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New Tenebrionid Beetles of the Tribes Strongyliini, Misolampini and Adeliini (Coleoptera) from Northern Vietnam¹⁾

By

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Abstract A new genus and species of the tenebrionid tribe Strongyliini and a new genus and species of the tribe Misolampini are described under the names *Saitostrongylium acco* gen. et sp. nov. and *Uenomisolampidius shunichii* gen. et sp. nov. Besides, four new *Laena* species of the Adeliini are also described: *L.* (s. str.) *acco* sp. nov., *L.* (s. str.) *hystrix* sp. nov., *L.* (s. str.) *sapa* sp. nov., *L.* (s. str.) *hoanglienensis* sp. nov. All the specimens of the new species were collected in broadleaved forests of northern Vietnam.

In the course of the entomological survey in northern Vietnam made by the National Science Museum, Tokyo, in the spring of 1995, Dr. S.-I. UÉNO and Dr. A. SAITO made a small collection of tenebrionid specimens in the thick forests on Mt. Tan Vien in Ha Tay Prov., Phang Si Pang in Lai Chau Prov., and Truong Yen of Moc Chau in Son La Prov. They were submitted to the present author for taxonomic study.

It has become apparent that the collection contains six species of three different genera. The first and second species are so peculiar in body shape as have never come to the author's hands. He was unable to decide their taxonomic position on the spot. The remaining four belong to the adeliine genus *Laena* and are new to science at first sight.

On the occasion of visiting the Natural History Museum, London and the Muséum National d'Histoire Naturelle, Paris, in the autumn of the same year, the author took the first two species along for a comparative study and for finding out any similar species in the collections of those museums. Besides, I sent one of the specimens to Dr. O. MERKL of the Természettudományi Múzeum for asking for his opinion. Finally, the author has come to the conclusion that those two are new to science and that a new genus should be erected for each species.

Thus, in the present paper, two new species, each belonging to a new genus of a different tribe, Strongyliini and Misolampini, and also four new species belonging to the adeliine genus *Laena*, will be described.

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Before going into further details, the author wishes to express his heartfelt thanks to Dr. Shun-Ichi UÉNO, Emeritus curator, National Science Museum (Nat. His.), Tokyo, and Dr. Akiko SAITO, curator at the Natural History Museum and Institute, Chiba, who submitted important materials to the author for taxonomic study. Thanks are also due to Dr. Claude GIRARD, Muséum National d'Histoire Naturelle, Paris, Mr. Malcolm KERLEY, the Natural History Museum, London, and Dr. Ottó MERKL, Természettudományi Múzeum, Budapest, for their kind help extended to the author's study. Appreciations are due to Dr. Yasuhiko HAYASHI of Kawanishi City, Dr. Makoto KIUCHI, National Institute of Sericulture and Entomology, Tsukuba City, and Mr. Seiji MORITA of Tokyo, for taking photographs inserted in the present paper.

All the holotypes to be designated are deposited in the collection of the Department of Zoology, National Science Museum (Nat. Hist.), Tokyo.

Tribe Strongyliini

Genus *Saitostrongylium* gen. nov.

Type species. *Saitostrongylium acco* sp. nov.

Body small, rather oblong-oval, strongly convex above, distinctly constricted between prothorax and hind body. Apterous.

Head with rather small eyes; antennae not so slender, with stellate sensoria on apical seven segments. Pronotum with fore and hind margins not bordered; sides not bordered or sutured, smoothly extending to underside; disc quadrifid, the tubercles being armed with peculiar processes. Scutellum invisible. Elytra ovoid, coarsely punctate, odd intervals often with ridges or gibbosities; epipleura not entire. Prosternum only weakly raised between coxae, with prosternal process wide but depressed, hardly produced; mesosternum short, raised only between mesocoxae, with mesosternal fossa broad and shallow. Legs without any peculiarities.

Notes. The genus nearest to this new one is *Eucrossoscelis* NAKANE, 1963, erected for *E. broscosomoides* NAKANE, 1963, from Amami-oshima Island, but the present genus can be distinguished from it by the robuster body, the shorter and a little thicker antennae, the modified pronotal surface and the distinctly modified elytral intervals.

Saitostrongylium acco gen. et sp. nov.

(Figs. 1 & 3)

Yellowish brown, with gibbosities on elytra and eyes black, each surface gently shining except for elytra, which are vitreously shining. Body rather

oblong-oval, strongly convex above, distinctly constricted between prothorax and hind body. Apterous.

Head subdecagonal, closely punctate, the punctures often fused with one another and forming rugosities; clypeus subelliptical, truncate and finely membranous in front; genae roundly projected obliquely laterad; frons wide, gradually raised posteriad; eyes not so large and oblique, convex laterad and upwards, diameter a little more than 3 times the width of an eye diameter; vertex with a pair of low tubercles in middle. Antennae reaching basal 1/5 of elytra, feebly thickened towards apical segment, ratio of the length of each segment from basal to apical: 0.32, 0.2, 0.36, 0.27, 0.24, 0.25, 0.24, 0.27, 0.25, 0.25, 0.3.

Pronotum slightly wider than long, widest a little before the middle, wider at apex than at base, closely and often rugosely punctate; apex almost straight and not bordered; base slightly produced posteriad, not bordered; sides gently produced laterad and sinuous before hind angles in dorsal view, not bordered but extending to underside; front angles rounded, hind angles slightly angulate; disc strongly convex, with two pairs of erected processes, one at basal 1/4 and the other at the middle. Scutellum invisible.

Elytra ovoid, about 1.5 times as long as wide, 2.5 times the length and 1.5 times the width of pronotum, widest at basal 2/5; dorsum strongly convex, highest at basal 1/3; disc with rows of coarse punctures, which are often fused with one another and/or become foveate; intervals irregularly convex, often fused somewhat transversely, with odd intervals often forming ridges or tubercles; sutural interval finely ridged, 3rd with 3 irregularly shaped large gibbosities and some smaller ones, 5th with a short ridge at basal 1/4 and a longer ridge at posterior 1/3, 7th with a lower ridge in posterior portion; apices roundly produced posteriad; epipleuron present in posterior half.

Prosternum only weakly raised between coxae, with prosternal process wide, depressed and hardly produced; mesosternum short, gently raised only between mesocoxae, with mesosternal fossa broad and shallow; metasternum short but wide.

Legs rather slender, without any characteristics; ratios of the lengths of pro-, meso- and metatarsomeres: 0.4, 0.28, 0.31, 0.27, 1.2; 0.56, 0.31, 0.27, 0.29, 1.24; 0.72, 0.35, 0.32, 1.26.

Male genitalia elongated fusiform, 1.5 mm in length and 0.2 mm in width, apices of fused lateral lobes sharply pointed.

Body length: 5.4 mm.

Holotype: ♂, Phang Si Pang, 1,950 m alt., Lai Chau Prov., 13-V-1995, A. SAITO leg., in NSMT.

Notes. The single specimen known of this interesting species was found on the trunk of a dead fallen tree lying at the side of a mountain stream.

Tribe Misolampini

Genus *Uenomisolampidius* gen. nov.

Type species. *Uenomisolampidius shunichii* sp. nov.

Body small (5–6 mm), oblong-oval and strongly convex, distinctly constricted between prothorax and hind body. Apterous. Clypeus truncate and finely membranous in front; antennae rather slender though slightly thickened towards apical portions, with stellate sensoria on 5 apical segments. Pronotum hemispherical; apex finely bordered; base not bordered; sides steeply inclined, without suture or ridge, enclosing underside; front angles rounded and finely bordered; hind angles feebly angulate, not bordered. Scutellum invisible. Elytra ovoid, punctato-striate; epipleura existing in posterior portions. Prosternum strongly raised between coxae, with prosternal process depressed and feebly produced posteriad; mesosternum short, raised in a V-shape in posterior portion, with triangular fossa rather deep. Legs without any peculiarities.

Uenomisolampidius shunichii gen. et sp. nov.

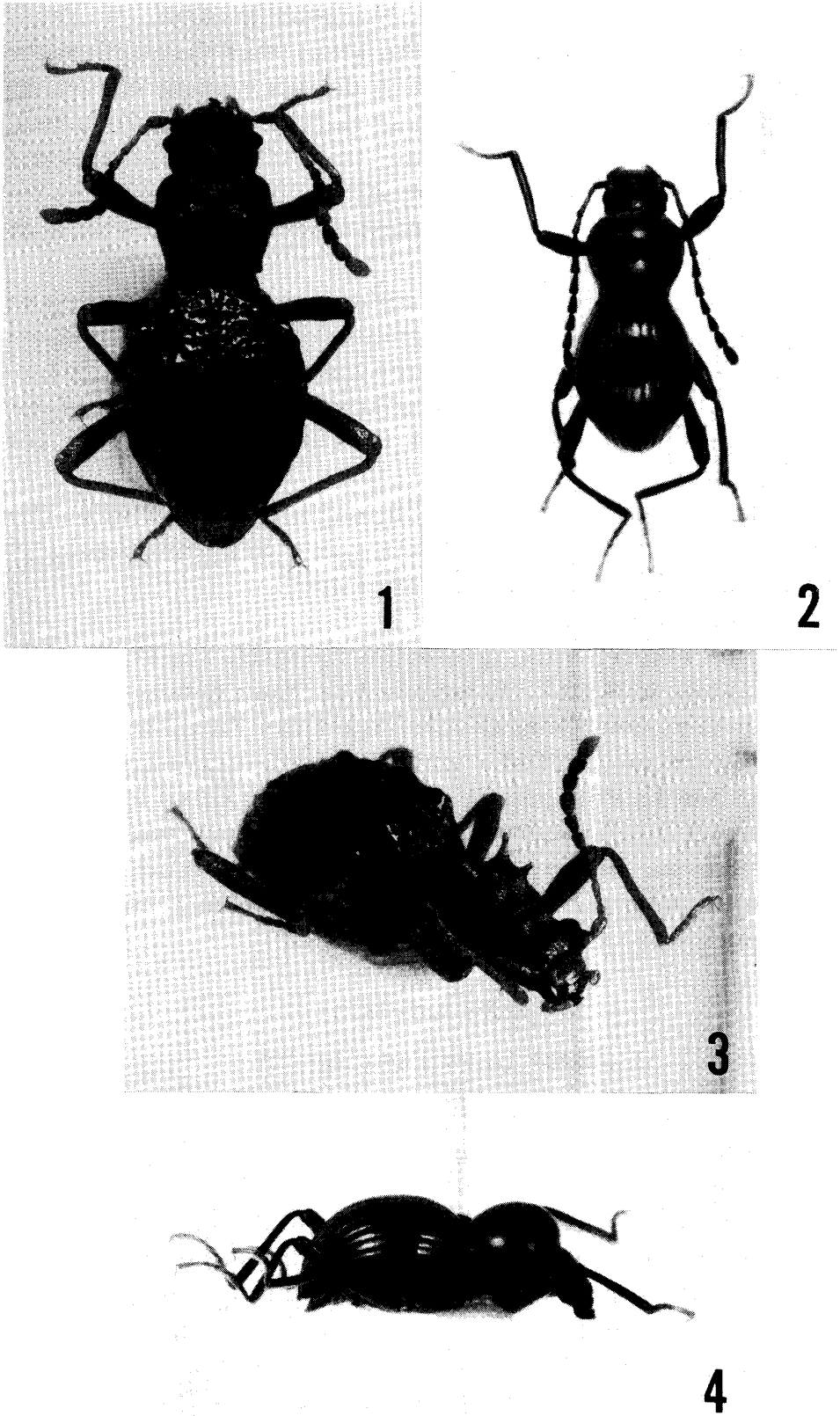
(Figs. 2 & 4)

Dark reddish brown, with antennae, eyes, lateral portions of elytra, femora and tibiae, etc., blackish, almost wholly darkened in certain individuals; each surface vitreously shining. Body oblong-oval and strongly convex, distinctly constricted between prothorax and mesothorax. Apterous.

Head almost rounded, irregularly scattered with small punctures; clypeus semicircular, closely and finely punctate, strongly projected apico-ventrad; gena before eye rather small, roundly raised obliquely forwards; frons rather steeply declined to semicircular fronto-clypeal suture, convex posteriad; eyes medium-sized, convex laterad and triangularly inlaid into head, interocular space about 1.3 times the width of an eye diameter. Antennae rather slender though slightly thickened towards apical segments, reaching basal 1/5 of elytra, with stellate sensoria on 5 apical segments, ratio of the length of each segment from basal to apical: 0.39, 0.2, 0.61, 0.5, 0.51, 0.48, 0.47, 0.46, 0.44, 0.42, 0.63.

Pronotum almost as wide as long, widest slightly before the middle, hemispherically convex, polished and slightly micro-shagreened; apex feebly produced forwards and finely bordered; base nearly straight and not bordered; sides steeply inclined and extending to underside, without any sutures or margins; front angles rounded and finely bordered; hind angles feebly angulate and slightly ridged,

Figs. 1–4. — 1 & 3. *Saitostrongylium acco* gen. et sp. nov.; 1, habitus, holotype, ♂; 2, fore body seen from antero-dorsal angle. — 2 & 4. *Uenomisolampidius shunichii* gen. et sp. nov.; 2, habitus, holotype, ♂; 4, lateral view.



Figs. 1-4.

underside of the ridge weakly impressed. Scutellum invisible.

Elytra ovoid, 1.4 times as long as wide, about twice the length and 1.4 times the width of pronotum, widest at basal 2/5; dorsum strongly convex, highest at basal 1/3; disc finely punctato-striate; intervals wide and gently convex, microscopically and transversely aciculate; sides steeply declined to lateral margins, which enclose hind body; apices gently produced posteriad; epipleuron visible in an area from the level of the posterior portion of metasternum to the apex of anal sternite.

Prosternum strongly raised between coxae, with prosternal process depressed and feebly produced posteriad; mesosternum short, raised in a V-shape in posterior portion, with a rather deep triangular fossa; metasternum short but wide.

Legs rather slender, without any peculiar modifications, ratios of the lengths of pro-, meso- and metatarsomeres: 0.64, 0.27, 0.24, 0.23, 1.2; 0.81, 0.48, 0.33, 0.34, 1.22; 1.39, 0.68, 0.62, 1.33.

Male genitalia rather slender, 1.5 mm in length, 0.26 mm in width (the widest point at the middle of basal piece), distinctly constricted between basal piece and fused lateral lobes, whose apices are gently pointed.

Body length: 5.3–6.3 mm.

Holotype: ♂, Mt. Tan Vien, 1,050 m alt., Ba Vi, Ha Tay Prov., 28-IV-1995, Shun-Ichi UÉNO leg., in NSMT. Paratypes: 1 ex., same data as for the holotype; 2 exs., Mt. Tan Vien, 690–900 m alt., Ba Vi, Ha Tay Prov., 28-IV-1995, Akiko SAITO leg. (one paratype in CBM, CBM-ZI 34027); 2 exs., Truong Yen, 950 m alt., Moc Chau, Son La Prov., 30-IV-1995, Shun-Ichi UÉNO leg.

Notes. On Mt. Tan Vien, the type locality, the present species was found on dead trunks of trees standing in an evergreen broadleaved forest. At Truong Yen, the two specimens were found at a decayed part of the trunk of a large tree standing in a thick tropical broadleaved forest.

Tribe Adeliini

Laena (s. str.) *acco* sp. nov.

(Fig. 5)

Piceous, with antennae, tibiae, tarsi, mouth parts, etc., yellowish brown, each surface almost glabrous and vitreously shining. Body oblong-oval, rather strongly convex above, distinctly constricted between prothorax and mesothorax.

Head subhexagonal, gradually raised posteriad, coarsely and irregularly punctate; clypeus short, transversely subhexagonal; gena before eye raised, with outer margin obtusely angulate; frons moderately declined to fronto-clypeal suture, which is finely sulcate and rather distinctly impressed on each side; eyes medium-sized, convex laterad, diameter about 5 times the width of an eye diameter. Antennae reaching basal portion of elytra, ratio of the length of each segment

from basal to apical: 0.38, 0.2, 0.36, 0.29, 0.28, 0.28, 0.27, 0.27, 0.26, 0.23, 0.39.

Pronotum longitudinally subelliptical, 1.2 times as wide as long, widest a little before the middle, apex wider than base; apex straight, not bordered; base feebly rounded and finely bordered; sides steeply declined to lateral margins, which are finely bordered but invisible from above; disc irregularly and not closely scattered with coarse punctures, each with a short bent hair.

Elytra ovoid, 1.4 times as long as wide, 2.5 times the length and a little more than 1.6 times the width of pronotum, widest at basal $\frac{3}{8}$; dorsum rather strongly convex, highest at basal $\frac{1}{3}$; disc with rows of punctures, distance between them 1–2 times their own diameter; intervals slightly convex, 3rd interval with a setiferous umbilicate pore closely near base, 9th with three: one at basal $\frac{1}{4}$ and another at apical $\frac{1}{5}$, each closely near 8th row of punctures, and also with the other at apical $\frac{1}{10}$ on the middle of interval; apices roundly produced posteriad.

Femora rather strongly thickened in middle, with upper- and undersides of each apex slightly lobed; ratios of the lengths of pro-, meso- and metatarsomeres: 0.59, 0.36, 0.33, 0.31, 1.2; 0.64, 0.52, 0.39, 0.24, 1.23; 1.21, 0.69, 0.34, 1.48.

Body length: 7.2 mm.

Holotype: ♀, Phang Si Pang, 1,950 m alt., Lai Chau Prov., 11–V–1995, Akiko SAITO leg., in NSMT.

Laena (s. str.) *hystrix* sp. nov.

(Fig. 6)

Blackish brown, with antennae, femora, tibiae, mouth parts, etc., lighter in colour, maxillary palpi, tarsi and hairs on surfaces pale yellowish brown; each surface moderately shining and distinctly clothed with rather long bent hairs. Body rather elongate and gently convex above, strongly constricted between prothorax and mesothorax.

Head subhexagonal, gently convex above, strongly punctate; clypeus transversely subhexagonal, bordered by sulci from genae and frons; gena before eye feebly raised and glabrous, obtusely produced antero-laterad; frons wide, smoothly continuing to vertex; eyes rather small, convex laterad, diameter about 6 times the width of an eye diameter. Antennae short and hardly reaching base of elytra, ratio of the length of each segment from basal to apical: 0.4, 0.2, 0.27, 0.26, 0.24, 0.21, 0.22, 0.24, 0.23, 0.26, 0.29.

Pronotum subcordate, slightly wider than long, widest at apical $\frac{1}{3}$, apex wider than base; apex nearly straight, not bordered; base very slightly produced, not bordered; sides gently declined to lateral margins, which are finely bordered and feebly serrate; front angles rounded, hind angles obtusely angulate; disc gently convex, strongly and not so closely punctate.

Elytra ovoid, 1.6 times as long as wide, about twice the length and 1.2 times

the width of pronotum, widest at the middle; dorsum gently convex though widely flattened in middle; disc rather strongly punctato-striate, each puncture with a long, slightly bent hair; intervals noticeably convex, with a row of sparse punctures, each sometimes with a fine indistinct hair; 3rd interval with two setiferous umbilicate pores, one at base and the other at apical 1/9, 7th with one at basal 1/8, 9th with 10: 1st at basal 1/10, 2nd at basal 1/5, 3rd at basal 1/3, 4th at the middle, 5th at apical 3/8, 6th at apical 2/7, 7th at apical 1/4, 8th at apical 1/6, 9th at apical 1/8, and 10th at apical 1/10; apices rather strongly produced posteriad.

Legs without any peculiarities; ratios of the lengths of pro-, meso- and metatarsomeres: 0.34, 0.23, 0.22, 0.24, 1.04; 0.36, 0.27, 0.24, 0.23, 1.13; 0.86, 0.53, 0.26, 1.23.

Body length: 4.3 mm.

Holotype: ♀, Mt. Tan Vien, 1,150 m alt., Ba Vi, Ha Tay Prov., 28-VI-1995, Shun-Ichi UENO leg., in NSMT.

Notes. The specimen recorded above is said to have been sifted out from a heap of dead leaves in a grove of arrow-bamboo just below the summit of the mountain.

Laena (s. str.) *sapa* sp. nov.

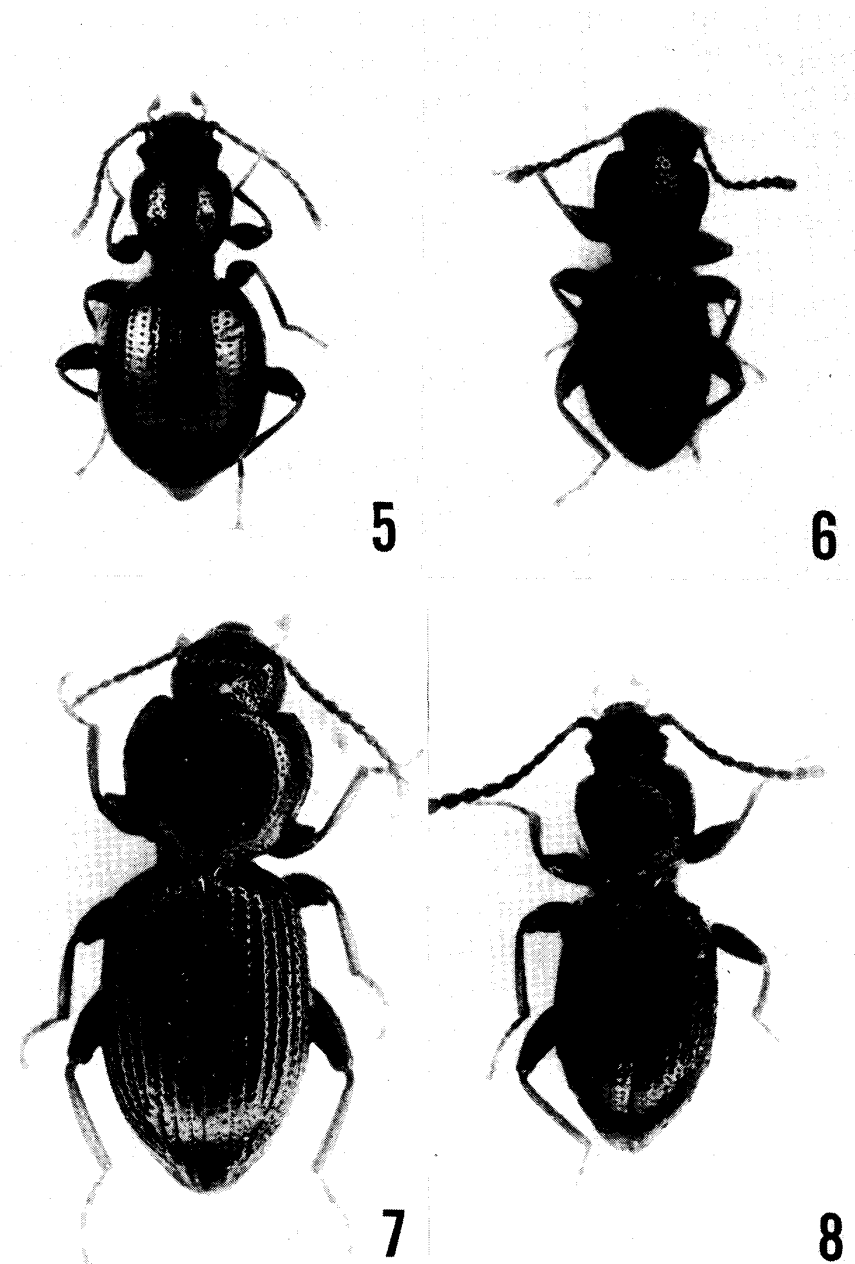
(Fig. 7)

Brownish black, with basal halves of antennae, femora and tibiae, etc., dark reddish brown, apical halves of antennae, tarsi and mouth parts yellowish brown, hairs on surfaces golden yellow; each surface moderately and somewhat vitreously shining. Body rather elongate, gently convex above and feebly flattened widely in medial portion, constricted between fore and hind bodies.

Head subdecagonal, gently inclined forwards, coarsely and irregularly punctate; clypeus somewhat transversely hexagonal, bordered from genae and frons by a fine sulcus; gena gently swollen and glabrous, only feebly produced laterad; frons wide and flattened; eyes small, obtusely convex laterad, diameter about 1/11 times the width of an eye diameter in dorsal view. Antennae reaching basal 1/5 of pronotum, ratio of the length of each segment from basal to apical: 0.39, 0.2, 0.37, 0.34, 0.33, 0.33, 0.34, 0.35, 0.34, 0.34, 0.38.

Pronotum subcordate, gently convex above and widely flattened medially, widest at apical 1/3, apex wider than base, feebly microsculptured and irregularly and not closely punctate, each puncture with a hair; apex weakly arcuate posteriad and not bordered; base feebly produced posteriad and not bordered; sides gently declined to lateral margins, which are finely bordered and slightly serrate; front and hind angles rounded though the latter are wider than the former.

Elytra elongate-oval, 1.6 times as long as wide, a half the length of and



Figs. 5-8. Habitus of *Laena* spp. — 5. *L.* (s. str.) *acco* sp. nov., holotype, ♀. — 6. *L.* (s. str.) *hystrix* sp. nov., holotype, ♀. — 7. *L.* (s. str.) *sapa* sp. nov., holotype, ♀. — 8. *L.* (s. str.) *hoanglienensis* sp. nov., holotype, ♂.

slightly wider than pronotum, widest a little before the middle; dorsum gently convex, highest at basal 1/3; disc punctato-striate, the striae shallow, and the punctures finely haired and clearly notching intervals; intervals gently convex, with a row of sparse punctures, each with a fine hair, which is usually longer or more distinct than those of strial punctures; 3rd interval with a setiferous

umbilicate pore at apical $1/6$, 7th with one at basal $1/8$, 9th with 9: 1st at basal $1/10$, 2nd at basal $1/5$, 3rd at basal $3/8$, 4th at the middle, 5th at apical $1/3$, 6th at apical $3/10$, 7th at apical $1/5$, 8th at apical $1/6$, and 9th at apical $1/12$; apices obtusely produced posteriad.

Meso- and metatibiae slightly lobed at inner apices of dorsal and ventral margins; ratios of the lengths of pro-, meso- and metatarsomeres: 0.62, 0.29, 0.25, 0.22, 1.2; 0.72, 0.51, 0.28, 0.21, 1.21; 1.47, 0.68, 0.32, 1.47.

Body length: ca. 8 mm.

Holotype: ♀, Phang Si Pang, N side, 1,970 m alt., Hoang Lien Son Mts., Lai Chau Prov., 11-V-1995, S.-I. UENO leg., in NSMT.

Laena (s. str.) *hoanglienensis* sp. nov.

(Fig. 8)

Blackish brown, with clypeus, antennae (except for 11th segment), mouth parts, femora and tibiae, etc., reddish brown, tarsi, maxillary palpi, 11th segment of antennae and hairs on surfaces yellowish brown, each surface rather strongly and somewhat vitreously shining, rather closely clothed with long bent hairs. Body rather elongate, strongly convex above though feebly flattened medially, strongly constricted between fore and hind bodies.

Head somewhat transversely elliptical, feebly convex above, coarsely punctate; clypeus transversely hexagonal, bordered by a fine sulcus from genae and frons; gena distinctly swollen, impunctate and glabrous, roundly produced antero-laterad; frons somewhat trapezoidal, gently inclined forwards; eyes medium-sized, rather strongly convex laterad, diameter about 5 times the width of an eye diameter. Antennae reaching base of elytra, ratio of the length of each segment from basal to apical: 0.47, 0.2, 0.37, 0.31, 0.31, 0.38, 0.36, 0.34, 0.35, 0.31, 0.61.

Pronotum somewhat trapezoidal, slightly wider than long, apex wider than base, widest at apical $1/3$; apex nearly straight, not bordered; base feebly produced, finely bordered; sides gently declined to lateral margins, which are finely bordered and slightly serrate; front angles narrowly rounded, hind angles widely so; disc gently convex, not closely scattered with coarse punctures, each with a rather long and bent hair.

Elytra elongate-ovoid, 1.7 times as long as wide, 2.4 times the length and 1.4 times the width of pronotum, widest at basal $2/5$; dorsum gently convex, though feebly flattened in basal portions; disc punctato-striate, the striae shallow and often disappearing, the punctures rather strong, each with a long bent hair; intervals gently convex, with a row of haired punctures, which are sparsely set, the hairs being finer than those in the rows of strial punctures; 3rd interval with a setiferous umbilicate pore at apical $1/8$, 6th with one at basal $1/24$ and distinctly projected obliquely laterad, 8th with four ones, 1st at basal $1/6$ and distinctly

projected laterad, 2nd at apical 2/5, 3rd at apical 2/7, and 4th at apical 1/9; apices weakly produced apicad.

Legs without any peculiarities; ratios of the lengths of pro-, meso- and metatarsomeres: 0.48, 0.32, 0.31, 0.28, 1.2; 0.78, 0.44, 0.33, 0.24, 1.2; 1.2, 0.68, 0.35, 1.48.

Male genitalia elongated fusiform, about 1.2 mm in length and 0.16 mm in width (widest at the middle of basal piece); lateral lobes short and small (about 1/5 times the length of basal piece), with apices not pointed.

Body length: ca. 4.8 mm.

Holotype: ♂, Phang Si Pang, north side, 1,950 m alt., Hoang Lien Son Mts., Lai Chau Prov., 17-V-1995, S.-I. UENO leg., in NSMT.

Notes. The type specimens of the three species, *L. acco*, *L. sapa* and *L. hoanglienensis* were sifted out from heaps of dead leaves in a temperate broad-leaved forest along a narrow stream and its branches on the northern slope of Mt. Phang Si Pang, the highest mountain in the Indo-Chinese Peninsula. All of them appeared very scarce, since only single specimens were collected during days of survey made by most experienced researchers.

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