

***Lathrobium pollens* and its Two New Relatives (Coleoptera, Staphylinidae) from Central Honshu, Japan**

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Abstract *Lathrobium pollens* and its two relatives are dealt with. Male genital organ of *L. pollens* is described and illustrated, and is recorded from Shizuoka Prefecture as new range. Its two related species, *L. (L.) morimotoi* sp. nov. and *L. (L.) kumotoriense* sp. nov., are described. They are obtained by sifting dead leaves accumulated in deciduous broadleaved forests in the Kantô District and adjacent localities.

Lathrobium pollens was described by SHARP (1889) based on six specimens found in three localities, Nagasaki, Miyanoshita and Nikkô in Japan. Since then, it has been reported by many Japanese entomologists from various localities of Honshu, Shikoku and Kyushu in Japan. However, they have been confused until now with its relatives due to similar body size and general appearance. Recently, the specimen obtained from Miyanoshita on Hakone of Kanagawa Prefecture was designated as the lectotype of *Lathrobium pollens* by ASSING (2013). On the basis of this treatment I would like to illustrate the type specimen of *L. pollens* and its male genital organ is described and illustrated. Besides, I had examined some specimens of related species obtained from two localities in Kanagawa and adjacent prefectures of central Honshu, Japan. After a close examination, they were divided into two species and new to science on account of disagreement in configuration of the secondary sexual characters of abdominal sternites and genital organ in the male with those of the previously known species. I am therefore going to describe them as the new species, in addition to figures of the secondary sexual characters of abdominal sternites and genital organ in the male of *L. pollens* in the present paper.

Before going further, I wish to express my hearty thanks to Mr. Yasutoshi SHIBATA, Machida, who is not only kind help me in giving the specimen obtained at Miyanoshita, type locality of the lectotype, but friendly help in consulting with literature, and Dr. Katsura MORIMOTO, Professor Emeritus of Kyushu University, for his kindness in providing me with the specimens used in the present study, to Mr. Naoya ITO, Laboratory of Entomology, Tokyo University of Agriculture, for taking the photographs inserted in this paper.

***Lathrobium (Lathrobium) pollens* SHARP**

[Japanese name: Kobane-nagahanekakushi]

(Figs. 1–5, 15)

Lathrobium pollens SHARP, 1889, Ann. Mag. nat. Hist., (6), 3: 254; ADACHI, 1955, J. Toyo Univ., (7): 22; ASSING, 2013, Linzer biol. Beitr., 45 (1): 1619.

Other references are omitted.

Body length: 9.3–10.7 mm (from front margin of head to anal end); 4.2–4.5 mm (from front margin of head to elytral apices).

Body elongate, nearly parallel-sided and moderately depressed above. Colour blackish brown to reddish brown and moderately shining, with labrum, maxillary palpi, legs and apical two abdominal



Fig. 1. *Lathrobium (Lathrobium) pollens* SHARP; habitus and labels attached to the syntype.

segments yellowish brown.

Male genital organ elongate and well sclerotised except for membraneous ventral side of median lobe. Median lobe somewhat broader than fused paramere, with ventral sclerite long and slender, widest near the middle and more strongly narrowed basad than apicad. Fused paramere remarkably longer than median lobe, nearly parallel-sided in basal half and then gradually narrowed towards constricted part before the apical part which is prolonged like a spearhead, surface provided with a longitudinal carina at the middle and with an arcuate carina at inside of each lateral margin.

Specimens examined. 1 ♂, Chisuji-no-taki, Miyanoshita, Hakone, Kanagawa Pref., Honshu, Japan, 1.VI.1969, Y. SHIBATA leg.; 3 ♀♀, Kojiri, Hakone, Kanagawa Pref., Honshu, Japan, 24.V.1966, Y. WATANABE leg.; 1 ♂, Ubako, Hakone, Kanagawa Pref., Honshu, Japan, 23.VI.1975, Y. SHIBATA leg.; 1 ♂, Mt. Kamiyama, Hakone, Kanagawa Pref., Honshu, Japan, 25.V.1974, Y. SHIBATA leg.; 1 ♂, same locality and collector as above, 1.VI.1974; 1 ♂, Mt. Amagi, Shizuoka Pref., Honshu, Japan, 15.V.1965, Y. WATANABE leg.; 2 ♂♂, 2 ♀♀, near Ohdaru-Spa, Shizuoka Pref., Honshu, Japan, 15.V.1965, Y. WATANABE leg.

Distribution. As far as I know, this species has been found in Kanagawa and Shizuoka Prefectures of central Honshu, Japan.

Bionomics. A large number of specimens were obtained from under dead leaves accumulated in deciduous broadleaved forests in the southwest area of Kantô District.

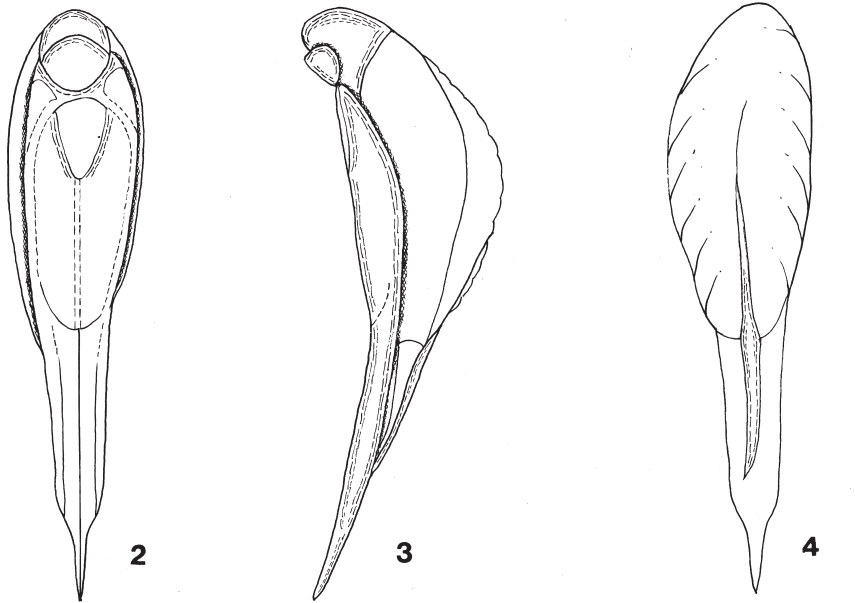
***Lathrobium (Lathrobium) morimotoi* Y. WATANABE, sp. nov.**

[Japanese name: Morimoto-kobane-nagahanekakushi]

(Figs. 6, 8–10, 16)

Body length: 9.4–11.7 mm (from front margin of head to anal end); 4.5–4.8 mm (from front margin of head to elytral apices).

The present new species is similar in body size and facies to *Lathrobium (L.) pollens* SHARP

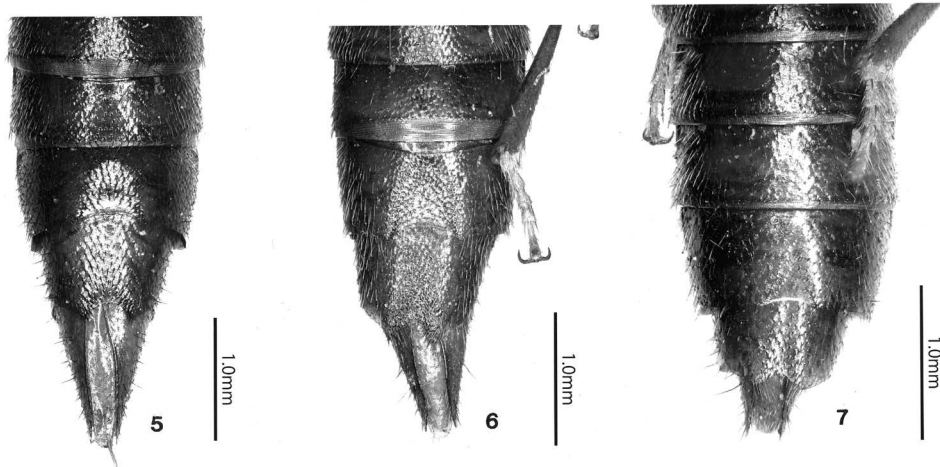


Figs. 2–4. Male genital organs of *Lathrobium (Lathrobium) pollens* SHARP from Miyanoshita in central Honshu.
 — 2, Dorsal view; 3, lateral view; 4, ventral view. Scale: 1.0 mm.

(1889), but slightly different from it in the structure of secondary sexual characters of abdominal sternites and genital organ in the male, and in the following external features.

Male. Head subquadrate, less transverse (width/length = 1.08) and less narrowed anteriorly than in *L. pollens*, though gently elevated at the middle as in *L. pollens*; lateral sides gently arcuate, frontal area between antennal tubercles transversely flattened and glabrous as in *L. pollens*; surface sparsely, somewhat coarsely setiferously punctured in medio-frontal area as in *L. pollens*, though more closely and more coarsely punctured in latero-basal area than in *L. pollens*, and covered with extremely microscopic coriaceous ground sculpture all over as in *L. pollens*. Antennae relatively slender and moderately long, extending to the middle of pronotum and not thickened towards the extremity, 1st segment robust, more than twice as long as width, 2nd 1.5 times as long as wide, a half times as long as 1st and slightly narrower than 1st (2nd/1st = 0.80), 3rd and 4th equal in both length and width to each other, each clearly longer than wide (length/width = 1.75), somewhat longer than 2nd (each of 3rd to 4th/2nd = 1.17), 5th to 10th equal in both length and width to one another, each 1.5 times as long as wide and somewhat shorter than 4th (each of 5th to 10th/4th = 0.86), 11th fusiform, clearly longer than wide (length/width = 1.75), somewhat longer (11th/10th = 1.17) than though as wide as 10th, subacuminate at the apex.

Pronotum subtrapezoidal, elevated medially and slightly narrowed posteriorly as in *L. pollens*, somewhat longer than wide (length/width = 1.14), distinctly longer (pronotum/head = 1.29) and slightly wider than head (pronotum/head = 1.05); lateral sides almost straight except near anterior and posterior angles as in *L. pollens*, anterior and posterior margins similar to those of *L. pollens*; surface slightly more closely, more coarsely punctured than in *L. pollens* with the exception of a narrow longitudinal smooth space along the median line through the length of pronotum. Scutellum subtriangular, surface smooth or provided with a few minute setiferous punctures as in *L. pollens*. Elytra sub-



Figs. 5–7. Secondary sexual characters of abdominal sternites in the male of *Lathrobium* (*Lathrobium*) spp. — 5, *L. (L.) pollens* SHARP; 6, *L. (L.) morimotoi* sp. nov.; 7, *L. (L.) kumotoriense* sp. nov.

quadrate and gently delated posteriad as in *L. pollens*, slightly transverse (width/length = 1.08), distinctly shorter (elytra/pronotum = 0.78) and slightly narrower (elytra/pronotum = 0.95) than pronotum; lateral sides feebly arcuate as in *L. pollens*, posterior margin more deeply emarginate at the middle than in *L. pollens*; surface more closely though less coarsely punctured than in *L. pollens*. Hind wings generated to minute lobes.

Abdomen elongate, 3rd to 7th segments parallel-sided and then abruptly narrowed towards the apical end, each tergite slightly closely and more coarsely punctured than in *L. pollens*; 8th and 9th tergites each more sparingly and more finely punctured and pubescent than in the preceding tergites; 8th sternite more narrowly and shallowly emarginate at the middle of posterior margin than in *L. pollens*, and more strongly longitudinally depressed in front of the emargination than in *L. pollens*, surface of the depression more closely, more coarsely pubescent than in *L. pollens*; 7th sternite much more shallowly and broadly emarginate at the middle of posterior margin than in 8th sternite, and linguiformly depressed before the emargination as in *L. pollens*, surface of the depression more closely and more coarsely pubescent than in *L. pollens*; 6th sternite not modified.

Genital organ similar in basal conformation to that of *L. pollens*, but different from it in the following points: whole aspect less elongate; ventral sclerite of median lobe much wider at the middle and forming rhomboidal part; fused paramere similar in form to those of *L. pollens* though spearhead projection of apical part distinctly shorter than that of *L. pollens*, and lateral arcuate carinae each more strongly elevated near the middle than that of *L. pollens* as seen from oblique-dorsal side.

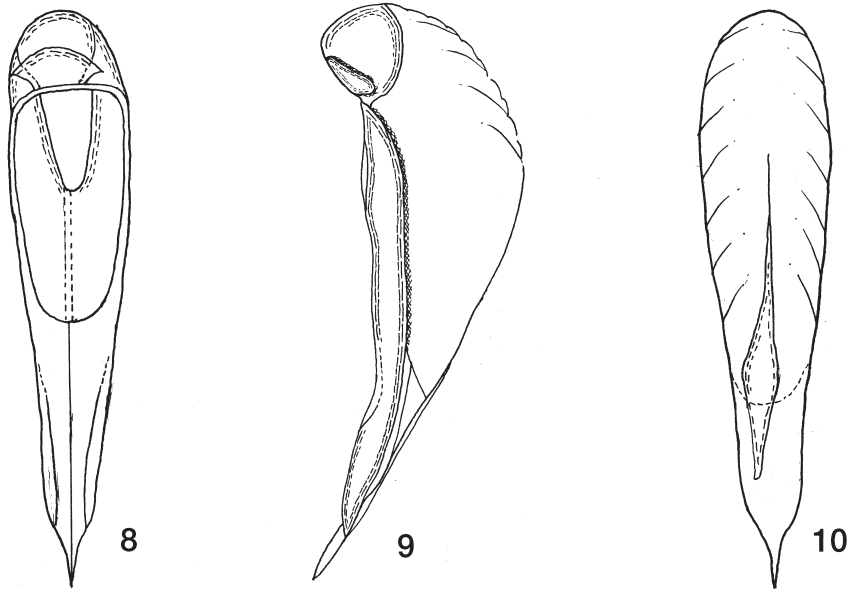
F e m a l e. Similar in general appearance to male, though the 8th abdominal sternite is gradually narrowed in basal two-thirds and somewhat abruptly so in apical third; 7th sternite not modified.

Type series. Holotype: ♂, allotype: ♀, Kano, Nagano Pref., Honshu, Japan, 17.IX.1964, K. MORIMOTO leg. Paratypes: 2 ♀♀, same data as for the holotype.

Type depository. All the type specimens are deposited in the collection of the Laboratory of Entomology, Tokyo University of Agriculture.

Distribution. Japan (central Honshu).

Bionomics. Nothing is known about the collection circumstance of this species.



Figs. 8–10. Male genital organs of *Lathrobium (Lathrobium) morimotoi* sp. nov. — 8, Dorsal view; 9, lateral view; 10, ventral view. Scale: 1.0 mm.

Etymology. The specific epithet of the present new species is given after Prof. Emer. Katsura MORIMOTO, who collected all the type specimens.

***Lathrobium (Lathrobium) kumotoriense* Y. WATANABE, sp. nov.**

[Japanese name: Kumotori-kobane-nagahanekakushi]

(Figs. 7, 11–14, 17)

Body length: 7.6–8.1 mm (from front margin of head to anal end); 3.8–4.1 mm (from front margin of head to elytral apices).

Body elongate, nearly parallel-sided and moderately depressed above. Colour brownish black and moderately shining, with labrum, palpi and legs yellowish brown.

This species is similar in general appearance to the above two species, but can be readily distinguished from them by secondary sexual characters of abdominal sternites and configuration of genital organs in the male.

Male. Head subquadrate, slightly narrowed anteriorly and gently elevated medially, slightly transverse (width/length = 1.04); postocular part feebly arcuate; surface sparingly, coarsely and setiferously punctured, the punctures becoming somewhat closer and less coarse in latero-basal areas than in the medio-frontal area, covered with extremely microscopic coriaceous ground sculpture all over; eyes small and flat, their longitudinal diameter about one-fifth as long as the length of postocular part. Antennae elongate, extending to the middle of pronotum and not thickened towards the apical segment, 4th to 10th segments moniliform, two proximal segments polished and the remaining opaque, 1st segment robust and dilated apically, more than twice as long as wide, 2nd about 1.6 times

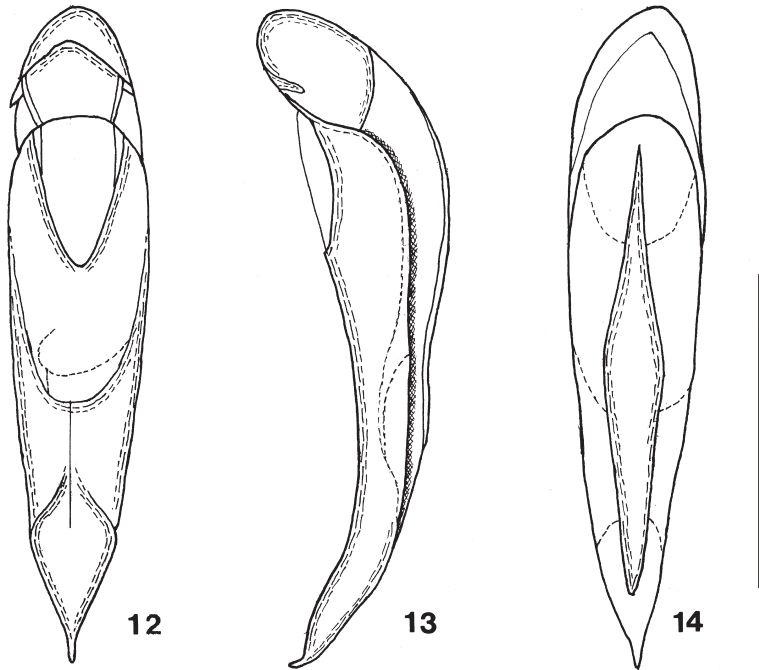


Fig. 11. *Lathrobium (Lathrobium) kumotoriense* sp. nov., ♂, from Mt. Kumotori-yama, Okutama, Tokyo Pref., Honshu, Japan.

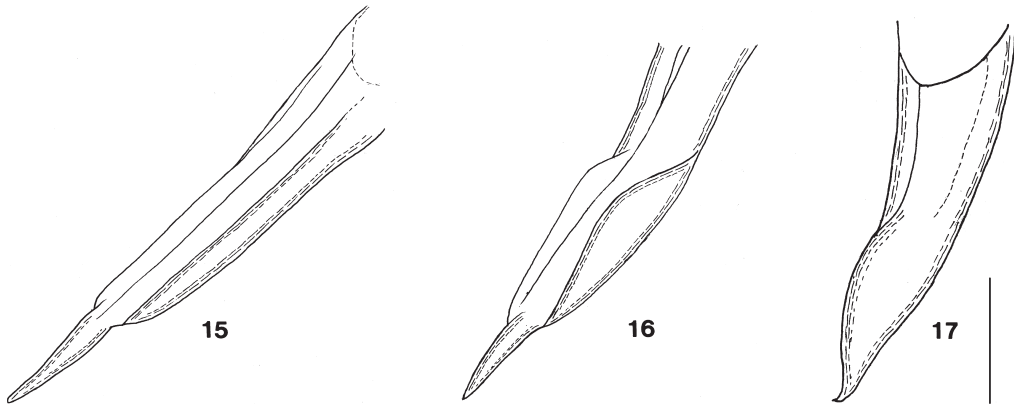
as long as wide, much shorter ($2\text{nd}/1\text{st} = 0.44$) and distinctly narrower ($2\text{nd}/1\text{st} = 0.71$) than 1st, 3rd apparently longer than wide (length/width = 1.80), somewhat longer ($3\text{rd}/2\text{nd} = 1.13$) than though as wide as 2nd, 4th to 10th equal in both length and width to one another, each distinctly longer than wide (length/width = 1.40), a little shorter (each of 4th to 10th/ $3\text{rd} = 0.78$) than though as wide as 3rd, 11th fusiform, apparently longer than wide (length/width = 1.80), distinctly longer ($11\text{th}/10\text{th} = 1.29$) than though as wide as 10th, subacuminate at the apex.

Pronotum gently elevated medially and subtrapezoidal, more strongly narrowed posteriad than anteriad, a little longer than wide (length/width = 1.25), distinctly longer (pronotum/head = 1.30) than though as wide as head; lateral sides almost straight except for anterior and posterior angles, anterior margin arcuate, posterior margin slightly emarginate at the middle, anterior and posterior angles similar in form to those of the preceding species; surface more closely and more coarsely punctured than in medio-frontal area of head except for an impunctate smooth median space through the length of pronotum. Scutellum subtriangular, surface provided with several coarse setiferous punctures and covered with obscure ground sculpture. Elytra subtrapezoidal, somewhat dilated apicad and subdepressed above, a little transverse (width/length = 1.13), distinctly shorter (elytra/pronotum = 0.75) but slightly wider (elytra/pronotum = 1.06) than pronotum; lateral sides feebly arcuate; posterior margin emarginate at the middle, posterior angles broadly rounded; surface more closely and more coarsely punctured than in pronotum, and covered with fine brownish pubescence. Hind wings degenerated to minute lobes which are about one-fourth as long as elytra. Legs moderately long; femora, tibiae and tarsi, all of which are similar in structure to those of other members of this species-group.

Abdomen elongate and slightly dilated towards the 7th segment, and then abruptly narrowed apicad; 3rd to 7th tergites each not so closely covered with somewhat coarse aciculate punctures, 8th and 9th tergites each more sparingly and more finely punctured than in the preceding tergites; 8th sternite semicircularly emarginate at the middle of posterior margin and provided with a shallow long-subtriangular depression in front of the emargination, surface of the depression more closely provided



Figs. 12–14. Male genital organ of *Lathrobium (Lathrobium) kumotoriense* sp. nov. — 12, Dorsal view; 13, lateral view; 14, ventral view. Scale: 1.0 mm.



Figs. 15–17. Oblique dorsal view of apical part of fused paramere of *Lathrobium (Lathrobium)* spp. — 15, *L. (L.) pollens* SHARP; 16, *L. (L.) morimotoi* sp. nov.; 17, *L. (L.) kumotoriense* sp. nov. Scale: 0.25 mm.

with blackish brown setae than in other part; 7th sternite more shallowly and more broadly emarginate at the middle of posterior margin than in 8th sternite, provided with a shallower longitudinal depression before the emargination than that of 8th sternite, surface of the depression covered with brownish pubescence as in other parts; 6th sternite simple.

Genital organ elongate and nearly symmetrical, sclerotised with the exception of ventral side of median lobe. Median lobe shorter than fused paramere, provided with a elongate ventral sclerite, which is widest near the middle and more strongly narrowed basad than apicad. Fused parameres gradually narrowed towards constricted part before the apex, the apical part is prolonged like a spear-head and narrowly truncate at the tip as seen from dorsal side, and minutely denticulated in profile, surface provided with a fine longitudinal carina along the median line, though the carina obscurely forked at apical third.

F e m a l e. Similar in general appearance to male, though the 8th abdominal sternite narrowed towards the broadly rounded apex, gradually in basal two-thirds and abruptly in apical third; 7th sternite simple.

Type series. Holotype: ♂, allotype: ♀, Mt. Kumotori-yama, Okutama, Tokyo Pref., Honshu, Japan, 8.VII.1965, Y. WATANABE leg. Paratypes: 3 ♂♂, 6 ♀♀, same data as for the holotype.

Type depository. All the type specimens are deposited in the collection of the Laboratory of Entomology, Tokyo University of Agriculture.

Distribution. Japan (central Honshu).

Bionomics. All the specimens of the type series were taken by sifting dead leaves accumulated in a broadleaved forest on Mt. Kumotori-yama at an altitude of about 1,200 m.

Etymology. The specific epithet of this new species is derived from “Mt. Kumotori”, the type locality.

要 約

渡辺泰明：コバネナガハネカクシおよび近縁の2新種の記載（鞘翅目ハネカクシ科）。——コバネナガハネカクシはSHARPによって長崎、宮の下および日光の3箇所から採集された個体をシントタイプとして1889年に記載された。しかしながら、これら3箇所から採集された個体は、それぞれ外部形態は類似しているが、雄交尾器の形状が異なり別種と判断されていた。ASSING (2013)は日本産*Lathrobium*に関する論文のなかで、コバネナガハネカクシのシントタイプの中から宮の下産個体をレクトタイプと指定した。これに基づいて、私は関東および隣接地域から採集されたこの類の個体を検討した結果2新種を見出したのでコバネナガハネカクシの概形および雄交尾器の形状を紹介するとともに、これら2新種を*Lathrobium* (*Lathrobium*) *morimotoi* モリモトコバネナガハネカクシおよび*L. (L.) kumotoriense* クモトリコバネナガハネカクシと命名・記載した。

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