fig. 12) distinctly transverse, 1.16 times as broad as long; lateral margins subparallel behind eyes in dorsal view; dorsal surface with few scattered coarse macropunctures in anterior and lateral portions, otherwise impunctate; microsculpture absent. Eyes large, longer than postocular region in dorsal view. Antenna slender, 2.6 mm long; all antennomeres oblong; antennomeres IV-X approximately twice as long as broad.

Pronotum (Fig. 12) short, 1.05 times as long as broad and 1.13 times as broad as head; with subparallel lateral margins in dorsal view; dorsal series broadly separated, each composed of 1+5 coarse punctures; lateral portions with few scattered macropunctures; microsculpture absent.

Elytra (Fig. 12) 0.95 times as long as pronotum; epipleural line pronounced (lateral view); dorsal surface with a sutural series composed of approximately 8 punctures, a median series composed of 6-7 punctures, and a lateral series composed of 6-9 punctures, otherwise impunctate. Hind wings fully developed. Metatarsomere I as short as II. Protarsomeres I-IV strongly dilated.

Abdomen slightly narrower than elytra; punctation rather sparse; interstices with microreticulation; posterior margin of tergite VII with palisade fringe.

♂: unknown.

**Comparative notes:** Based on the external characters, *P. puncta* probably belongs to the *P. nigerrima* group (see ASSING 2012a, 1013a, b). Among the species of this group, it is characterized particularly by the somewhat smaller eyes, the small head (in relation to the pronotum), and the punctation pattern of the elytra.



**Distribution:** LAST (1984) recorded *P. puncta* from two localities in Papua New Guinea, the type locality (not identified) and Okapa (6°30'S, 145°36'E) (Map 2).

***Pseudolathra cyanea* (LAST, 1984), nov.comb.** (Fig. 13, Map 2)

*Lathrobium cyanea* LAST, 1984: 121 f.

**Type material examined:** Holotype ♀: "Middle Waria, New Guinea, 29-7-1970, R. Hornabrook / Holotype / Brit. Mus. 1985-401 / *Lathrobium cyanea* sp.n., H.R. Last. det., Type ♀ / *Pseudolathra cyanea* (Last), det. V. Assing 2014" (BMNH).

**Comment:** The original description is based on a unique female holotype from "Middle Waria, ..., beaten from foliage" (LAST 1984). The species clearly does not belong to *Lathrobium*. Based on the external characters (punctuation pattern, habitus, presence of an epipleural line), it is attributed to *Pseudolathra*.

**Redescription:** Body length 8.2 mm; length of forebody 3.9 mm. Coloration highly distinctive: body shiny and black, with pronounced metallic greenish-blue hue; abdomen black with weak bluish hue; legs blackish, with the tarsi and the narrow bases of the tibiae yellowish-brown; antennae reddish, with the median antennomeres somewhat darker.

**Head** (Fig. 13) 1.05 times as broad as long; posterior angles obsolete; lateral margins behind eyes smoothly rounded towards posterior constriction in dorsal view; dorsal surface with few scattered coarse macropunctures in anterior and lateral portions, otherwise impunctate; microsculpture absent. Eyes large, much longer than distance from posterior margin of eye to posterior constriction. Antenna slender, 2.6 mm long; all antennomeres oblong; antennomeres IV-X gradually decreasing in length and decreasingly oblong.

**Pronotum** (Fig. 13) strongly convex in cross-section, 1.11 times as long as broad and approximately as broad as head, widest near anterior angles, distinctly tapering posteriorly; dorsal series broadly separated, each composed of 1+3 coarse punctures; lateral portions with few scattered macropunctures; microsculpture absent.

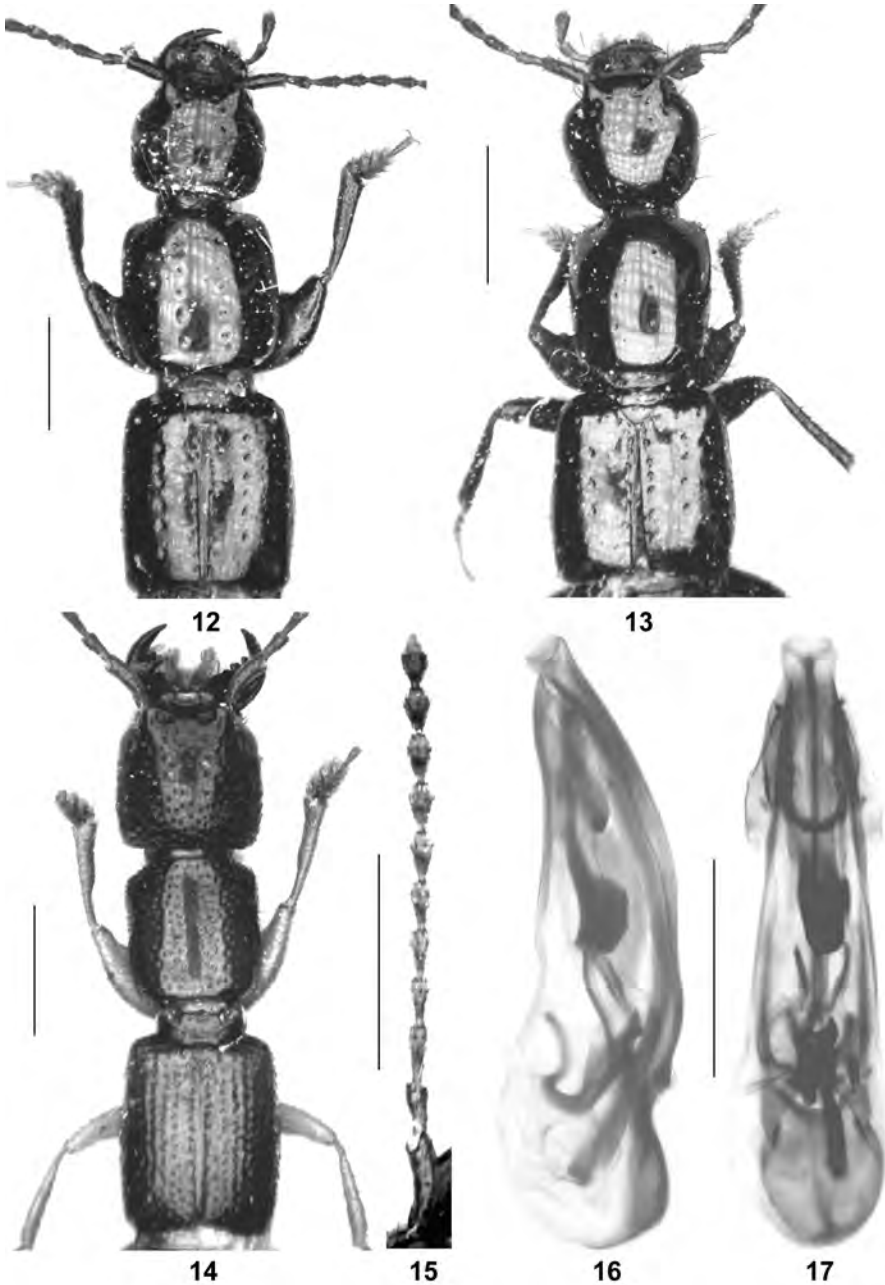
**Elytra** (Fig. 13) 0.93 times as long as pronotum; epipleural line pronounced (lateral view); dorsal surface with a sutural series composed of 6-7 punctures, a median series composed of 3-4 punctures, and a lateral series composed of 5-7 punctures, otherwise impunctate. Hind wings fully developed. Metatarsomere I shorter than II. Protarsomeres I-IV moderately strongly dilated.

**Abdomen** slightly narrower than elytra; punctuation rather sparse, sparser on posterior than on anterior tergites; interstices with microsculpture; posterior margin of tergite VII with palisade fringe.

♂: unknown.

**Comparative notes:** This species is distinguished from all its congeners by the conspicuous coloration alone.

**Distribution and natural history:** The type locality is apparently a river valley in the Bowutu Mountains in eastern Papua New Guinea (Map 2). According to LAST (1984), the holotype was beaten from the foliage of a tree.



**Figs 12-17:** *Pseudolathra puncta* (LAST), holotype (12), *P. cyanea* (LAST), holotype (13), and *P. armata* nov.sp., holotype (14-17): (12-14) forebody; (15) antenna; (16-17) aedeagus in lateral and in ventral view. Scale bars: 12-15: 1.0 mm; 16-17: 0.5 mm.

***Pseudolathra armata* nov.sp.** (Figs 14-19, 28, Map 2)

**Type material:** Holotype ♂: "MALAYSIA, Pahang, Rompin, 7.5.1993, leg. I. Jenis / Holotypus ♂ *Pseudolathra armata* sp. n., det. V. Assing 2014" (NHMW). Paratype ♀: "MALAYSIA, Pahang, 40 km W Rompin, Selendang, 29.4.-6.5.1993, leg. I. Jenis" (cAss).

**E t y m o l o g y:** The specific epithet (Latin, adjective: armed) alludes to the remarkable assortment of internal structures of the aedeagus.

**D e s c r i p t i o n:** Body length 7.0-7.5 mm; length of forebody 4.3-4.5 mm. Coloration: head and pronotum blackish-brown; elytra reddish, with the postero-lateral angles extensively infuscate; abdomen dark-reddish to reddish-brown, with the middle of segments VII and VIII extensively blackish; legs yellowish; antennae reddish.

Head (Fig. 14) 1.00-1.03 times as broad as long, of subquadrangular shape, with sharply marked posterior angles; lateral margins subparallel in dorsal view; punctuation coarse, not umbilicate, rather dense in lateral and posterior dorsal portions, sparser in median dorsal portion, with interspersed micropunctuation; interstices without microsculpture in median dorsal portion, with microsculpture in lateral and in posterior dorsal portions. Eyes (Fig. 14) large, moderately convex, but only little more than half as long as postocular region in dorsal view. Antenna (Fig. 15) slender, 2.7-2.8 mm long; all antennomeres oblong; IV-X of gradually decreasing length, decreasingly oblong, and with distinctly constricted bases.

Pronotum (Fig. 14) 1.08-1.11 times as long as broad and 0.92-0.94 times as broad as head; lateral margins very weakly converging posteriad; punctuation nearly as coarse as that of head, dense and not umbilicate, without distinct micropunctuation; separate dorsal series absent; impunctate midline moderately broad.

Elytra (Fig. 14) 1.04-1.11 times as long as pronotum; punctuation shallow, arranged in longitudinal series. Hind wings fully developed. Legs rather short; metatarsomere I short and weakly oblong, slightly longer than II; protarsomeres I-IV strongly dilated, without sexual dimorphism.

Abdomen slender, approximately 0.85 times as broad as elytra; punctuation fine, moderately dense on tergites III-VI, somewhat sparser and finer on tergite VII, very sparse on tergite VIII; interstices with distinct microreticulation; posterior margin of tergite VII with pronounced palisade fringe.

♂: sternite VII (Fig. 18) moderately transverse, posterior margin weakly concave, pubescence sparse, near middle of anterior margin with a cluster of gland openings (Fig. 28); sternite VIII (Fig. 20) nearly as broad as long, posterior excision broad and somewhat V-shaped, 0.25 times as deep as length of sternite; aedeagus (Figs 16-17) approximately 1.5 mm long, slender, rather weakly sclerotized, and symmetric (except for internal structures); ventral process with semi-membranous apex; internal sac with a conspicuous assortment of dark sclerotized structures of various shapes.

**C o m p a r a t i v e n o t e s:** 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 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. armata* undoubtedly belongs to the *P. quadriceps* group. It differs from the three previously described species of this group particularly by the deeper and nearly V-shaped posterior excision of the male sternite VII, as well as by the more slender aedeagus with internal structures of different shapes.

**Distribution and natural history:** The species is known from two localities near Rompin in Pahang province in the south of Peninsular Malaysia (Map 2). Additional data are not available.

***Pseudolathra bisinuata* nov.sp.** (Figs 20-27, 29-30, Map 2)

**Type material:** Holotype ♂: "Borneo Sabah, Kinabatangan, 22.VIII.2005, LF, leg. W. Mey & Ebert / Holotypus ♂ *Pseudolathra bisinuata* sp.n., det. V. Assing 2014" (MNHUB).

**Etymology:** The specific epithet (Latin, adjective) alludes to the conspicuously bisinuate posterior margin of the male sternite VIII.

**Description:** Body length 9.7 mm; length of forebody 5.0 mm. Habitus as in Fig. 20. Coloration: head dark-brown; pronotum and elytra reddish-brown, the latter with the posterior angles only very indistinctly and diffusely infuscate; abdomen brown with paler apex; legs dark-yellowish; antennae reddish.

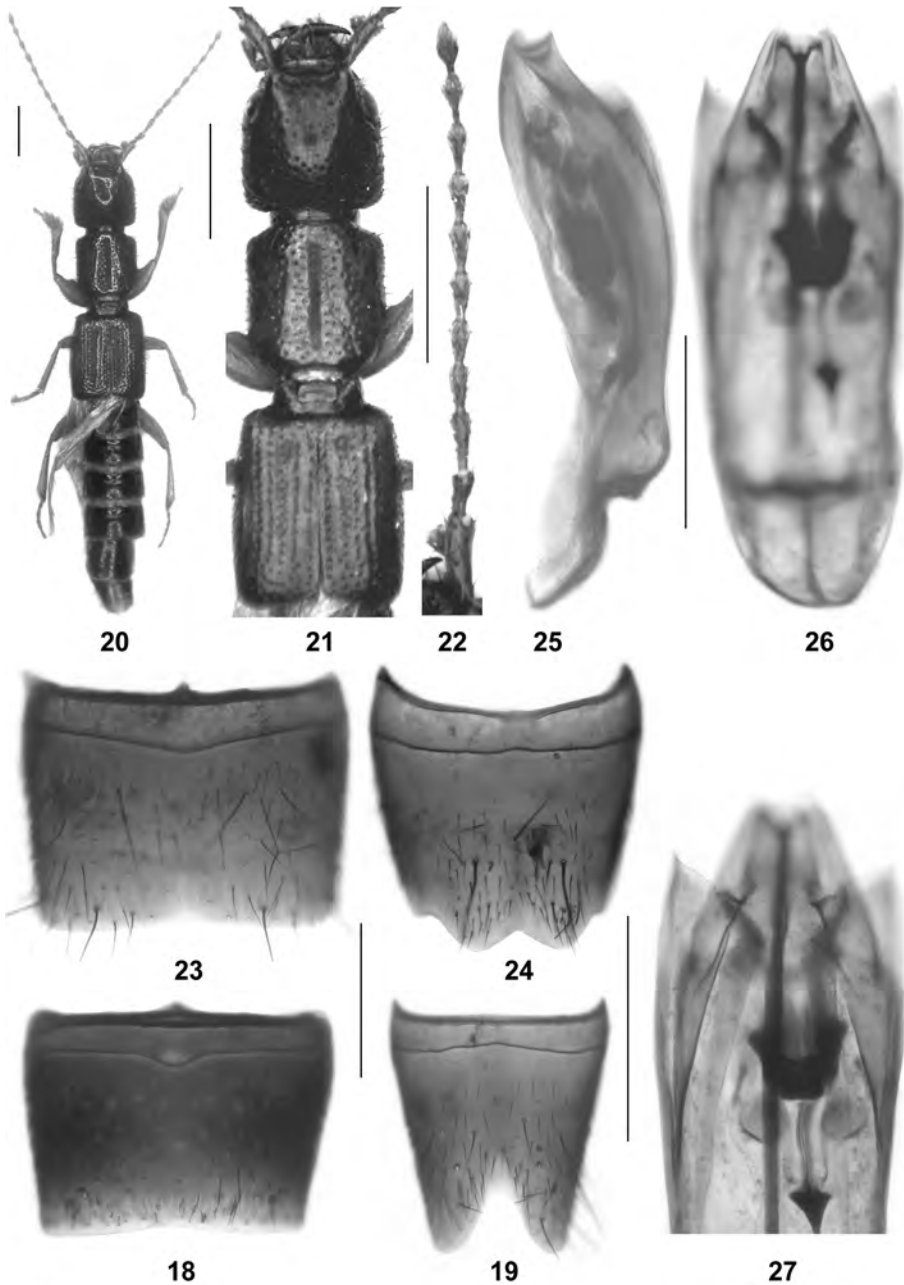
Head (Fig. 21) approximately as broad as long, of subquadrangular shape, with sharply marked posterior angles; lateral margins subparallel in dorsal view; punctuation coarse, not umbilicate, rather dense in lateral and posterior dorsal portions, sparse in median and anterior dorsal portions, with interspersed micropunctuation; interstices without microsculpture in median and anterior dorsal portions, with distinct microsculpture in lateral and in posterior dorsal portions. Eyes moderately large and moderately convex, but only little more than half as long as postocular region in dorsal view. Antenna slender, 3.4 mm long; all antennomeres oblong; V-X of subequal length and with distinctly constricted bases.

Pronotum (Fig. 21) 1.05 times as long as broad and nearly as broad as head; lateral margins very weakly converging posteriad; punctuation similar to that of head, but less dense and without distinct micropunctuation; separate dorsal series absent; impunctate midline rather broad.

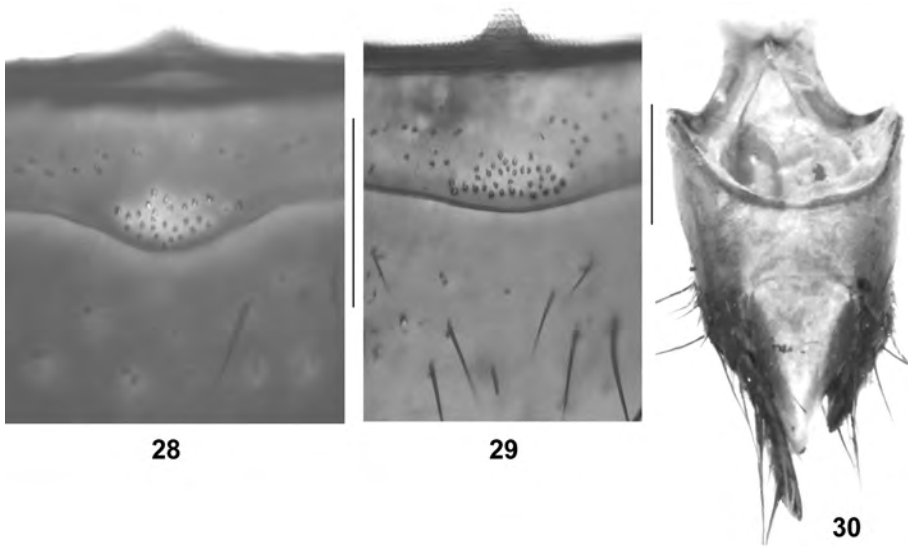
Elytra (Fig. 21) 1.07 times as long as pronotum; punctuation shallow, arranged in longitudinal series. Hind wings fully developed. Legs rather short; metatarsomere I short and weakly oblong, approximately as long as II; protarsomeres I-IV strongly dilated.

Abdomen slender, approximately 0.8 times as broad as elytra; punctuation fine, moderately dense on tergites III-VI, somewhat sparser and finer on tergite VII, very sparse on tergite VIII; interstices with distinct microreticulation; posterior margin of tergite VII with pronounced palisade fringe.

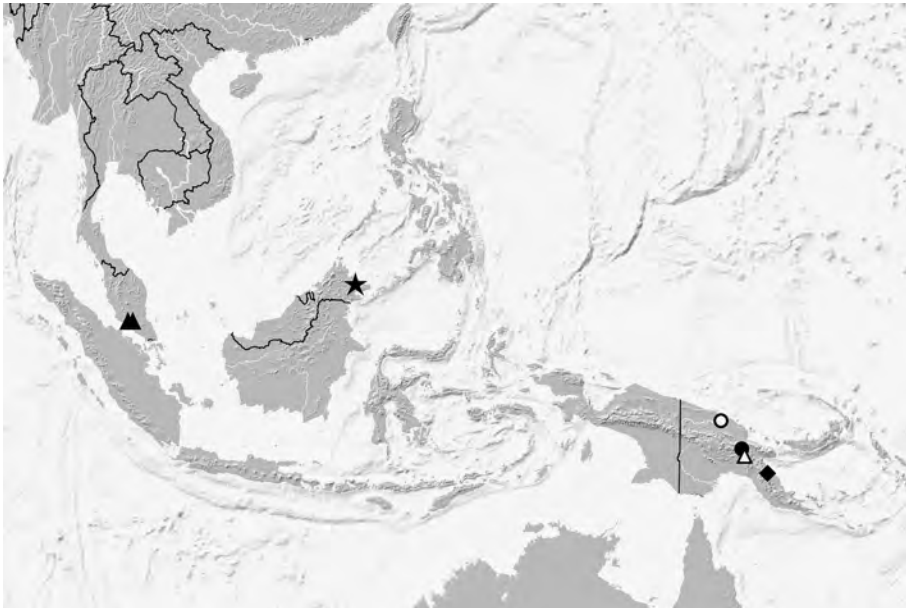
♂: postero-lateral processes of tergite IX (Fig. 30) strongly asymmetric, left process (dorsal view) much longer than right process; sternite VII (Fig. 23) moderately transverse, posterior margin weakly concave, pubescence sparse, near middle of anterior margin with a cluster of gland openings; sternite VIII (Fig. 24) weakly transverse, posteriorly produced, posterior excision broad and very shallow, thus rendering the posterior margin bisinuate; aedeagus (Figs 25-27) approximately 1.5 mm long, rather weakly sclerotized, and symmetric (except for internal structures); ventral process with semi-membranous apex; internal sac with a conspicuous assortment of dark structures of various shapes.



**Figs 18-27:** *Pseudolathra armata* nov.sp. (18-19) and *P. bisinuata* nov.sp. (20-27): (18, 23) male sternite VII; (19, 24) male sternite VIII; (20) habitus; (21) forebody; (22) antenna; (25-26) aedeagus in lateral and in ventral view; (27) apical portion of aedeagus in ventral view. Scale bars: 20-22: 1.0 mm; 18-19, 23-27: 0.5 mm.



**Figs 28-30:** *Pseudolathra armata* nov.sp. (28) and *P. bisinuata* nov.sp. (29-30): (28-29) antero-medial portion of male sternite VII; (30) male segments IX-X. Scale bars: 0.2 mm.



**Map 2:** Distributions of *Pseudolathra armata* (black triangles), *P. bisinuata* (star), *P. sepikensis* (white circle), *P. naviculum* (black circle), *P. puncta* (white triangle), and *P. cyanea* (diamond).

**Comparative notes:** Like the preceding species, *P. bisinuata* evidently belongs to the *P. quadriceps* group. It differs from the other species of this group particularly by the morphology of the male tergite IX, the conspicuously shaped posterior margin of the male sternite VIII, and by the morphology of the aedeagus.

**Distribution and natural history:** The type locality is situated somewhere in the Kinabatangan river valley in Sabah, North Borneo, Malaysia (Map 2). The holotype was collected at a light source.

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### Zusammenfassung

Typen und weiteres Material der Gattung *Pseudolathra* CASEY, 1905 aus der Paläarktis, Orientalis und Australis werden revidiert. Vier in der Gattung *Lathrobium* GRAVENHORST, 1802 beschriebene Arten aus Papua-Neuguinea werden in die Gattung *Pseudolathra* gestellt, redeskribiert und abgebildet: *Pseudolathra sepikensis* (LAST, 1984), nov.comb., *P. naviculum* (LAST, 1984), nov.comb., *P. puncta* (LAST, 1984), nov.comb. und *P. cyanea* (LAST, 1984), nov.comb. Zwei Arten werden beschrieben und abgebildet: *P. armata* nov.sp. (südliche malaiische Halbinsel) und *P. bisinuata* nov.sp. (Malaysia: Borneo). Für fünf Arten werden weitere Nachweise gemeldet.

### References

- ASSING V. (2010): On the Lathrobiina of Taiwan (Coleoptera: Staphylinidae: Paederinae). — Beiträge zur Entomologie, Keltern **60** (2): 301-361.
- ASSING V. (2012a): The *Pseudolathra* species of the East Palaearctic and the Oriental regions (Coleoptera: Staphylinidae: Paederinae). — Beiträge zur Entomologie, Keltern **62** (2): 299-230.
- ASSING V. (2012b): A revision of the *Lathrobium* species of the Himalaya (Coleoptera: Staphylinidae: Paederinae). — Bonn Zoological Bulletin **61** (2): 142-209.
- ASSING V. (2013a): 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.
- ASSING V. (2013b): A revision of Palaearctic and Oriental *Pseudolathra* III. Seven new species and additional records (Coleoptera: Staphylinidae: Paederinae). — Entomologische Blätter und Coleoptera **109**: 271-284.
- ASSING V. (2013c): On the *Lathrobium* fauna of China V. New species and additional records from Yunnan (Coleoptera: Staphylinidae: Paederinae). — Contributions to Entomology, Beiträge zur Entomologie **63** (1): 53-128.
- ASSING V. (2013d): On the *Lathrobium* fauna of Japan (Coleoptera: Staphylinidae: Paederinae). — Linzer biologische Beiträge **45** (2): 1615-1641.
- ASSING V. (2014a): A revision of the *Pinobius* species of the Oriental, Palaearctic, and Australian regions (Coleoptera: Staphylinidae: Paederinae). — Koleopterologische Rundschau **84**: 115-191.

- ASSING V. (2014b): A revision of *Tetartopeus* IV. A new species from Turkey, new synonymies, and additional records (Coleoptera: Staphylinidae: Paederinae). — *Linzer Biologische Beiträge* **46** (2): 1119-1131.
- LAST H. (1984): Recorded and new species of Coleoptera (Staphylinidae, Paederinae) in Papua New Guinea. — *Folia Entomologica Hungarica* **45** (2): 109-125.
- LI X.-Y., SOLODOVNIKOV A. & H.-Z. ZHOU (2013): The genus *Pseudolathra* in China: new species and new records (Coleoptera, Staphylinidae, Paederinae). — *ZooKeys* **356**: 1-9.
- ROUGEMONT G. DE (in press): Two new species of *Pseudolathra* CASEY from Borneo (Coleoptera, Staphylinidae, Paederinae). — *Revue Suisse de Zoologie* (2014).

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