

**Nine new *Strongylium* Kirby, 1819  
(Coleoptera: Tenebrionidae: Stenochiinae: Stenochiini)  
species from Borneo, Kalimantan and Sumatra**

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**Taxonomy, new species, Coleoptera, Tenebrionidae, Stenochiinae, Stenochiini, *Strongylium*, Borneo, Kalimantan, Sumatra**

**Abstract.** Nine new *Strongylium* Kirby, 1819 species are described from Borneo, Kalimantan and Sumatra as follows: *Strongylium matsudai* sp. nov.; *S. kalimantanbaratum* sp. nov.; *S. singkawangense* sp. nov.; *S. bawangense* sp. nov.; *S. madiense* sp. nov.; *S. mysterium* sp. nov.; *S. berambuthalum* sp. nov.; *S. lembahum* sp. nov. and *S. pelangium* sp. nov.

## INTRODUCTION

In the Masumoto Collection preserved in the National Museum of Nature and Science, Tsukuba, Japan, we found some unknown *Strongylium* Kirby, 1819 species collected from Borneo, Kalimantan and Sumatra. Over recent several years, we examined them in details. As a result of this work, we recognized nine species to be new to science. Therefore, we describe them in the present paper.

## MATERIAL AND METHODS

The specimens studied come from the Masumoto Collection preserved in the National Museum of Nature and Science, Tsukuba, Japan.

External morphology and male genitalia were examined using an Olympus SZ60 and a Leica MS5 stereoscopic microscopes. Pictures were taken using an Olympus PEN E-P3 digital camera equipped with an extension tube and a ZUIKO AUTO-MACRO 50mm f3.5 lens or 80mm f4 lens, and stacked using the free software Combine ZM from Alan Hadley.

The label data of the specimens analysed are cited verbatim in quotation marks, a slash is used to separate lines of the data on the label, and a double slash separates the labels one from another. Holotypes will be deposited in the Masumoto Collection of the National Museum of Nature and Science, Tsukuba, Japan.

Abbreviations used herein are as follows: BL/BW = Body length / Body width; LAI-XI = Length of antennomere I to XI in mm; WE/ED = Width between eyes / Eye transverse diameter; PW/PL = Pronotal width / Pronotal length; EL/EW = Elytral length / Elytral width; EL/PL = Elytral length / Pronotal length; EW/PW = Elytra width / Pronotal width; LTB-A = Lengths of pro-, meso- and metatarsi from baso- to apicomeres in mm.

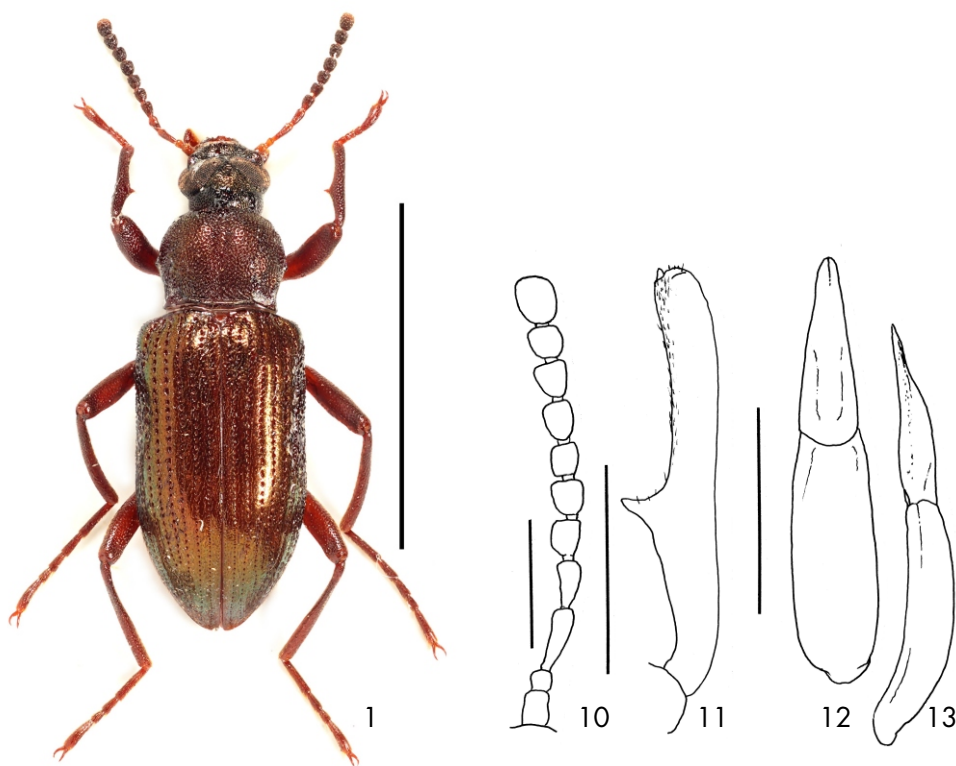
## TAXONOMY

***Strongylium matsudai* sp. nov.**

(Figs. 1, 10-13)

**Type locality.** East Malaysia, N. Borneo, Sabah, Kimanis Rd., Crocker Range.

**Type material.** Holotype (♂): "E. MALAYSIA N. Borneo / Sabah Kimanis Rd., Crocker Range / VI. 2004. H. Matsuda col. // Coll. Masumoto / 2013".



Figs. 1, 10-13, *Strongylium matsudai* sp. nov., holotype, ♂. 1, habitus; 10, antenna; 11, protibia; 12, aedeagus (dorsal view); 13, ditto (lateral view). Scales: 5.0 mm for 1; 1.0 mm for 10-13.

**Description of holotype.** Body 8.4 mm in length, BL/BW 2.8, oblong ovate, convex longitudinally, gently flattened in medial portion. Head and seven apical antennomeres brownish black, the remaining portions of body surface mostly dark reddish brown, hairs on surfaces pale reddish brown; each surface weakly, sericeously shining and clothed with short, subdecumbent hairs.

Head subdecagonal, though the basal portion is concealed under the pronotum; clypeus semicircular, depressed and flattened in basal part, gently inclined in apical part, wholly closely punctate and minutely, rather setaceously haired; fronto-clypeal suture fine and widely curved; genae obliquely raised antero-laterad, rather sparsely, finely punctate and minutely haired; frons somewhat T-shaped, steeply inclined, closely, finely punctate, with posterior part to vertex shallowly concave and irregularly punctate, the punctures often fused with one another and

forming rugulosities; vertex gently, roundly convex, microsculptured and rugulose. Eyes large, strongly convex laterad, noticeably deeply, obliquely inlaid into head; WE/ED 0.15. Antennae subclavate and not so long, with seven apical antennomeres a little widened, tip of antennomere XI reaching to base of elytra; LAI-XI: 0.32, 0.12, 0.40, 0.33, 0.30, 0.28, 0.28, 0.28, 0.27, 0.26, 0.32.

Pronotum subquadrate, PW/PL 1.4, widest at basal 3/7, rather noticeably constricted at basal 2/7; apex slightly produced, finely bordered in lateral parts; base very weakly produced, clearly bordered and margined, the margin sinuous and tapering in lateral parts; front angles slightly angulate; hind angles subrectangular and slightly protruded; disc rather strongly convex, highest at anterior 1/3, longitudinally depressed on midline, depressed in posterior portion; discal surface microsculptured, closely, coarsely punctate, clothed with fine hairs; sides rather steeply inclined to lateral margins, which are rather boldly bordered, with a triangular projection at middle; along the lateral margin in basal 1/5 with a short ridge, the space between the ridge and the lateral margin grooved. Scutellum short sublinguiform, slightly raised, weakly depressed in medial part, wholly microsculptured, with lateral parts microscopically punctate.

Elytra subfusiform, EL/EW 2.3, EL/PL 3.7, EW/PW 1.2, nearly subparallel-sided in basal half, then, gradually, roundly narrowed toward apices; dorsum moderately convex, gently, longitudinally flattened in antero-medial half, highest at apical 1/3; disc with rows of punctures, which are rather ovate and closely set in interior portion, and become larger and round in antero-medial portions, and smaller and closely set in lateral and posterior portions; intervals weakly convex, microsculptured, weakly, irregularly aciculate, scattered with minute punctures; sides steeply declined to lateral margins, which are bordered by punctate-grooves and hardly visible from above; humeri moderately swollen, microsculptured, microscopically punctate and rather densely, finely haired; apical portions of elytra slightly, roundly produced.

Maxilla with terminal palpomere subtriangular. Mentum inverted subtrapezoidal, longitudinally ridged medianly, longitudinally wrinkled. Gula semicircularly, finely bordered, gently convex, rather smooth.

Prosternum medium-sized; apex very slightly emarginate and irregularly bordered; anterior part depressed and weakly rugulose; posterior part gently raised, coarsely rugulose; inter-procoxal space gently concave; prosternal process triangular. Mesoventrite short; anterior and medial parts rather depressed, coarsely punctate; posterior parts raised and narrowed, minutely rugoso-punctate. Metaventrite broad, longitudinally impressed in posterior 3/4 on midline; basal part weakly depressed, microsculptured and rugulose; medial and posterior parts weakly convex, weakly microsculptured, and rather closely punctate, the punctures become smaller and sparser laterad, each with a subdecumbent fine hair.

Abdomen microsculptured, closely punctate, clothed with decumbent hairs; ventrite V very weakly flattened medianly, depressed in apico-median part, the apex rounded.

Femora subclavate, closely punctate and densely clothed with rather long fine hairs. Tibiae slightly curved interiad and ventrad, slightly becoming bolder apicad, closely minutely punctate and densely clothed with fine hairs; protibiae each with a sharp spine at basal 2/5 on inner face. Tarsi rather long, LTB-A: 0.26, 0.10, 0.11, 0.12, 0.51; 0.62, 0.40, 0.33, 0.23, 0.66; 0.75, 0.30, 0.25, 0.64.

Aedeagus elongated subfusiform, tapering apicad, 1.85 mm in length, 0.18 mm in width, moderately curved in lateral view; basale subfusiform, 1.00 mm in length; apicale elongated triangular, 0.85 mm in length; apical part slightly prolonged with apices rather acute.

**Female.** Unknown.

**Differential diagnosis.** This new species belongs to the species group of *Strongylium aciculatum* by their postero-lateral area of the pronotum with a short ridge and a groove. The new species resembles *Strongylium merkliaum* Masumoto & Akita, 2008, originally described from West Malaysia, Perak, Taipin, Bukit Larut (Maxwell Hill), by relatively bold body with acute pronotal spines. The former can be distinguished from the latter by the body surface sericeously shining and rather densely clothed with fine hairs, the pronotum narrower compared with the elytra (EW/PW 1.3 in the latter), more coarsely punctate and noticeably depressed medianly, the elytra hardly punctate-striate, the legs a little stouter with spines stronger, and the aedeagus obviously longer (1.64 mm in the latter).

**Etymology.** The specific name, *matsudai*, is given in honour of Hidehito Matsuda who collected the holotype.

**Distribution.** Borneo, Sabah.

***Strongylium kalimantanbaratum* sp. nov.**

(Figs. 2, 14-17)

**Type locality.** Indonesia, Kalimantan Barat, Singkawang reg., Madi Vill., Mt. Bawang.

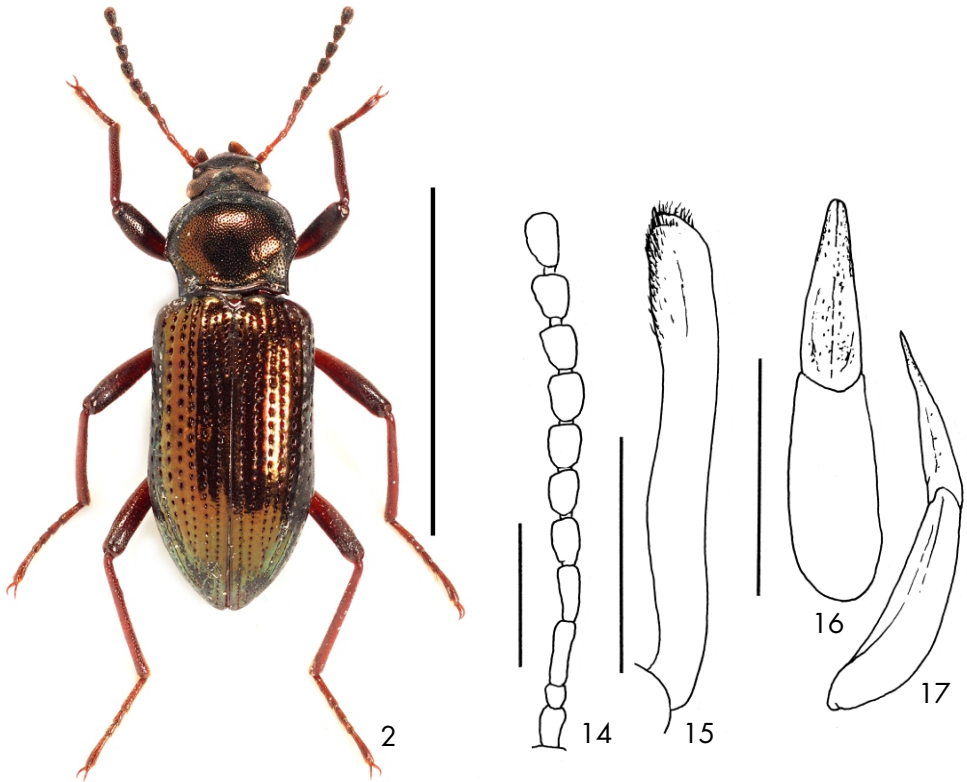
**Type material.** Holotype (♂): "INDONESIA / KALIMANTAN BARAT, / Singkawang reg., Madi / vill. env., Mt. Bawang, alt. / 1000-1500 m, V 2017, / Local collector leg. // Coll. Masumoto / 2019". Paratypes: (4 ♂♂): same locality as for the holotype, but IV. 2017; (1 ♀): INDONESIA, South Kalimantan, Kandangan, Loksado Vill. 17 km NE, alt. 900 m, 23. IX.-30. X. 1997, St. Jakl leg.

**Description of holotype.** Body 8.2 mm in length, BL/BW 2.7, oblong ovate, convex longitudinally, rather noticeably constricted at the border of fore and hind bodies. Major portions of dorsal surface dark copper-coloured; elytra slightly lighter in colour; four basal antennomeres, legs and major portions of ventral surface dark brown, seven apical antennomeres almost black, hairs of surfaces pale yellow; head and pronotum gently, slightly sericeously shining; scutellum and elytra metallicly shining, four basal antennomeres and legs moderately shining, ventral surface weakly shining; body almost glabrous, except for apical seven antennomeres, apico-interior parts of tibiae and ventral surface of tarsi are haired.

Head subdecagonal, though the basal portion is concealed under the pronotum; clypeus semicircular, depressed and flattened in basal part, gently inclined apicad, scattered with minute punctures; fronto-clypeal suture curved, strongly impressed in lateral parts; genae obliquely raised, fairly smooth, minutely punctate, with exterior margins roundly produced; frons somewhat shortened T-shaped, gently inclined, rather closely, minutely punctate; vertex weakly convex, rather closely punctate, the punctures obviously larger than those on frons. Eyes strongly convex laterad, deeply, obliquely inlaid into head; WE/ED 0.22. Antennae subfiliform, antennomeres weakly widened to each apex; tip of antennomere XI barely reaching base of elytra; LAI-XI: 0.30, 0.11, 0.40, 0.37, 0.34, 0.33, 0.33, 0.35, 0.32, 0.31, 0.35.

Pronotum subquadrate with noticeable projections slightly after the middle of lateral margins, PW/PL 1.3, roundly narrowed anteriorly and rather abruptly narrowed posteriorly from the widest points (= the projections); whole margins bordered; apex slightly produced; base weakly produced in medial part, bi-sinuuous in lateral parts, thickly bordered; front angles rounded; hind angles subrectangular; disc rather strongly convex in anterior 2/3, highest at anterior 1/3, rather strongly depressed in posterior 1/3; surface wholly, weakly microsculptured, closely punctate;

the punctures becoming confluent in lateral portions; lateral margins slightly explanate, with a ridge in posterior 1/3 along the margin; space between the ridge and lateral margin grooved and rather coarsely punctate. Scutellum subcordate, rather smooth, weakly raised along lateral margins.



Figs. 2, 14-17, *Strongylium kalimantanbaratum* sp. nov., holotype, ♂. 2, habitus; 14, antenna; 15, protibia; 16, aedeagus (dorsal view); 17, ditto (lateral view). Scales: 5.0 mm for 2; 1.0 mm for 14-17.

Elytra slightly elongated subelliptical, EL/EW 2.0, EL/PL 3.0, EW/PW 1.2, widest near base, nearly subparallel-sided in basal half, then, gradually, roundly narrowed apicad; dorsum rather strongly convex, highest at basal 1/3, weakly, longitudinally flattened in antero-medial 1/3; disc with rows of punctures, which are small, closely set and connected with each other by shallow grooves in interior portion, large and isolated in antero-medial portions, and small, elongated and finely striated in lateral and posterior portions; intervals weakly convex, finely microsculptured, hardly punctate; sides steeply declined to lateral margins, which are bordered by punctate-grooves and hardly visible from above; humeri moderately swollen, smooth; apical parts slightly produced.

Maxilla with terminal palpomere securiform. Mentum somewhat shield-form, raised antero-medially, weakly microsculptured. Gula semicircularly, finely bordered, gently convex, rather smooth.

Prosternum medium-sized, with apex very slightly emarginate, finely bordered; anterior part depressed and punctate-rugulose; posterior part strongly raised, rather smooth; inter-procoxal space weakly depressed; prosternal process triangularly projected and depressed. Mesoventrite short; anterior and medial parts depressed, weakly raised medially, finely punctate laterally; posterior part raised and narrowed, rather smooth. Metaventrite broad, longitudinally impressed in posterior 4/5 on midline; basal part weakly depressed, finely microsculptured and punctulate-rugulose; medial and posterior parts gently convex, weakly microsculptured and slightly wrinkled.

Abdomen weakly microsculptured; ventrite I longitudinally wrinkled, with lateral parts finely punctate; ventrites II and III finely punctate, with each basal part finely wrinkled; ventrites IV and V minutely punctate; apex of ventrite V rounded and hardly bordered.

Femora subclavate, closely punctate. Tibiae closely punctate; protibiae slightly produced interiad in middle. Tarsi rather long, LTB-A: 0.16, 0.11, 0.10, 0.12, 0.56; 0.40, 0.28, 0.24, 0.22, 0.70; 0.60, 0.23, 0.18, 0.62.

Aedeagus subfusiform, bold at base and tapering apicad, 1.52 mm in length, 0.32 mm in width, rather strongly curved in lateral view; basale 0.84 mm in length; apicale elongated triangular, 0.68 mm in length with acute apices.

**Variation.** (n=4). The body outline and coloration are not so varied. BL/BW 2.7, WE/ED 0.22-0.23, PW/PL 1.3, EW/EL 1.9-2.0, EL/PL 2.9-3.0, EW/PW 1.1-1.2.

**Female.** (n=1). Head narrower with eyes smaller; pronotum narrower and hardly projected at middle of lateral margins; elytra more elongate; protibiae not modified on interior face. Major body parts: BL 8.4 mm, BL/BW 2.9, WE/ED 0.41, PW/PL 1.3, EL/EW 2.0, EL/PL 3.5, EW/PW 1.2.

**Differential diagnosis.** The new species is also a member of the species group of *Strongylium aciculatum*. Among those, the new species resembles *S. maxwellense* Masumoto & Akita, 2008 originally described from West Malaysia, Perak, Taipin, Bukit Larut (Maxwell Hill), by having the stout body with the wide pronotum and male protibiae weakly widened in the middle on the interior face. The former can be distinguished from the latter by the pronotum more strongly narrowed and depressed in the basal portion, the elytra with rows of more strong punctures and intervals more strongly convex (almost flat in the latter), and the aedeagus obviously shorter (1.89 mm in the latter) with the bold base and tapering apicad.

**Etymology.** The specific name, *kalimantanbaratum*, is derived from the place where the major type series were collected.

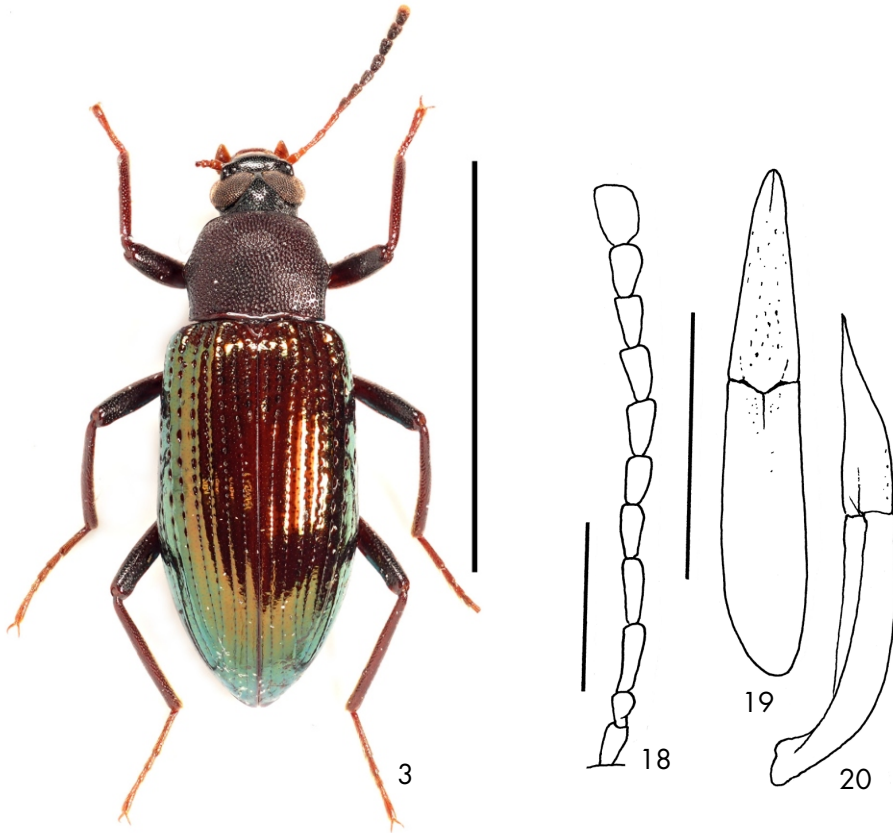
**Distribution.** West and South Kalimantan.

### ***Strongylium singkawangense* sp. nov.**

(Figs. 3, 18-20)

**Type locality.** Indonesia, Kalimantan Barat, Singkawang reg., Madi Vill., Mt. Bawang.

**Type material.** Holotype (♂): "INDONESIA / KALIMANTAN BARAT, / Singkawang reg., Madi / vill. env., Mt. Bawang, alt. / 1000-1500 m, VI 2017, / Local collector leg. // Coll. Masumoto / 2019".



Figs. 3, 18-20, *Strongylium singkawangense* sp. nov., holotype, ♂. 3, habitus; 18, antenna; 19, aedeagus (dorsal view); 20, ditto (lateral view). Scales: 5.0 mm for 3; 1.0 mm for 18-20.

**Description of holotype.** Body 7.9 mm in length, BL/BW 2.5, subfusiform, convex longitudinally, weakly flattened in antero-medial portion of the elytra. Head, seven apical antennomeres and pronotum brownish black, four basal antennomeres, scutellum, elytra, major portions of ventral surface and legs dark reddish brown, hairs on surfaces pale yellow; head and prosternum moderately shining, pronotum, meso- and metasternites and abdomen weakly, sericeously shining, scutellum, four basal antennomeres, elytra and legs rather strongly, somewhat vitreously shining, seven apical antennomeres nearly mat; except for seven apical antennomeres, apico-interior parts of tibiae and ventral surface of tarsi are almost glabrous.

Head transversely subelliptical; clypeus gently produced, depressed and flattened in basal part, gently inclined apicad, microsculptured, scattered with fine punctures; fronto-clypeal suture weakly curved, strongly impressed in lateral parts; genae gently dilated and moderately convex, minutely punctate, with exterior margins obliquely roundly produced; frons somewhat shortened T-shaped, gently inclined, rather coarsely punctate in anterior part, finely punctate in posterior part; vertex gently convex, coarsely punctate, the punctures obviously larger than those on frons. Eyes large, strongly convex laterad, broadly, slightly obliquely inlaid into head; WE/ED 0.20.

Antennae subfiliform with antennomeres weakly widened apicad; tip of antennomere XI barely reaching to base of pronotum; LAI-XI: 0.23, 0.10, 0.38, 0.30, 0.24, 0.26, 0.25, 0.26, 0.26, 0.25, 0.29.

Pronotum subhexagonal, PW/PL 1.3; lateral margin noticeably projected at middle (the widest points), nearly straight narrowed anterior and weakly sinuously narrowed posterior from the widest points, finely punctate-grooved, and wholly visible from above; whole margins bordered; apex slightly produced and finely ridged; base very weakly produced in medial part, bi-sinuous in lateral parts, bordered and boldly ridged; front angles rounded; hind angles subrectangular; disc moderately convex in anterior 3/4, inclined in posterior 1/3, highest at middle; surface wholly, weakly microsculptured, closely, irregularly punctate, the punctures slightly umbilicate. Scutellum sublinguiform, rather smooth, longitudinally depressed on median line.

Elytra subfusiform, EL/EW 1.8, EL/PL 3.6, EW/PW 1.4, widest at middle, gently narrowed basad, and gradually, roundly narrowed apicad from the widest point; dorsum rather strongly convex, weakly, longitudinally flattened in antero-medial 1/3, highest at basal 1/3; disc with rows of punctures, which are small, closely set and connected with each other by shallow grooves in interior portion, large and almost isolate, sometimes connected with each other by fine striae in antero-medial portions, and small, elongated and finely striated in lateral and posterior portions; intervals moderately convex, sparsely, finely punctate and often micro-aciculate; sides steeply declined to lateral margins, which are bordered by grooves with sparse and fine punctures in rows, and hardly visible from above; humeri moderately swollen, smooth; apical portions slightly, roundly produced.

Maxilla with terminal palpomere triangular. Mentum inverted subtrapezoidal, raised and smooth antero-medially, depressed and microsculptured laterally. Gula semicircularly, finely bordered, gently convex, rather smooth.

Prosternum a little short, with apex very slightly emarginate and ridged; anterior part depressed and coarsely punctate-rugulose; posterior part strongly raised, rather smooth; inter-procoxal space weakly depressed; prosternal process triangularly projected, depressed and punctate-rugulose. Mesoventrite short; anterior and medial parts depressed, coarsely punctate; posterior parts raised in V-shape, wrinkled. Metaventrite broad, wholly weakly microsculptured, longitudinally impressed in posterior 3/4 on median line; basal part punctate-rugulose; medial and posterior parts gently convex, minutely punctate medially, scattered with larger punctures laterally.

Abdomen wholly weakly microsculptured; ventrite I sparsely punctate; ventrite II finely punctate, longitudinally wrinkled in basal 3/4; ventrite III sparsely, finely punctate, finely wrinkled in basal 1/3; ventrite IV almost smooth, sparsely scattered with microscopic punctures laterally; ventrite V scattered with microscopic punctures, the apex rounded.

Femora subclavate, closely microscopically punctate. Tibiae closely, finely punctate; pro- and metatibiae nearly straight, minutely haired; mesotibiae slightly prolonged, weakly bent interiad in middle, clothed with fine hairs in apical 5/7 on ventral side. Tarsi rather long, LTB-A: 0.13, 0.10, 0.11, 0.11, 0.45; 0.61, 0.24, 0.19, 0.13, 0.53; 0.72, 0.23, 0.16, 0.60.

Aedeagus subfusiform, 1.62 mm in length, 0.23 mm in width, gently curved in lateral view; basale 1.00 mm in length, slightly widened in middle; apicale elongated triangular, 0.62 mm in length, with acute apices.

**Female.** Unknown.

**Differential diagnosis.** The new species resembles a member of the *Strongylium aciclatum*



group, due to the ridge and groove in posterior parts of the pronotum slightly recognized. Furthermore, the holotype was collected in the same locality and timing of those of the previous new species.

The present new species resembles *Strongylium bouchardi* Masumoto & Akita, 2008, originally described from Borneo, Sabah, Mt. Trus Madi, but the body is bolder, and the head and pronotum do not bear metallic shine. The eyes are larger (WE/ED 0.45 in the latter), the protibiae are nearly straight (weakly gouged in apical 3/5 in the latter) and the aedeagus is smaller (1.71 mm in the latter).

**Etymology.** The specific name, *singkawangense*, is derived from the place where the holotype was collected.

**Distribution.** West Kalimantan.

***Strongylium bawangense* sp. nov.**  
(Figs. 4, 21-23)

**Type locality.** Indonesia, Kalimantan Barat, Singkawang reg., Madi Vill., Mt. Bawang.

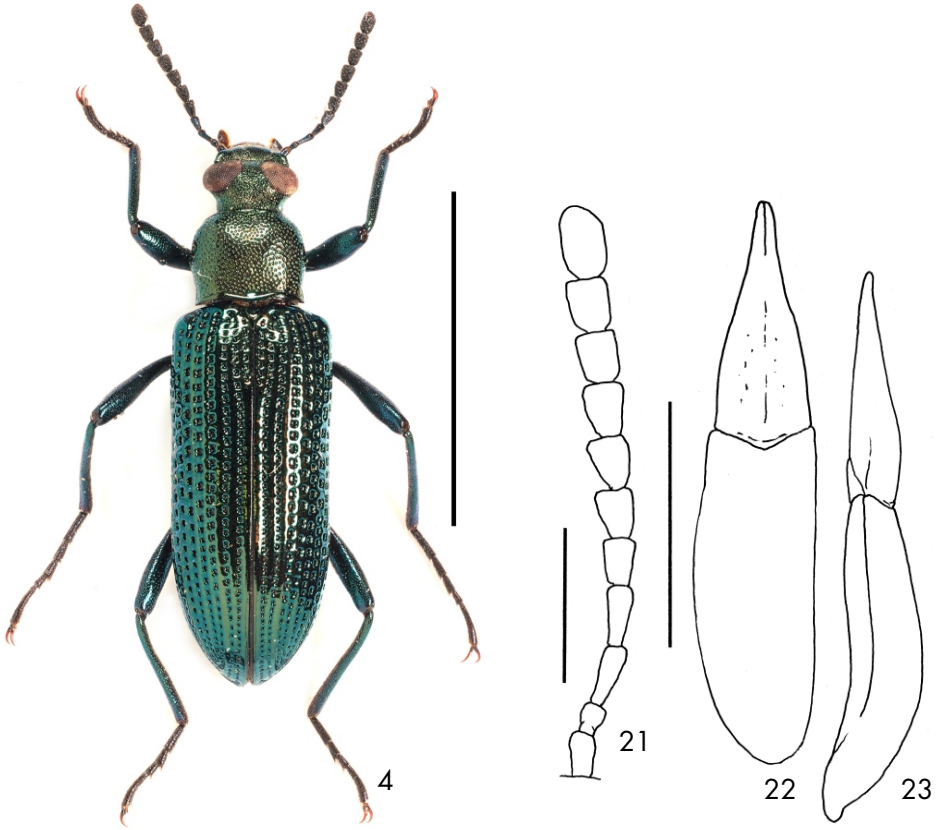
**Type material.** Holotype (♂): "INDONESIA / KALIMANTAN BARAT, / Singkawang reg., Madi / vill. env., Mt. Bawang, alt. / 1000-1500 m, VII. 2017, / Local collector leg. // Coll. Masumoto / 2019".

**Description of holotype.** Body 9.3 mm in length, BL/BW 3.3, subfusiform, convex longitudinally, weakly flattened in antero-medial portion of elytra. Head and pronotum greenish black, major portion of elytra, prosternum and legs dark green, scutellum and first intervals of elytra almost black, five basal antennomeres black with feeble greenish tinge, six apical antennomeres black, meso- and metaventrites blackish brown, abdomen brownish black with dark greenish lustre; head and pronotum weakly, sericeously shining, scutellum, elytra, prosternum, abdomen and legs rather strongly, fairly metallicly shining, meso- and metasternum moderately shining, five basal antennomeres gently shining, six apical antennomeres mat; dorsal surface almost glabrous, anterior portion of ventral surface also almost glabrous, abdomen clothed with minute subdecumbent hairs.

Head transversely subelliptical; clypeus somewhat inverted trapezoidal, gradually inclined apicad, closely punctate, each puncture with a minute, subdecumbent hair; fronto-clypeal suture impressed and weakly curved; genae obliquely, moderately raised antero-laterad, minutely punctate, sparsely intermixed with larger punctures; frons somewhat widely T-shaped, gently inclined, finely punctate in anterior part, coarsely, ruguloso-punctate in posterior part; vertex gently convex, rather closely punctate. Eyes large, strongly convex laterad, broadly, slightly obliquely inlaid into head; WE/ED 0.44. Antennae subfiliform with antennomeres weakly widened apicad; tip of antennomere XI barely reaching to base of elytra; LAI-XI: 0.36, 0.15, 0.41, 0.30, 0.31, 0.27, 0.28, 0.29, 0.27, 0.25, 0.40.

Pronotum subtrapezoidal, PW/PL 1.2; apex nearly straight, finely bordered and ridged, the ridge a little bold and sparsely punctate in medial part, tapering laterad; base wider than apex, very weakly produced in medial part, sinuous in lateral parts, finely bordered and boldly ridged, the ridge sparsely, finely punctate along marginal part; front angles nearly rounded; hind angles acute; disc moderately convex, gently inclined in posterior 1/3, very weakly inclined in antero-median 2/3, highest at middle; surface wholly, weakly microsculptured, rather strongly, closely punctate; sides steeply declined to lateral margins, each margin provide with a triangular

projection at middle (=widest point), roundly narrowed anterior and posterior from the widest points, and sinuous in basal 1/4, almost wholly visible from above. Scutellum triangle with rounded sides, very slightly depressed in antero-medial part and raised posteriorly, rather smooth, sparsely, irregularly scattered with minute punctures in marginal parts.



Figs. 4, 21-23, *Strongylium bawangense* sp. nov., holotype, ♂. 4, habitus; 21, antenna; 22, aedeagus (dorsal view); 23, ditto (lateral view). Scales: 5.0 mm for 4; 1.0 mm for 21-23.

Elytra subelliptical, EL/EW 2.1, EL/PL 4.2, EW/PW 1.4, widest at basal 1/4, weakly narrowed in basal 5/8, then roundly so to apex; dorsum rather strongly convex, weakly, longitudinally flattened in antero-medial half, highest at basal 1/4; disc with rows of punctures, rows I and II striated and the punctures small and closely set, the remaining rows with large punctures which are round at each bottom, and quadrate at top (= the level of elytral surface); intervals moderately convex, weakly microsculptured, sparsely, microscopically punctate; sides rather steeply declined to lateral margins, which are bordered by rows of punctures, and hardly visible from above; humeri moderately swollen, weakly microsculptured and scattered with microscopic punctures; apical portions of elytra slightly, roundly produced.

Maxilla with terminal palpomere strongly dilated and subsecuriform. Mentum subrhombical, raised antero-medially, depressed and minutely punctate laterally. Gula broad, very finely,

semiparabolically bordered, gently convex, rather smooth.

Prosternum a little short; apex border and finely ridged; anterior part wide, raised posteriad, sparsely scattered with strong punctures; posterior part strongly raised; inter-procoxal space longitudinally depressed and aciculate; prosternal process triangularly projected, depressed and transversely rugulose. Mesoventrite short; anterior and medial parts depressed, rather sparsely, strongly punctate; posterior parts raised in V-shape, ruguloso-punctate. Metaventrite broad, wholly weakly microsculptured, longitudinally impressed in posterior half on median line, basal part depressed and punctate-rugulose, each puncture with a fine hair; medial and posterior parts gently convex, rather sparsely scattered with strong punctures, antero-lateral parts rather closely punctate.

Abdomen wholly weakly microsculptured and closely punctate, each puncture with a fine decumbent hair; ventrite V closely finely punctate, each puncture with a fine hair, the apex weakly truncate.

Femora subclavate and rather long, closely, microscopically punctate; protibiae gently produced along hind margin, nearly straight along front margin; meso- and metafemora produced along front margins and nearly straight along hind margins, which are densely clothed with short hairs. Tibiae medium-sized, closely, finely punctate, protibiae slightly curved ventrad, mesotibiae nearly straight; metatibiae weakly curved dorsad. Tarsi rather long, LTB-A: 0.15, 0.11, 0.12, 0.11, 0.62; 0.70, 0.35, 0.31, 0.26, 0.82; 0.50, 0.31, 0.24, 0.76.

Aedeagus subfusiform, 2.12 mm in length, 0.43 mm in width, gently curved in lateral view; basale 1.27 mm in length, slightly elongated elliptical; apicale elongated triangular, 0.85 mm in length, weakly convex dorsad and sparsely minutely punctate, with slightly prolonged, acute apices.

**Female.** Unknown.

**Differential diagnosis.** The new species somewhat resembles *Strongylium shigeoi* Masumoto, Akita & Lee, 2008, originally described from Taiwan, in having elytral punctures quadrate. The former can be distinguished from the latter by dorsal coloration quite different (brownish in the latter), the pronotum rather strongly, closely punctate, with the lateral margins triangularly projected at middle (shallowly punctate, and with the lateral margins simply rounded in the latter), the elytra much more longer than the pronotum (EL/PL 3.4 in the latter), and the aedeagus obviously longer (1.30 mm in the latter).

**Etymology.** The specific name, *bawangense*, is named after Mt. Bawang, the place where the holotype was collected.

**Distribution.** West Kalimantan.

***Strongylium madiense* sp. nov.**

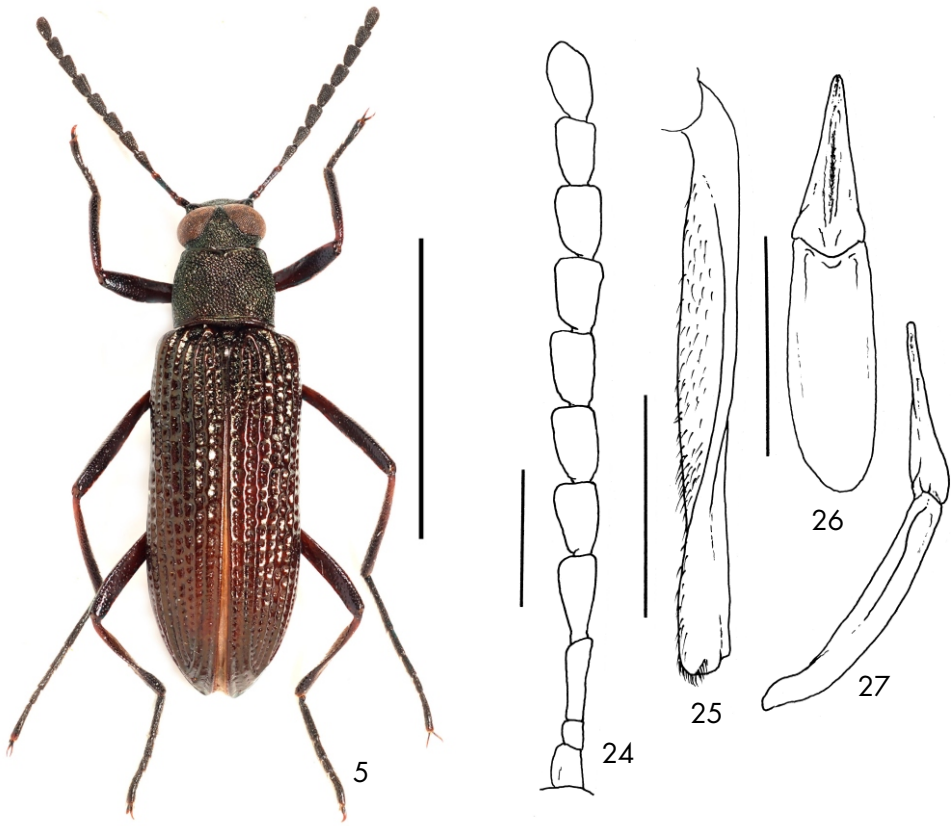
(Figs. 5, 24-27)

**Type locality.** Indonesia, Kalimantan Barat, Singkawang reg., Madi Vill., Mt. Bawang.

**Type material.** Holotype (♂): "INDONESIA / KALIMANTAN BARAT, / Singkawang reg., Madi / vill. env., Mt. Bawang, alt. / 1000-1500 m, VII. 2017, / Local collector leg. // Coll. Masumoto / 2019".

**Description of holotype.** Body 10.0 mm in length, BL/BW 3.3, subcylindrical, convex

longitudinally, weakly depressed in areas around scutellar striae. Head, pronotum and anterior portion of ventral surface black with iron tinge, scutellum, elytra, femora, protibiae, protarsi, three basal antennomeres brownish black and partly with feeble dark coppery lustre, abdomen brownish black with dark bluish lustre, meso- and metatibiae and meso- and metatarsi blackish brown, eight apical antennomeres black; head and pronotum weakly, sericeously shining, scutellum, elytra rather strongly shining, anterior portion of ventral surface and legs moderately shining, abdomen weakly, somewhat metallically shining, four basal antennomeres gently shining, seven apical segments mat; dorsal surface and anterior portion of ventral surface also almost glabrous, abdomen clothed with minute decumbent hairs, seven apical antennomeres rather densely clothed with minute hairs, tibiae clothed with setaceous hairs on interior faces, tarsi clothed with setaceous hairs, which are short and dense on ventral face.



Figs. 5, 24-27, *Strongylium madiense* sp. nov., holotype, ♂. 5, habitus; 24, antenna; 25, metatibia; 26, aedeagus (dorsal view); 27, ditto (lateral view). Scales: 5.0 mm for 5; 1.0 mm for 24-27.

Head subrhombical, microsculptered; clypeus semicircular, steeply inclined apicad, rather closely punctate; fronto-clypeal suture widely curved and clearly impressed; genae obliquely, moderately raised antero-laterad, irregularly punctate, with external margins rounded; frons somewhat widely T-shaped, rather steeply inclined, hardly punctate in anterior part, irregularly punctate in posterior part; area between eyes shallowly impressed and irregularly punctate;

vertex hardly convex, rather closely, coarsely punctate. Eyes very large, strongly convex laterad, broadly, slightly obliquely inlaid into head; WE/ED 0.16. Antennae subfiliform with antennomeres weakly widened apicad; tip of antennomere XI barely reaching to basal 1/5 of elytra; LAI-XI: 0.40, 0.11, 0.59, 0.57, 0.51, 0.50, 0.49, 0.48, 0.46, 0.44, 0.52.

Pronotum subquadrate with rounded sides, PW/PL 1.3; apex slightly emarginate, ridged in wide V-shape, the ridge sparsely punctate in medial part; base slightly wider than apex, very slightly emarginate, bordered and rather boldly ridged, the ridge weakly sinuous in lateral parts, microscopically punctate along posterior margin; front angles obtusely angulate; hind angles slightly acute; disc rather weakly convex, highest in medial portion, weakly inclined anteriad and posteriad, very weakly depressed along median line, and obliquely impressed in lateral portions close to base; surface wholly, weakly microsculptured, closely punctate, the punctures in medial portion rather small, becoming larger in lateral portions, and those often umbilicate and fused with each other; sides steeply declined to lateral margins, which are finely bordered and slightly ridged, and almost wholly visible from above. Scutellum sublinguiform, weakly convex in middle, finely microsculptured, and scattered with minute punctures in lateral parts.

Elytra elongated subelliptical, EL/EW 2.3, EL/PL 4.4, EW/PW 1.6, widest at apical 2/5, very weakly narrowed basad, and gently, roundly so apicad from the widest point; dorsum rather strongly convex, weakly, longitudinally depressed in antero-medial 2/9 (= area around scutellar strioles), highest at basal 2/9; disc with rows of punctures, which are often connected with each other; intervals microsculptured, sparsely scattered with microscopic punctures, weakly ridged longitudinally, the ridges finely, irregularly curved by rows of strong punctures, and also weakly ridged transversely; sides rather steeply declined to lateral margins, which are bordered by rows of punctures, and hardly visible from above; humeri moderately swollen, weakly microsculptured and almost smooth; apical portions of elytra slightly roundly produced.

Maxilla with terminal palpomere gently dilated and triangular. Mentum subrhombical, raised antero-medially, depressed and minutely punctate laterally, with lateral margins ridged. Gula broadly, triangularly bordered, with apical part rounded, gently convex, rather smooth.

Prosternum medium-sized, wholly microsculptured; apex nearly straight and finely ridged; anterior part wide, transversely rugulose; posterior part strongly raised, scattered with large punctures; inter-procoxal space longitudinally hollowed, and longitudinally rugulose, with areas surrounding procoxae strongly raised; prosternal process fairly large, finely rugulose, weakly declined to rounded apex. Mesoventrite rather short; anterior and medial parts depressed, microsculptured and finely punctate, convex at antero-medial part; posterior parts gently raised, rather longitudinally ruguloso-punctate, longitudinally hollowed between mesocoxae; areas surrounding mesocoxae strongly raised, finely punctate and haired. Metaventrite broad with fine longitudinal median impression in posterior 3/4, wholly weakly microsculptured, antero-medial part weakly convex, closely punctate and rugulose, each puncture with a fine hair, antero-lateral parts sparsely punctate, medial and posterior parts gently convex, rather sparsely scattered with large punctures.

Abdomen wholly weakly microsculptured and closely, finely punctate, each puncture with a fine decumbent hair; ventrite I to III longitudinally wrinkled; ventrite IV transversely wrinkled; ventrite V noticeably concave close to apex, fairly closely finely punctate, each puncture with a fine hair, the apex truncate and pubescent.

Femora subclavate, microscopically punctate; profemora gently produced along hind margin, nearly straight along front margin, which is rather densely haired and weakly gouged in apical 1/3; meso- and metafemora weakly produced along front margins, nearly straight along hind margins. Tibiae rather slender, closely, finely punctate; protibiae slightly curved ventrad, gouged and subsetaceously haired in apical halves on ventral faces; mesotibiae nearly straight, rather

sparsely subsetaceous haired on interior faces; metatibiae with exterior side produced in basal half and weakly twisted, gouged and setaceous haired on interior face. Tarsi rather long, densely haired; LTB-A: 0.15, 0.12, 0.11, 0.11, 0.66; 1.32, 0.60, 0.48, 0.34, 0.78; 0.90, 0.37, 0.28, 0.69.

Aedeagus subfusiform, 1.60 mm in length, 0.39 mm in width, bent at the border of basal and apical parts in lateral view; basale 0.98 mm in length, slightly elongated elliptical; apicale elongated triangular, 0.62 mm in length, weakly convex dorsad, medianly grooved in apical 3/4, with prolonged and rather acute apices.

**Female.** Unknown.

**Differential diagnosis.** The new species somewhat resembles *Strongylium tabanai* Masumoto, 1998, originally described from Sichuan, Southeastern China, in the body outline. The former can be distinguished from the latter by the body smaller (18.5 mm in the latter) with the dorsal coloration different (almost black in the latter), the antennae bolder, the head much more closely irregularly punctate, with the eyes larger (WE/DE 0.6), the pronotum more quadrate, the elytra with rows of punctures mostly connected with each other and surrounded by ridges (simply punctate striate in the latter), and the apex of abdominal ventrite V obviously truncate and emarginate.

**Etymology.** The specific name, *madiense*, is named after the local name, Madi village, the place where the holotype was collected.

**Distribution.** West Kalimantan.

### ***Strongylium mysterium* sp. nov.**

(Figs. 6, 28-32)

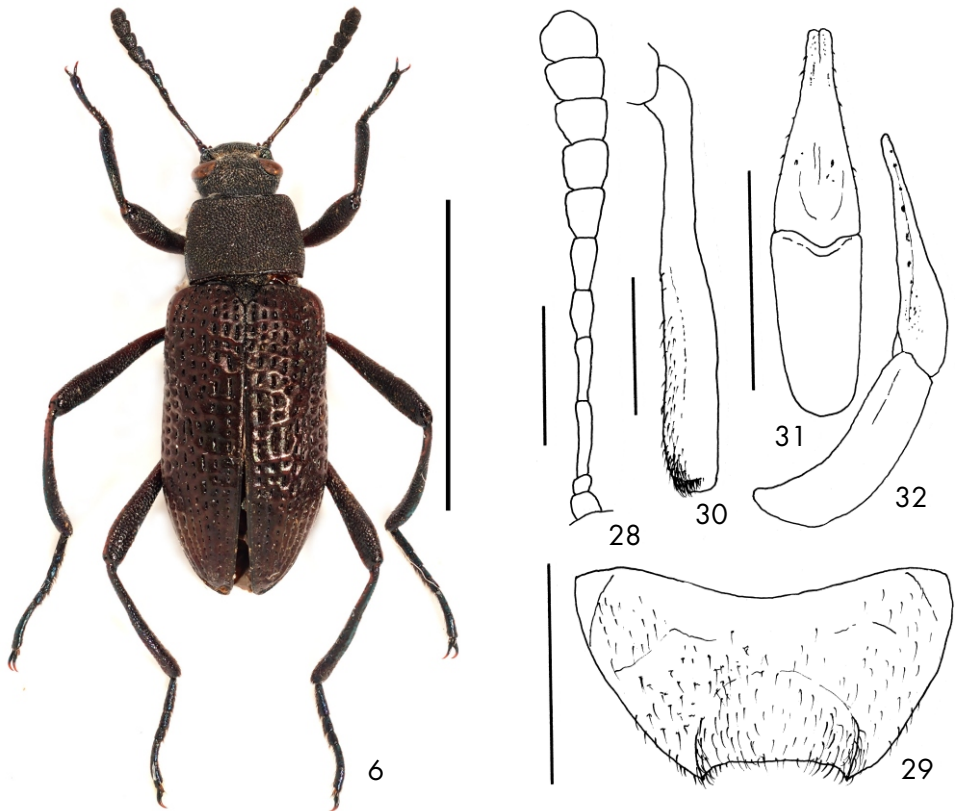
**Type locality.** Indonesia, Kalimantan Barat, Singkawang reg., Madi Vill., Mt. Bawang.

**Type material.** Holotype (♂): "INDONESIA / KALIMANTAN BARAT, / Singkawang reg., Madi / vill. env., Mt. Bawang, alt. / 1000-1500 m, VII. 2017, / Local collector leg. // Coll. Masumoto / 2019".

**Description of holotype.** Body 9.1 mm in length, BL/BW 2.8, elongated elliptical, convex dorsad. Head, pronotum, scutellum, and femora black with feebly brownish tinge, elytra and major portion of ventral surface brownish black, tibiae and tarsi black, antennae black with feeble dark bluish tinge; head and pronotum weakly sericeous and hardly shining, only pronotal apex weakly shining, scutellum and elytra sericeously and feebly shining, ventral surface weakly shining, femora weakly shining in basal parts, and apical parts of femora, tibiae and tarsi moderately shining, five basal antennomeres and genae with weak bluish lustre, six basal antennomeres mat; dorsal surface and anterior portion of ventral surface almost glabrous, medial and posterior portions of ventral surface clothed with minute decumbent hairs, seven apical antennomeres densely clothed with minute hairs, legs fairly densely haired, tibiae clothed with setaceous hairs on apico-interior faces; tarsi densely clothed with setaceous hairs on ventral face.

Head subrhombic, weakly convex, microsculptered; clypeus wide, steeply inclined apicad, closely, coarsely punctate, clothed with fine decumbent hairs; fronto-clypeal suture widely curved and inconspicuously impressed; genae rather weakly, obliquely raised antero-laterad, irregularly punctate, sparsely, finely haired, with external margins rounded; frons wide, gently inclined

anteriad, closely, coarsely punctate and rugulose, each puncture with a decumbent hair; vertex hardly convex, finely haired, rather closely, coarsely punctate, the punctures often connected with each other and forming rugulosity. Eyes moderate in size, gently convex laterad, slightly obliquely inlaid into head; WE/ED 1.40. Antennae subclavate; tip of antennomere XI barely reaching to basal 1/5 of elytra; LAI-XI: 0.30, 0.11, 0.48, 0.42, 0.28, 0.27, 0.31, 0.33, 0.31, 0.32, 0.33.



Figs. 6, 28-32, *Strongylium mysterium* sp. nov., holotype, ♂, 6, habitus; 28, antenna; 29, ventrite V; 30, metatibia; 31, aedeagus (dorsal view); 32, ditto (lateral view). Scales: 5.0 mm for 6; 1.0 mm for 28-32.

Pronotum subtrapezoidal with feebly rounded sides, PW/PL 1.4; apex very slightly emarginate, finely ridged; base slightly wider than apex, bordered by ridge, which is obviously bolder than apical one, and sinuous in lateral parts, microsculptured and minutely punctate; front angles subrectangular; hind angles slightly acute; disc weakly convex, weakly microsculptured, closely punctate, the punctures flat and microsculptured at each bottom and with a fine hair at the centre, often fused with each other and forming rugulosity; sides gently declined to lateral margins, which are bordered by punctate-grooves and fine ridges, and barely visible from above. Scutellum triangle with rounded sides, slightly convex, microsculptured, closely minutely punctate, each puncture with a minute subdecumbent hair.

Elytra rather short, EL/EW 2.0, EL/PL 4.1, EW/PW 1.3, widest at middle, gradually narrowed basad, slightly sinuous in basal 2/5, and gently roundly narrowed apicad from the widest point; dorsum strongly convex, highest at basal 1/3; disc with rows of punctures, which are small, subovate at each bottom, large and ovate or longitudinally elongate at the top (at the level of elytral surface), and sometimes connected with each other and forming short longitudinal impressions; intervals microsculptured, often weakly, microscopically aciculate, weakly to rather strongly convex, strongly, mostly transversely connected with each other by ridges; sides rather steeply declined to lateral margins, which are bordered by grooves with punctures, and hardly visible from above; humeri moderately swollen, weakly microsculptured and minutely aciculate; apical portions slightly produced and rounded.

Maxilla with terminal palpomere gently dilated and triangular. Mentum subrhombical, raised antero-medially, weakly depressed, minutely punctate and pubescent in lateral parts. Gula broad triangular, finely bordered, weakly convex, transversely micro-aciculate.

Prosternum short, microsculptured; apex nearly straight and very finely ridged, anterior part closely minutely punctate, medial and posterior parts feebly raised, irregularly, longitudinally rugose; inter-procoxal space weakly, rather widely hollowed, with areas surrounding procoxae strongly raised; prosternal process fairly large, rugose, with rounded apex. Mesoventrite short; anterior and medial parts depressed, sparsely, finely punctate and haired, convex in antero-medial part, where is almost glabrous, posterior parts rather abruptly raised, sparsely punctate and haired, weakly, longitudinally hollowed in area between mesocoxae, with areas surrounding mesocoxae strongly raised, finely punctate and haired. Metaventrite broad, wholly weakly microsculptured, finely punctate and clothed with rather long hairs, with a longitudinal median impression in posterior 5/6, basal part micro-granulate and wrinkled, medial and posterior parts gently convex on both sides of the median line, transversely wrinkled, finely granulo-punctate, each puncture with a rather long decumbent hair.

Abdomen weakly microsculptured, closely, finely punctate, each puncture with a fine decumbent hair; ventrite I to III weakly, longitudinally wrinkled; ventrite IV weakly transversely wrinkled; ventrite V weakly, subparabolically depressed close to apex, basal part sparsely punctate, medial and apical parts fairly closely finely punctate, the apex emarginate and finely pubescent.

Legs rather stout. Femora subclavate, closely, rather coarsely punctate; profemora gently produced along hind face, nearly straight along front face, which are weakly gouged in basal 2/5; mesofemora gently becoming bolder apicad; metafemora feebly produced apicad along front face, with posterior halves weakly gouged and finely, sparsely haired. Tibiae closely punctate and finely haired; protibiae slightly curved ventrad, with ventral faces slightly gouged and subsetaceously haired in apical 2/5; mesotibiae becoming bolder apicad, with interior face densely, finely haired in apical 2/3; metatibiae gently becoming bolder apicad, with posterior face slightly gouged and sparsely finely haired in apical half. Tarsi minutely, densely haired, particularly densely clothed with subsetaceous hairs on ventral sides; LTB-A: 0.20, 0.12, 0.12, 0.11, 0.79; 0.65, 0.28, 0.25, 0.21, 0.98; 0.75, 0.22, 0.24, 0.89.

Aedeagus short subfusiform, 1.61 mm in length, 0.34 mm in width, weakly curved in lateral view; basale 0.62 mm in length, short and gently widened anteriorly; apicale, 0.99 mm in length, gently, roundly narrowed in basal 2/3, a little steeply narrowed and prolonged in apical 1/3, and sparsely spinulate in lateral parts, with gently prolonged apices.

**Female.** Unknown.



**Differential diagnosis.** The new species is very unique in shape, e. g. the body stout, the head wide and rather flattened, the eyes not large and inter-ocular space wide, the antennae noticeably subclavate, the pronotum rather simply subquadrate and only gently convex, the elytra with rows of large and often elongated punctures, and the intervals often transversely connected with each other, and the aedeagus with the short basale and long spinulate apicale. Up until now no relative species has hitherto been known.

**Etymology.** The specific name, *mysterium*, is Latin, meaning "unknown, strange, etc."

**Distribution.** West Kalimantan.

***Strongylium berambuthalum* sp. nov.**

(Figs. 7, 33-35)

**Type locality.** Indonesia, West Sumatra, Haru Valley.

**Type material.** Holotype (♂): "INDONESIA / WEST SUMATRA, HARU / VALLEY env., 20 km N. of / Payakumbuh, 600 m alt., / V. 2007, St. Jakl lgt. // Coll. Masumoto / 2019". Paratypes: (2 ♀♀): same data as for the holotype.

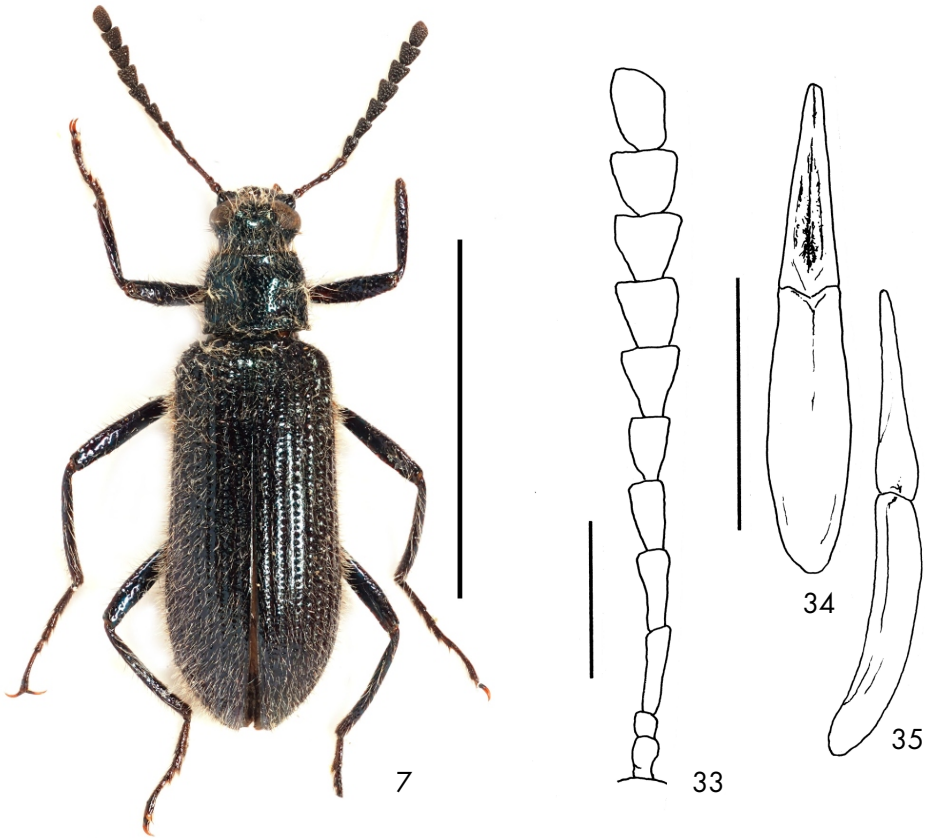
**Description of holotype.** Body 9.3 mm in length, BL/BW 3.1, a little fragile, rather elongate, weakly convex longitudinally. Head, pronotum, scutellum, elytra, prosternum, mesoventrite and abdomen black with feeble dark bluish lustre; metaventrite black with dark greenish lustre, antennae and legs black; hairs on major body surface pale yellow, those on ventral sides of tibiae and tarsi dark brown; dorsal and ventral surfaces weakly shining, except for seven apical antennomeres are mat; each surface mostly clothed with fairly long fine hairs, antennae clothed with short fine hairs; tibiae clothed with setaceous hairs on antero-ventral faces; tarsi densely clothed with setaceous hairs on ventral faces.

Head subelliptical; clypeus somewhat inverted trapezoidal, gently flattened in major basal part, rather steeply inclined apicad, rather closely punctate and haired, truncate at apex; fronto-clypeal suture nearly straight but indistinct; genae obliquely, moderately raised antero-laterad, scattered with small punctures with rather long hairs, with external margins rounded; frons fairly wide, gently inclined, hardly punctate in anterior part, closely, finely punctate in lateral parts; area between eyes with long hairs, and also with a shallow longitudinal median impression; vertex weakly convex, irregularly, finely punctate and haired. Eyes rather large, strongly convex laterad, obliquely inlaid into head; WE/ED 0.74. Antennae subfiliform with antennomeres weakly widened apicad; tip of antennomere XI barely reaching to basal 1/4 of elytra; LAI-XI: 0.23, 0.10, 0.46, 0.40, 0.33, 0.33, 0.35, 0.34, 0.31, 0.32, 0.39.

Pronotum subtrapezoidal with slightly rounded sides, PW/PL 1.3; apex nearly straight, rather boldly ridged, the ridge tapering laterad, sparsely punctate and minutely haired; base slightly wider than apex, finely bordered and ridged, the ridge sinuous in lateral parts, microscopically punctate and finely haired; front angles rectangle with rounded corners; hind angles acute; disc weakly convex, weakly depressed in antero-lateral and postero-lateral portions; surface except median portion rather closely, irregularly punctate, the punctures in lateral portions small and partly closely set, and each with a long hair; sides steeply inclined; the border of dorsal and ventral portions almost inconspicuous, only basal 1/4 ridged. Scutellum triangle with rounded apex, weakly convex in middle, scattered with minute punctures with fine hairs.

Elytra elongated subelliptical, EL/EW 2.3, EL/PL 5.0, EW/PW 1.5, widest at apical 3/8, very weakly narrowed basad, and roundly so posteriad from the widest point, slightly sinuous around

basal  $3/8$  in dorsal view; dorsum moderately convex, weakly, longitudinally flattened in antero-medial  $1/4$  (area around scutellar striae), highest at basal  $1/4$ ; disc with rows of punctures, whose bottoms are small and round, and tops (levels of elytral surface) are large and mostly subquadrate; the punctures in rows III and IV obviously large in anterior portion; intervals weakly microsculptured, scattered with minute punctures, each with a fine, fairly long hair; sides rather steeply declined to lateral margins, which are bordered by grooves with rows of punctures, and hardly visible from above; humeri weakly swollen, irregularly punctate and haired; apical portions simply rounded.



Figs. 7, 33-35, *Strongylium berambuthalum* sp. nov., holotype, ♂. 7, habitus; 33, antenna; 34, aedeagus (dorsal view); 35, ditto (lateral view). Scales: 5.0 mm for 7; 1.0 mm for 33-35.

Maxilla with terminal palpomere subsecuriform. Mentum inverted trapezoidal, raised antero-medially, sparsely punctate and haired in posterior part. Gula semicircular, weakly convex, slightly microsculptured.

Prosternum medium-sized; apex nearly straight, anterior part transversely rugose, posterior part weakly raised, rather coarsely punctate and haired; inter-procoxal space longitudinally hollowed, with areas surrounding procoxae rather strongly raised; prosternal process fairly large, depressed, roundly produced, sparsely punctate and haired. Mesoventrite rather short,

anterior and medial parts wide-subrhombically depressed, rather closely punctate and haired, with a glabrous convexity in antero-medial part; posterior part weakly, longitudinally inclined, finely punctate and haired, with areas surrounding antero-interior parts of mesocoxae rather strongly raised, irregularly punctate and haired. Metaventrite broad, wholly weakly microsculptured, with fine longitudinal median impression in posterior 3/4, basal part weakly convex, closely punctate and rugulose, each puncture with a fine hair, medial and posterior parts gently convex and weakly microsculptured, the medial part transversely rugulose, minutely punctate and finely haired, and the posterior part rather smooth, sparsely, minutely punctate and haired, antero-lateral parts distinctly closely punctate and clothed with long hairs.

Abdomen wholly weakly microsculpture; ventrite I to IV rather closely punctate and clothed with fairly long hairs, the punctures often a little transverse; ventrite V flattened and hardly punctate in medial part close to apex, the remaining parts minutely punctate and each puncture with a fine decumbent hair, the apex of the ventrite truncate and slightly pubescent.

Femora subclavate, minutely punctate and haired; profemora slightly gouged in basal halves on frontal faces; meso- and metafemora weakly gouged in basal halves on posterior faces. Tibiae finely punctate; protibiae very slightly curved inward, weakly gouged and subsetaceously haired in apical halves on anterior faces; mesotibiae weakly curved inward, slightly gouged and subsetaceously haired in apical halves on interior faces; metatibiae slightly curved inward, weakly gouged and setaceously haired in apical halves on interior faces. Tarsi rather long, densely, setaceously haired on ventral faces; LTB-A: 0.13, 0.09, 0.09, 0.10, 0.69; 0.57, 0.29, 0.20, 0.22, 0.68; 0.75, 0.27, 0.24, 0.70.

Aedeagus elongated subfusiform, 1.80 mm in length, 0.59 mm in width, weakly bent in medial part in lateral view; basale 1.02 mm in length, elongated elliptical, convex longitudinally; apicale elongated triangular, 0.78 mm in length, longitudinally grooved on median line, scattered with minute punctures in apical half, and those with prolonged apices.

**Females.** (n=2). The body a little bolder and clothed with slightly shorter hairs, the antennae shorter, and wider apicad, the eyes smaller, the inter-ocular space wider, the pronotum more closely punctate, the elytra with rows of punctures clearer, the legs bolder, shorter and not modified. Major body parts: BL 10.5-10.6 mm, BL/BW 2.9-3.0, WE/ED 1.07-1.20, PW/PL 1.4, EL/EW 1.8-1.9, EL/PL 4.4-4.8, EW/PW 1.6.

**Differential diagnosis.** The new hairy species somewhat resembles *Strongylium siphangngense* Masumoto, 2003, originally described from South Thailand based on a female. As compared with each female, the former can be distinguished from the latter by the body larger (8.6 mm, BL/BW 3.1 in the latter), the head narrower, the pronotum wider (PW/PL 1.3 in the latter), and the elytra a little bolder (EL/EW 2.1 in the latter) and punctures in rows stronger.

**Etymology.** The specific name, *berambuthalum*, is originated from Latinized Indonesian, "finely haired".

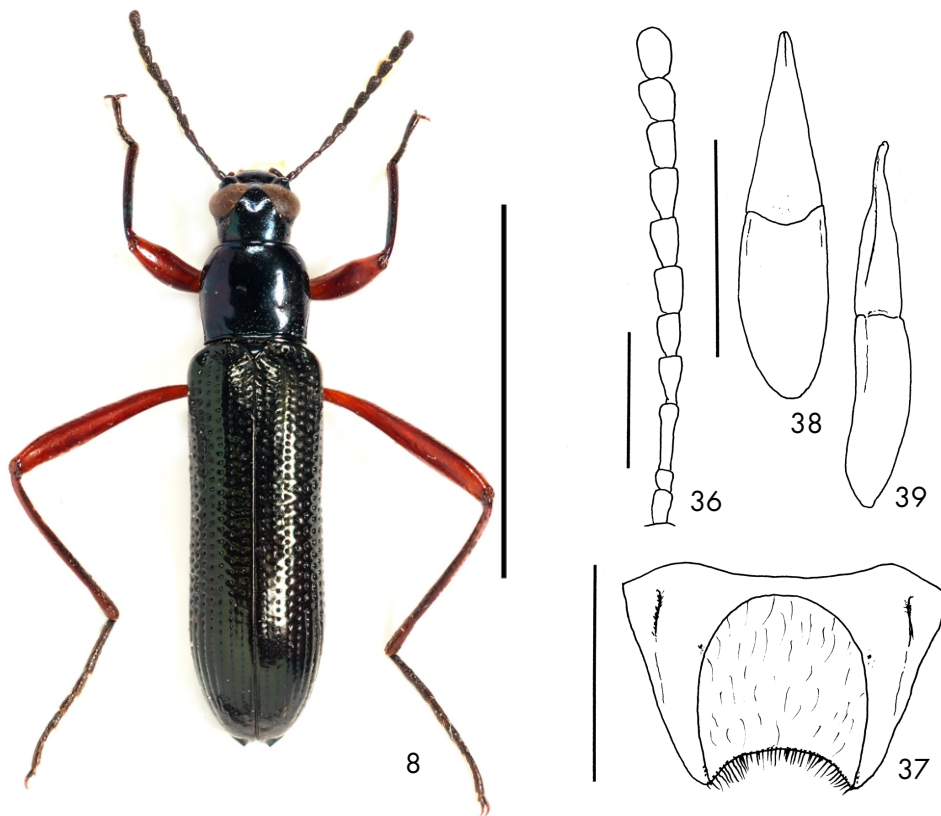
**Distribution.** West Sumatra.

### ***Strongylium lembahum* sp. nov.**

(Figs. 8, 36-39)

**Type locality.** Indonesia, West Sumatra, Haru Valley.

**Type material.** Holotype (♂): "INDONESIA / WEST SUMATRA, HARU / VALLEY env., 20 km N. of / Payakumbuh, 600 m alt., / V. 2007, St. Jakl lgt. // Coll. Masumoto / 2019". Paratypes: (2 ♀♀): same data as for the holotype.



Figs. 8, 36-39, *Strongylium lembahum* sp. nov., holotype, ♂. 8, habitus; 36, antenna; 37, ventrite V; 38, aedeagus (dorsal view); 39, ditto (lateral view). Scales: 5.0 mm for 8; 1.0 mm for 36-39.

**Description of holotype.** Body 9.5 mm in length, BL/BW 4.0, slender, convex longitudinally. Head, four basal antennomeres, pronotum, scutellum, and tibiae black with feeble purplish tinge, seven apical antennomeres black with very feeble brownish tinge, elytra black with feeble greenish tinge, fore and middle femora dark brown, ventral surface mostly dark blue and partly with feeble brownish tinge, hairs on legs mostly brownish black; dorsal surface moderately, slightly sericeously shining, three basal antennomeres and ventral surface weakly, sericeously shining, eight apical antennomeres mat, pro- and mesofemora moderately shining, pro- and mesotibiae moderately shining, tarsi mat; dorsal surface mostly glabrous, ventral surface partly finely haired, three basal antennomeres glabrous, eight antennomeres densely, minutely haired, femora almost glabrous, tibiae and tarsi haired, particularly, apico-interior faces of tibiae and ventral face of tarsi densely clothed with setaceous hairs.

Head longitudinally subrhombical, weakly microsculptered; clypeus subquadrate, flattened in basal half and inclined in apical half, sparsely, minutely punctate, with truncate apex; fronto-

clypeal suture nearly straight impressed, obliquely bent in lateral parts and reaching to external margins; genae obliquely raised antero-laterad, sparsely, minutely punctate, with external margins rounded; frons somewhat T-shaped, steeply inclined anteriorly, hardly punctate in anterior part, sparsely, minutely punctate in posterior part; area between eyes to vertex with a weak concavity; vertex weakly convex, sparsely, minutely punctate. Eyes fairly large, gently convex laterad, obliquely inlaid into head; WE/ED 0.25. Antennae slightly subclavate, tip of antennomere XI barely reaching to basal 1/10 of elytra; LAI-XI: 0.30, 0.09, 0.48, 0.32, 0.27, 0.28, 0.27, 0.28, 0.27, 0.26, 0.29.

Pronotum subquadrate with feeble rounded sides, PW/PL 1.1; apex nearly straight ridged, the ridge sparsely punctate in medial part, tapering laterad; base slightly wider than apex, slightly sinuate in lateral parts, bordered by rather deep impression and ridged, the ridge bolder than apical one, and sparsely, minutely punctate; front angles rounded; hind angles subrectangular with corners slightly acute; disc gently convex, weakly depressed in posterior portion, obliquely impressed in lateral portions close to base; pronotal surface very weakly microsculptured, sparsely minutely punctate; sides fairly steeply declined to lateral margins; which are bordered by fine impressions and very fine ridges, and barely visible from above (except for anterior portions are hardly visible due to lateral convexities). Scutellum nearly equilateral triangle with rounded sides, raised posteriorly, wholly microsculptured.

Elytra rather long, EL/EW 2.9, EL/PL 4.3, EW/PW 1.3, widest at apical 3/10, very weakly constricted in basal 1/3, roundly narrowed in apical 1/3; dorsum rather strongly convex longitudinally, highest at basal 1/5, weakly depressed in area around scutellar striae; disc with rows of punctures, the punctures in basal, interior and posterior portions small and round to subovate, those in medio-lateral portions large and often subquadrate; intervals microsculptured, nearly flat in interior portion, weakly convex in remaining portions, and often transversely connected with each other by ridges; sides rather steeply declined to lateral margins, which are bordered by grooves with rows of punctures, and hardly visible from above; humeri weakly swollen, microsculptured; apical portions roundly produced with apices noticeably dehiscent.

Maxilla with terminal palpomere gently dilated and subsecuriform. Mentum wide hexagonal, raised antero-medially, weakly microsculptured, sparsely punctate and haired in lateral and posterior parts. Gula somewhat parabolic, weakly convex, transversely microsculptured, finely bordered along lateral margins, the border rather strongly impressed in anterior parts, almost inconspicuous in basal parts.

Prosternum wide, microsculptured, apex very weakly emarginate and very finely ridged, anterior part slightly, transversely wrinkled and sparsely, minutely punctate, medial part raised, weakly, longitudinally rugulose, posterior part (inter-procoxal space) longitudinally hollowed medianly, interior borders of procoxae raised; prosternal process with basal part convex along median line, hollowed in lateral parts, ridged along lateral margins, and apex bluntly triangular. Mesoventrite short, anterior and medial parts depressed, microsculptured and sparsely punctate, gently convex in median part, posterior parts gently raised, microsculptured, minutely punctate and sparsely haired, weakly, longitudinally hollowed in area between mesocoxae, with areas surrounding mesocoxae strongly raised, microsculptured, rugoso-punctate and sparsely, finely haired. Metaventrite rather long, wholly weakly microsculptured, with a longitudinal median impression in posterior 4/7, basal part weakly convex, rugulose, inclined posteriorly, medial and posterior parts gently convex on both sides of the median impression, weakly depressed in postero-medial half, weakly obliquely wrinkled, minutely punctate, antero-lateral parts scattered with rather large punctures.

Abdomen microsculptured, sparsely, finely punctate; ventrite I to III weakly, longitudinally wrinkled; ventrite IV weakly transversely wrinkled; ventrite V subparabolically depressed in

middle, the depression sparsely clothed with fine long hairs, lateral edges of the depression with a pair of punctures, and the apex emarginate and clothed with brownish straight bristles.

Legs rather slender (hind legs lacking in the holotype). Femora subclavate, profemora gently produced along hind margin, nearly straight along front margin, weakly gouged in apical 1/3, mesofemora weakly produced apicad along front margins, nearly straight along hind margins, weakly gouged in apical 1/3. Tibiae closely, finely punctate, protibiae slightly curved ventrad, with ventral faces slightly gouged and subsetaceously haired in apical halves; mesotibiae long, weakly curved intero-ventrad, with interior face slightly gouged and rather sparsely subsetaceously haired in apical halves. Tarsi densely haired, particularly densely clothed with subsetaceous hairs on ventral sides, protarsi short and mesotarsi long; LTB-A: 0.12, 0.09, 0.07, 0.07, 0.40; 0.97, 0.34, 0.29, 0.20, 0.70; -, -, -, -.

Aedeagus subfusiform, 1.60 mm in length, 0.32 mm in width; basale 0.83 mm in length, subelliptical, moderately convex dorsad; apicale 0.77 mm in length, elongated triangular, weakly convex in medial part, minutely punctate in anterior part, each puncture with a microscopic spine, apices weakly prolonged and fairly acute.

**Females.** (n=2). The body a little larger and bolder, the antennae shorter and a little bolder, the inter-ocular space wider, the pronotum more noticeably punctate, the elytra with rows of punctures clearer, the legs bolder and not modified. Major body parts: BL 10.0-11.3 mm, BL/BW 4.2-4.3, WE/ED 0.50-0.54, PW/PL 1.1, EL/EW 3.0-3.2, EL/PL 3.7-3.8, EW/PW 1.2-1.3.

**Differential diagnosis.** The new species somewhat resembles *Strongylium shimogaense* Masumoto, 1997, described from South India, commonly in having slender bodies with smooth dorsal surfaces and rather long legs. The former can be distinguished from the latter by the smaller body (17–18 mm in the latter), the antennae obviously shorter, the pronotum with the apex slightly narrower than the base (obviously narrower than base in the latter), and the elytra slenderer (EL/EW 2.7 in the latter) with apices remarkably dehiscent (simply rounded in the latter).

**Etymology.** The specific name, *lembahum*, means a valley in Indonesian.

**Distribution.** West Sumatra.

### ***Strongylium pelangium* sp. nov.**

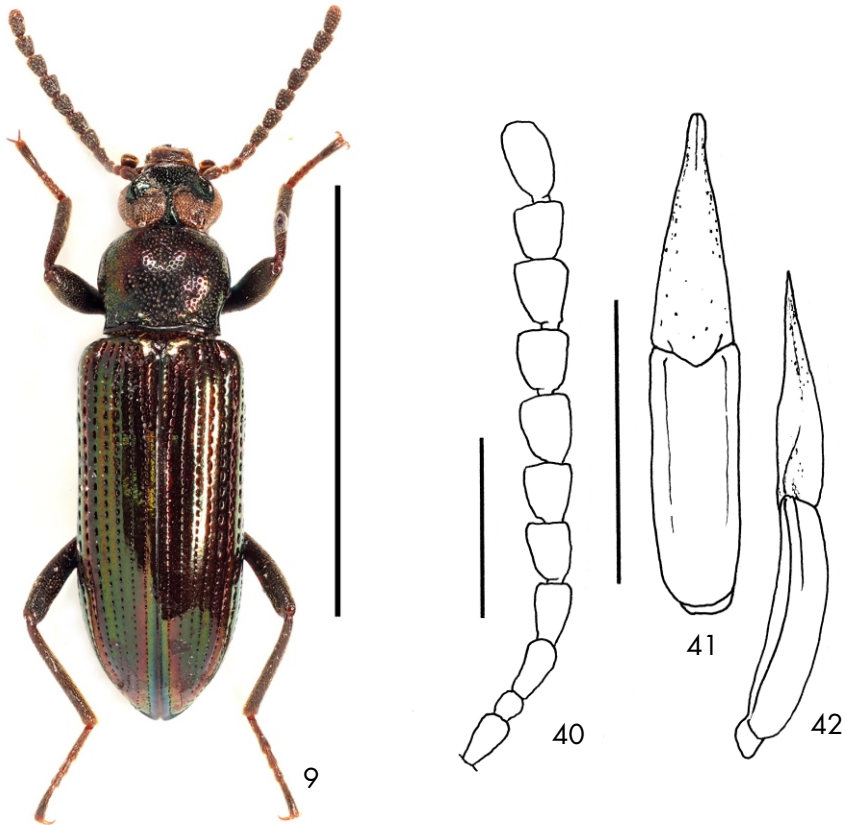
(Figs. 9, 40-42)

**Type locality.** Indonesia, West Sumatra, Haru Valley.

**Type material.** Holotype (♂): "INDONESIA / WEST SUMATRA, HARU / VALLEY env., 20 km N. of / Payakumbuh, 600 m alt., / V. 2007, St. Jaklgt. // Coll. Masumoto / 2019".

**Description of holotype.** Body 8.4 mm in length, BL/BW 3.4, elongated subelliptical, weakly convex longitudinally, very softly flattened longitudinally along median area; head, black with feeble dark greenish lustre; pronotum, scutellum, elytra and anterior portion of ventral surface blackish copper-coloured, postero-lateral portions of pronotum and antero-medial portions of elytra with weak bluish, greenish and purplish lustres by a certain light; four basal antennomeres and tarsi a little dark reddish brown, major posterior portions of ventral surface, femora and tarsi brownish black, hairs on surfaces mostly brownish yellow, those on ventral surfaces of tarsi darker in colour; anterior portion of head, moderately shining, posterior portion of head weakly,

sericeously shining, pronotum, scutellum, prosternum and abdomen moderately sericeously shining, elytra weakly metallicly, moderately shining, four basal antennomeres moderately shining, seven apical antennomeres mat, meso- and metaventrites weakly shining, femora, tibiae and tarsi hardly shining; major body almost glabrous, dorsal surface partly minutely haired, antennae and legs fairly closely, very minutely haired, ventral surface partly clothed with decumbent hairs, ventral faces of tibiae and tarsi densely clothed with rather longer, somewhat setaceous hairs.



Figs. 9, 40-42, *Strongylium pelangium* sp. nov., holotype, ♂. 9, habitus; 40, antenna; 41, aedeagus (dorsal view); 42, ditto (lateral view). Scales: 5.0 mm for 9; 1.0 mm for 40-42.

Head subquadrate, weakly microsculptured; clypeus somewhat inverted trapezoidal, widely flattened and gently inclined in basal part, rather closely finely punctate, each puncture with minute subdecumbent hairs, rather steeply inclined in apical part, with apex widely rounded; fronto-clypeal suture nearly straight and clearly impressed, curved latero-antierad in lateral parts and extending to external margins; genae moderately, obliquely raised antero-laterad, irregularly scattered with small punctures and a little rugulose, with external margins rounded; frons ridged in T-shape, rather steeply inclined, sparsely scattered with small punctures; area between eyes somewhat triangularly raised, very weakly, longitudinally depressed along median

line, which extends to vertex; vertex weakly convex, closely, finely punctate, inclined posteriad. Eyes very large, strongly convex laterad, obliquely inlaid into head; inter-ocular space narrow, WE/ED 0.02. Antennae thinly subclavate; tip of antennomere XI barely reaching to basal 1/5 of elytra; LAI-XI: 0.34, 0.12, 0.29, 0.28, 0.33, 0.33, 0.32, 0.31, 0.29, 0.28, 0.39.

Pronotum somewhat inverted subtrapezoidal with sides rounded in major anterior portions and sinuous in basal portions, PW/PL 1.2; apex nearly straight, finely ridged; base almost as wide as apex, finely bordered and ridged, the ridge obviously bolder than that of base, sinuous in lateral parts, and microscopically punctate; front angles rounded; hind angles subrectangular; disc gently convex, weakly depressed in antero-medial portion and basal portions, also weakly depressed in postero-lateral portions; surface weakly microsculptured, rather closely punctate, each puncture with a minute hair at the centre; sides convex laterad in anterior 3/5, noticeably sinuous in posterior 2/5, fairly steeply declined to lateral margins, which are finely bordered and finely ridged, the ridge almost wholly visible from above, the border becoming deeper posteriad and forming a deep impression before hind angle. Scutellum triangle with rounded sides, slightly raised posteriad, weakly convex in middle, weakly microsculptured and scattered with minute punctures.

Elytra elongated subelliptical, EL/EW 2.3, EL/PL 3.9, EW/PW 1.3, widest at base, slightly narrowed posteriad in basal 2/3 and roundly narrowed in apical 1/3, very weakly sinuous in basal 3/7 in dorsal view; dorsum moderately convex, very weakly flattened in antero-medial half, highest at basal 1/4; disc with rows of punctures, which are longitudinally ovate, rows I and II with punctures small, closely set and striated, row III to VIII with punctures large and sparsely set in anterior and medial portions, those in posterior portions becoming smaller, closer and striated; intervals nearly flat to only slightly convex in antero-interior and posterior portions, moderately convex in antero-lateral portions, weakly microsculptured, often transversely micro-aciculate, and sparsely scattered with minute puncture; sides rather steeply declined to lateral margins, which are bordered by grooves with rows of punctures, and hardly visible from above; humeri moderately swollen, microsculptured, irregularly scattered with minute punctures; apical portions of elytra slightly produced.

Maxilla with terminal palpomere fairly strongly dilated and subsecuriform. Mentum inverted triangular, widely convex and smooth in medial part, depressed in lateral parts, somewhat longitudinally wrinkled and sparsely haired in anterior part. Gula broad, semicircular and smooth, with a pair of short impressions on the border of ventral part of head in anterior parts.

Prosternum marginate and finely ridged; anterior part microsculptured, rather closely and strongly punctate; posterior part including inter-procoxal space fairly strongly raised, minutely punctate and haired; inter-procoxal space longitudinally hollowed, with areas surrounding procoxae strongly raised; prosternal process fairly large, depressed, microsculptured, sparsely punctate and haired, gently roundly produced in lateral parts, triangular in apical part, with a tubercle at apex. Mesoventrite short and small; major anterior part strongly, somewhat triangularly depressed, mostly concealed under posterior part of prosternum, microsculptured and coarsely punctate; posterior part fairly strongly raised in V-shape, microsculptured and finely, sparsely haired. Metaventrite medium-sized, weakly convex in medial part, inclined laterad on both sides, impressed on median line in posterior half; major medial part microsculptured, minutely punctate, each puncture with a fine decumbent hair; lateral marginal parts scattered with large punctures with subdecumbent hairs.

Abdomen wholly weakly microsculptured; ventrite I to III rather closely punctate, each puncture with a fine decumbent hair; ventrites IV and V more closely, finely punctate and haired than I to III; ventrite V weakly, subelliptically depressed in apical part, with apex neither truncate, nor emarginated, just roundly curved.



Middle legs lost in the holotype. Femora subclavate, minutely punctate and finely haired. Protibiae nearly straight, gently becoming bolder apicad, closely, minutely punctate and finely haired; metatibiae slightly curved inward in apical parts, rather coarsely punctate, finely haired in dorsal parts, setaceously haired in apico-ventral parts. Tarsi rather long, densely, finely haired in dorsal parts, setaceously haired in ventral parts; LTB-A (middle legs lacking): 0.16, 0.10, 0.09, 0.10, 0.59; -,-,-,-,-; 0.61, 0.26, 0.24, 0.60.

Aedeagus subfusiform, 1.65 mm in length, 0.25 mm in width, weakly bent at the border of basale and apicale; basale 0.78 mm in length, weakly widened anteriad, convex longitudinally in dorsal view, gently curved in lateral view; apicale elongated triangular, 0.70 mm in length, longitudinally gently convex, weakly curved in lateral view, scattered with minute punctures, which become more distinct in apical part; apices weakly prolonged.

**Female.** Unknown.

**Differential diagnosis.** The new species belongs to the species group of *Strongylium aciculatum*. The new species resembles *Strongylium maruyamaianum* Masumoto & Akita, 2008, originally described from West Malaysia, Cameron Highlands, but can be distinguished from the latter by the eyes larger (WE/ED 0.09 in the latter) and more strongly convex laterad, the pronotum more strongly sinuous in basal portions; the elytra shorter (EL/EW 2.5, EL/PL 4.1 in the latter), the aedeagus shorter (1.84 mm in the latter) and the apicale elongated triangular (rather spatulate in the latter).

**Etymology.** The stem of the specific name, *pelangi*, means the rainbow in Indonesian.

**Distribution.** West Sumatra.

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