

Two New Apterous *Lathrobium* (Coleoptera, Staphylinidae) from the Ta-hsüeh Shan Mountains in Taiwan

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Abstract Two new apterous *Lathrobium* are described and illustrated under the names *L. (s. str.) taiwanense* and *L. (s. str.) shaolaiense*. The former was obtained from the upper hypogean zone on Mt. Hsiao-hsüeh Shan and the latter from the humous zone on Mt. Shao-lai Shan, both lying on the Ta-hsüeh Shan Mountains in Taichung Hsien, Taiwan.

No apterous staphylinids of the genus *Lathrobium* have hitherto been recorded from Taiwan. Through the courtesy of Dr. Shun-Ichi UÉNO, I had an opportunity to examine two apterous *Lathrobium* which had been found from the upper hypogean and humous zones of two different mountains in Taichung Hsien, Taiwan. One of them, obtained on Mt. Hsiao-hsüeh Shan, belongs to the group of *L. nomurai* because of having non-transverse head and elytra and inconspicuous secondary sexual characters of the abdominnal sternites in the male, while the other, obtained on Mt. Shao-lai Shan lying on the Ta-hsüeh Shan Mountains, belongs to the group of *L. pollens* because of transverse elytra and remarkable secondary sexual characters of the abdominal sternites in the male.

After a careful examination, it has become clear that these species are new to science because of disagreement with the known members of the respective groups in the secondary sexual characters of the abdominal sternites and configuration of the male genital organ. They will be described in the present paper. The holotypes of the two new species to be described are deposited in the collection of the National Science Museum (Nat. Hist.), Tokyo.

Before going further, I wish to express my hearty thanks to Dr. Shun-Ichi UÉNO, Visiting Professor at Tokyo University of Agriculture, for his kindness in supplying me with the interesting specimens and valuable advice on the present study.

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Lathrobium (s. str.) *taiwanense* Y. WATANABE, sp. nov.

(Figs. 1-2, 4-5)

Body length: 7.9 mm (from front margin of head to anal end); 5.0 mm (from front margin of head to elytral apices).

Body elongate, parallel-sided and subdepressed above. Colour reddish brown and shining, with palpi, apical antennal segments and legs somewhat paler.

Male. Head suborbicular and gently elevated medially, slightly longer than

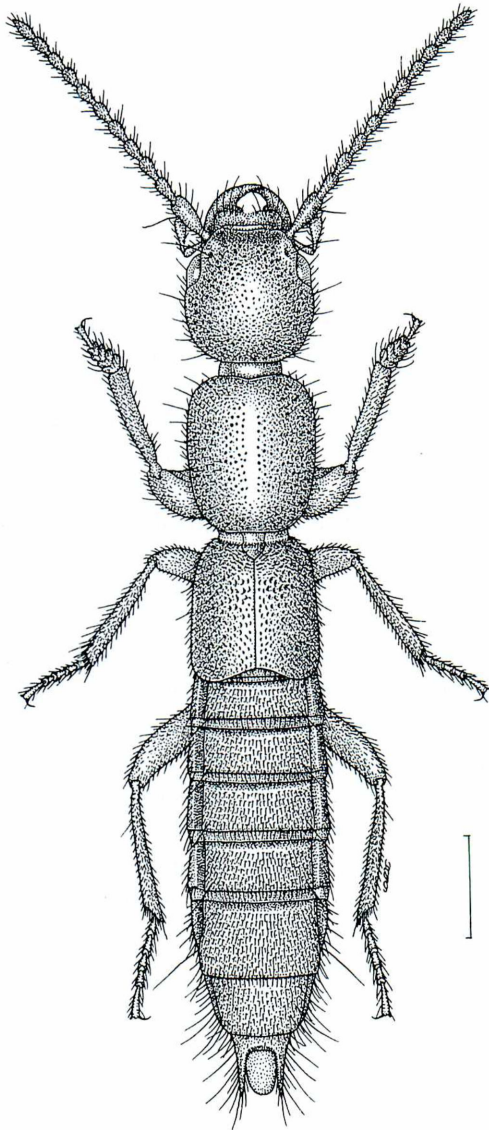


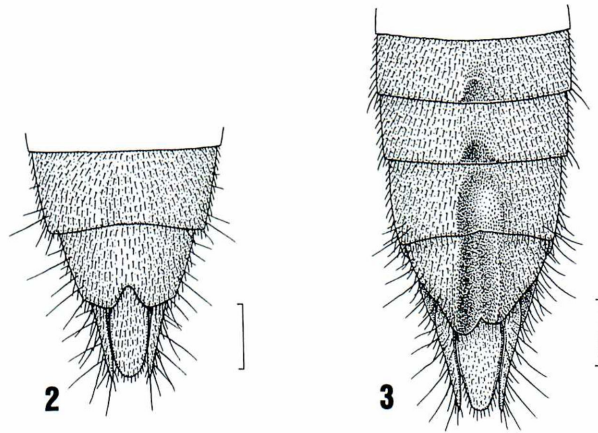
Fig. 1. *Lathrobium* (s. str.) *taiwanense* sp. nov., holotype, from Mt. Hsiao-hsüeh Shan, Ta-hsüeh Shan Mts. in Taichung Hsien, Taiwan. Scale: 1.0 mm.

broad (length/width=1.04), widest at posterior third and more strongly narrowed posteriad than anterior, with lateral sides gently arcuate, frontal area between antennal tubercles transversely flattened and glabrous along frontal margin, provided with a conspicuous setiferous puncture inside each antennal tubercle; surface sparingly, coarsely and setiferously punctured, the punctures becoming much finer and more or less rugose in latero-posterior areas; eyes relatively large and slightly prominent, their longitudinal diameter more than a half as long as postocular parts. Antennae elongate, extending to near the middle of pronotum, two proximal segments polished, 3rd segment subopaque, the remainings opaque, 1st segment robust and strongly dilated towards the apex, more than twice as long as broad, 2nd constricted at the base, about 1.5 times as long as broad, but less than a half as long as and much narrower (2nd/1st=0.73) than 1st, 3rd a little dilated apicad, more than 1.5 times as long as broad, somewhat longer (3rd/2nd=1.13) though as broad as 2nd, 4th distinctly longer than broad (length/width=1.60), a little shorter (4th/3rd=0.89) and slightly narrower (4th/3rd=0.86) than 3rd, 5th to 8th equal in both length and width to one another, each distinctly longer than broad (length/width=1.40), somewhat shorter than (each of 5th to 8th/4th=0.88) though as broad as 4th, 9th to 11th equal in width to one another, 9th somewhat longer than broad (length/width=1.36), slightly shorter than 8th (9th/8th=0.97), 10th a little longer than broad (length/width=1.20), slightly shorter than 9th (10th/9th=0.88), 11th fusiform, about twice as long as broad, considerably longer than 10th (11th/10th=1.83), subacuminate at the tip.

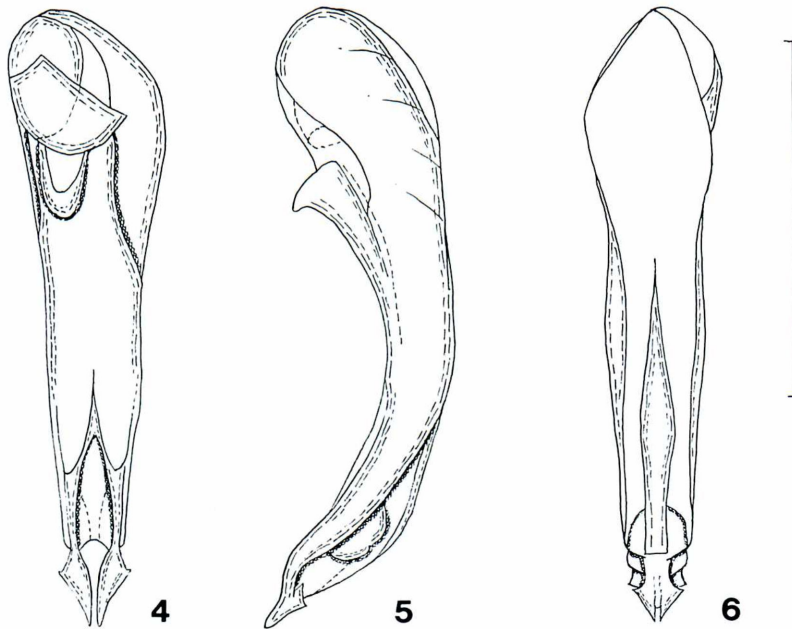
Pronotum oblong and convex, apparently longer than broad (length/width=1.19), distinctly longer (pronotum/head=1.17) and slightly broader (pronotum/head=1.02) than head, widest at anterior fourth and more strongly narrowed posteriad than anterior; lateral sides feebly arcuate in dorsal view, anterior margin subtruncate, posterior margin slightly emarginate at middle, anterior angles obtuse and not visible from above, posterior angles rounded; surface closely covered with coarse punctures, bearing a narrow smooth longitudinal space along the median line. Scutellum subtriangular and somewhat convex, provided with a few minute setiferous punctures on the surface. Elytra subtrapezoidal and subdepressed above, somewhat dilated posteriad, slightly longer than broad (length/width=1.02), distinctly shorter than (elytra/pronotum=0.86) though as broad as pronotum; lateral sides very feebly arcuate, posterior margin emarginate and forming an obtuse re-entrant angle at the middle; posterior angles broadly rounded; surface densely, roughly and setiferously punctured all over. Hind wings degenerated to minute lobes. Legs relatively slender and moderately long; profemur remarkably thickened, though strongly constricted near the base and excavated in apical half on the inner face, so that the anterior part of the excavation forms a subtriangular blunt tooth; protibia dilated apicad, hollowed in basal half on the inner face and provided with five or so transverse rows of comb-like yellowish setae within the hollow; meso- and metatibiae normal; 1st to 4th protarsal segments strongly widened; meso- and metatarsi thin.

Abdomen elongate, gradually widened towards the 7th segment and then abruptly

narrowed from the 8th to anal end, 3rd to 7th tergites each transversely depressed along the base and moderately closely covered with fine aciculate punctures and brownish pubescence; 8th sternite V-shapedly excised at the apex; 7th sternite also shallowly and broadly emarginate at the middle of posterior margin.



Figs. 2–3. Abdominal sternites in the male of *Lathrobium* (s. str.) spp.; *L.* (s. str.) *taiwanense* sp. nov. (2), and *L.* (s. str.) *shaolaiense* sp. nov. (3). Scale: 0.5 mm.



Figs. 4–6. Male genital organ of *Lathrobium* (s. str.) *taiwanense* sp. nov.; dorsal view (4), lateral view (5), and ventral view (6). Scale: 1.0 mm.

Genital organ elongate and well sclerotized except for membranous ventral side of median lobe; median lobe somewhat shorter and narrower than fused paramere, widest near basal fifth and then abruptly narrowed basad and gradually so apicad, though nearly parallel-sided in apical half, with ventral sclerite elongate, widest near the middle and then markedly narrowed towards the acutely pointed base and slightly narrowed towards the apical tip which is truncated. Fused paramere elongate, strongly curved dorsad in apical half, apical part divided into two lobes, each of which is dilated into a securiform apical portion as seen from dorsal side.

Female. Unknown.

Type specimen. Holotype: ♂, Mt. Hsiao-hsüeh Shan, Ta-hsüeh Shan Mts., Taichung Hsien, Taiwan, 15-VI-1989, S. UÉNO leg.

Distribution. Taiwan.

Remarks. This new species belongs to the group of *L. nomurai* because of the long elytra, and can be readily distinguished from the other members of the same group by the smaller body and the different configuration of male genital organ.

Bionomics. The type specimen was dug out from a muddy scree deposited under a steep cliff at the northern side of Mt. Hsiao-hsüeh Shan at an altitude of 2,630 m.

Etymology. The new specific name is derived from Taiwan, in which lies the type locality "Mt. Hsiao-hsüeh Shan".

***Lathrobium* (s. str.) *shaolaiense* Y. WATANABE, sp. nov.**

(Figs. 3, 7-10)

Body length: 7.9 mm (from front margin of head to anal end); 4.1 mm (from front margin of head to elytral apices).

This new species can be distinguished at a glance from the preceding species by the transverse head and elytra, which agree with the characteristics of the group of *L. pollens*. Differing from the members of the species-group in configuration of secondary sexual characters of abdominal sternites and male genital organ.

Body elongate, subparallel-sided and somewhat depressed above. Colour reddish brown and shining, with two apical abdominal segments and legs dark yellowish brown.

Male. Head subtrapezoidal and moderately convex medially, a little transverse (width/length=1.13), widest at basal fourth and more distinctly narrowed anteriorly than posteriorly; lateral sides gently arcuate, frontal area flattened and glabrous between antennal tubercles, provided with a large setiferous puncture inside each antennal tubercle; surface sparingly covered with distinct setiferous punctures which become more or less closer and finer than in latero-posterior areas, and bearing a small smooth vertexal area; eyes small and nearly flat, their longitudinal diameter about one-third as long as postocular part. Antennae elongate, extending to the middle of pronotum and not thickened apicad, two proximal segments polished, 3rd segment subopaque and the re-

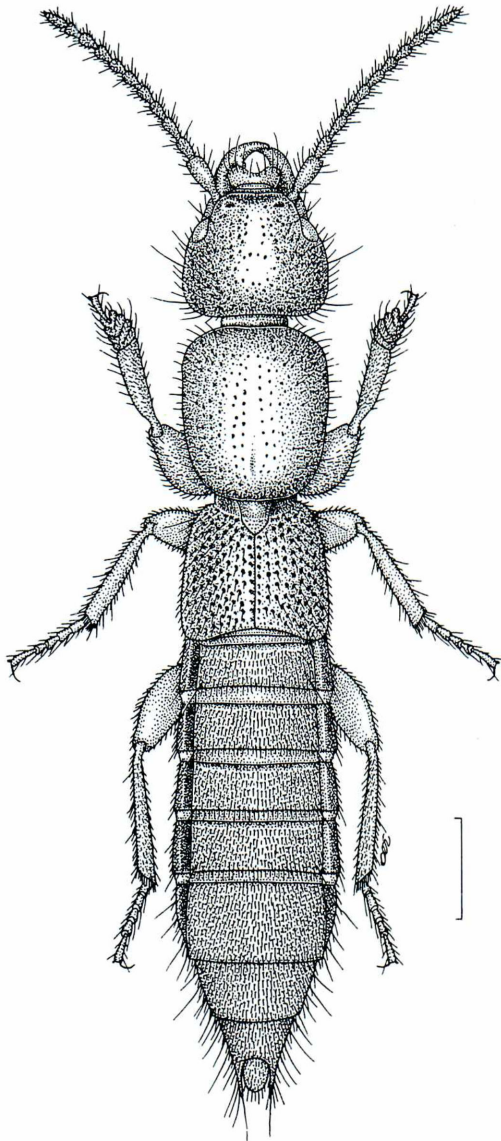


Fig. 7. *Lathrobium* (s. str.) *shaolaiense* sp. nov., holotype, from Mt. Shao-lai Shan, Ta-hsüeh Shan Mts. in Taichung Hsien, Taiwan. Scale: 1.0 mm.

mainings opaque, 1st robust and strongly dilated apicad, twice as long as broad, 2nd constricted at the base, about 1.5 times as long as broad but a half as long as and remarkably narrower ($2\text{nd}/1\text{st}=0.70$) than 1st, 3rd subequal to 2nd in both length and width, 4th and 5th equal to each other in both length and width, each somewhat longer than broad ($\text{length}/\text{width}=1.07$) and slightly shorter than ($4\text{th and }5\text{th}/3\text{rd}=0.75$) though as broad as 3rd, 6th to 10th equal to one another in both length and width, each a little longer than broad ($\text{length}/\text{width}=1.20$) and as long as though slightly narrower

(each of 6th to 10th/5th=0.89) than 5th, 11th fusiform, more than twice as long as broad and much longer (11th/10th=1.67) but slightly narrower (11th/10th=0.92) than 10th, subacuminate at the apex.

Pronotum nearly oblong, apparently longer than broad (length/width=1.13), a little longer (pronotum/head=1.30) and slightly broader (pronotum/head=1.02) than head, widest behind anterior angles and slightly narrowed posteriad; lateral sides almost straight in dorsal view except near the areas of anterior and posterior angles, anterior margin gently rounded, posterior margin subtruncate, anterior angles obtuse and not visible from above, posterior ones rounded; surface more coarsely and more numerous punctured than on head except for a narrow smooth median line through the length of pronotum. Scutellum small and subtriangular, provided with a few minute setiferous punctures on the surface. Elytra nearly trapezoidal, slightly dilated posteriad, a little transverse (width/length=1.10) and distinctly shorter (elytra/pronotum=0.80) than and almost as broad as pronotum; lateral sides slightly arcuate, posterior margin emarginate at the middle; posterior angles obliquely truncated; surface densely covered with much coarser punctures than those on pronotum. Hind wings degenerated to minute lobes. Legs relatively short; profemur and protibia similar in structure to those of the preceding species.

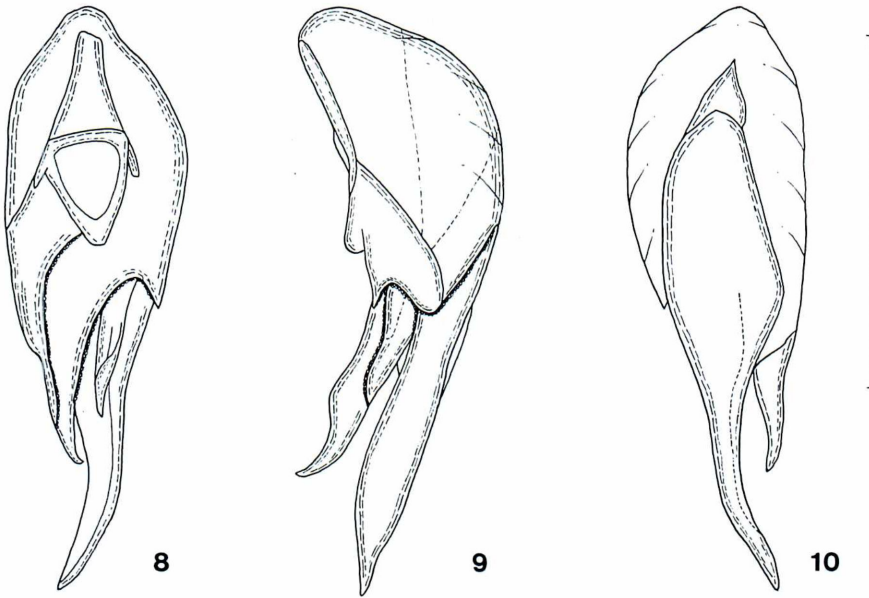
Abdomen elongate, gently widened towards 7th segment, and then abruptly narrowed from the 8th to anal end; 3rd to 7th tergites each transversely depressed along the base as in the preceding species and moderately closely covered with superficial punctures and fine brownish pubescence, 8th tergite more sparingly and more finely punctured than on the preceding tergites; 8th sternite subtriangularly and asymmetrically excised at apex and deeply longitudinally depressed in front of the excision along the median line, surface of the depression provided densely with short rigid blackish setae; 7th sternite also arcuately and asymmetrically emarginate at the middle of posterior margin and long-elliptically depressed at the middle before the emargination, surface of the depression smooth, 6th sternite provided with a shallow horseshoe-shaped depression at the middle just before posterior margin, surface of the depression somewhat coarsely asperate; 5th sternite also with a similar small asperate area to that of 6th sternite at the middle in front of posterior margin.

Genital organ nearly spindle-shaped. Median lobe considerably longer than fused paramere, with ventral sclerite widest near the middle, much strongly narrowed towards the pointed apex than to the base, and somewhat curved to the right side in apical half. Fused paramere asymmetrical, abruptly constricted near apical third and apparently narrowed towards the pointed apex which is somewhat curved to the left as seen from dorsal side, distinctly emarginate in apical fourth in profile.

Female. Unknown.

Type specimen. Holotype: ♂, Mt. Shao-lai Shan, Ta-hsüeh Shan Mts., Taichung Hsien, Taiwan, 16-VI-1989, S. UENO leg.

Remarks. The present new species may belong to the group of *L. pollens* because the head and elytra are transverse and abdominal sternites have conspicuous sec-



Figs. 8–10. Male genital organ of *Lathrobium* (s. str.) *shaolaiense* sp. nov.; dorsal view (8), lateral view (9), and ventral view (10). Scale: 1.0 mm.

ondary sexual characters. It can be readily distinguished from the members of the group by different sexual characters of the abdominal sternites in the male and different configuration of male genital organ.

Bionomics. The holotype was dug out from the soil beneath dead leaves deposited in a gully in a deciduous broadleaved forest on Mt. Shao-lai Shan at an altitude of 2,030 m.

Etymology. The name of the present new species is derived from “Mt. Shao-lai Shan”, the type locality.

要 約

渡辺泰明：台湾産の後翅の退化したナガハネカクシ属の2新種（甲虫目，ハネカクシ科）。——台湾からはこれまで，後翅の退化したナガハネカクシの仲間が知られていなかった。私は最近，上野俊一博士が1989年6月に台湾の台中県大雪山系の二つの山で採集された，このグループに含まれる2種を検討する機会を得た。これらはいずれも地下浅層から掘り出されたが，雄の腹部第二次性徴および交尾器の形状がこれまで知られた種のものとは一見して異なっており，新種と判断されたので，下記のとおり命名，記載した。

1. *Lathrobium* (s. str.) *taiwanense* Y. WATANABE, sp. nov.

本種は，大雪山系小雪山の標高2,630 mほどの地点にある急斜面の岸壁の下に堆積した，土の多い岩錐の下端部から掘り出されたもので，頭部および翅鞘がいずれも幅よりも長いことで，日本に分布しているオオコバネナガハネカクシ種群に含められる。しかし体が小型で，雄の交

尾器の側葉は末端域が二裂し、しかもそれぞれの先端部分が斧状を呈する特異な形状で、このグループの他の種から容易に区別できる。

2. *Lathrobium* (s. str.) *shaolaiense* Y. WATANABE, sp. nov.

本種は、大雪山系稍来山の標高2,030 mほどの落葉広葉樹林内の、凹地か小溝に溜まった落ち葉の下の石混じりの土の中から掘り出されたもので、頭部および翅鞘のそれぞれが長さよりも幅が広いことで、日本に分布しているコバネナガハネカクシ種群に含まれる。しかし、雄の腹部に表われる第二次性徴の形状および交尾器の中葉が側葉よりいちじるしく長く、後半は急に狭まり、その部分が湾曲していることなどで、このグループの既知種から容易に区別できる。

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Elytra, Tokyo, **26** (2): 311–312, November 15, 1998

List of the Host Fungi of the Japanese Ciidae (Coleoptera), III

Makoto KAWANABE

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Daedaleopsis confragosa [Chamidareamitake]

Cis nipponicus, *C. seriatopilosus*, *Sulcaxis affinis*, *Octotemnus glabriculus*, *O. japonicus*, *O. laminifrons*, *O. parvulus*

Daedaleopsis styracina [Egonokitake]

Ennearthron chujoi

Daedaleopsis perlevis [Senbeitake]

Euxestocis bicornutus