A New Species of the Group of *Lathrobium brachypterum* (Coleoptera, Staphylinidae) from the Bôsô Peninsula in Central Honshu, Japan

Yasuaki WATANABE

Laboratory of Insect Resources, Tokyo University of Agriculture, Atsugi, Kanagawa, 243–0034 Japan

Abstract A new species of the group of *Lathrobium brachypterum* is described and illustrated from the Bôsô Peninsula in Central Japan under the name of *L. kasaharai*. This is related to *L. brachypterum*, but can be distinguished from it by the different configuration of the male genital organ.

The members of the group of *Lathrobium brachypterum* are usually obtained from under dead leaves in broadleaved forests in various mountain areas. Up to the present, more than ten species of the species-group have been known from Honshu and Shikoku, Japan. Recently, through the courtesy of Mr. Hiroki MIZUSHIMA, I had an opportunity to examine an interesting species belonging to this species-group. It was obtained from under dead leaves accumulated in a broadleaved forest near Kameyama-ko in the Bôsô Peninsula of Chiba Prefecture in central Honshu, Japan. After a careful examination, it has become clear that this species is new to science in view of the peculiar male genital organ, which is clearly different in configuration from those of any other members of the group. It will be described and illustrated in the present paper. The holo-, allo- and paratypes of the new species to be described are deposited in the collection of the Laboratory of Insect Resources, Tokyo University of Agriculture. This short paper is dedicated to the memory of the late Mr. Sumao KASAHARA, who was well known as a specialist of carabid beetles in Japan and contributed much to the development of the Japanese Society of Coleopterology.

Before going further, I wish to express my hearty thanks to Dr. Shun-Ichi UÉNO, Visiting Professor at Tokyo University of Agriculture, for his kind advice on the present study. Deep gratitude is also due to Mr. Hiroki MIZUSHIMA, Laboratory of Insect Resources, Tokyo University of Agriculture, for his kindness in submitting invaluable specimens to me for taxonomic study, and to Mr. Koji TOYODA, Ranzan, Saitama, for his assistance in drawing the fugures inserted in this paper.

Lathrobium (s. str.) kasaharai Y. WATANABE, sp. nov.

[Japanese name: Kasahara-himekobane-nagahanekakushi]

(Figs. 1-5)

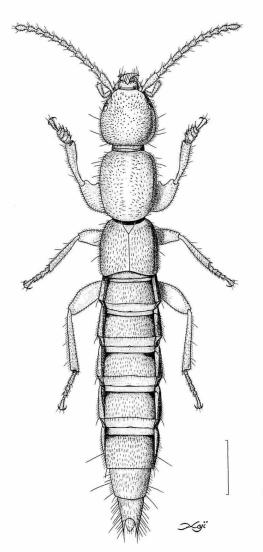
Body length: 7.0–8.0 mm (from front margin of head to anal end); 3.1–3.2 mm (from front margin of head to elytral apices).

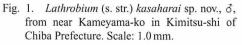
Body elongate, subparallel-sided and somewhat depressed above. Colour dark reddish brown to reddish black and moderately shining, with head somewhat darker, palpi, legs and two apical abdominal segments brownish yellow, mandibles, antennae, and sutural areas and posterior margins of elytra reddish brown.

Head subquadrate and somewhat depressed above, slightly transverse Male. (width/length=1.05); widest at posterior fourth and slightly more distinctly narrowed anteriad than posteriad; lateral sides gently arcuate, frontal area between antennal tubercles transversely flattened and glabrous, provided with a large setiferous puncture inside each antennal tubercle; surface sparsely scattered with distinct setiferous punctures which become closer and somewhat finer in latero-posterior areas than in mediofrontal part and covered with extremely fine coriaceous ground sculpture only visible under high magnification; eyes small and nearly flat, their longitudinal diameter less than one-third as long as postocular part. Antennae elongate, extending to near the middle of pronotum and not thickened towards the apical segment, 6th to 10th segments more or less moniliform, two proximal segments polished, the remainings opaque, 1st segment robust and apparently dilated apicad, twice as long as broad, 2nd constricted at the base, 1.5 times as long as broad, remarkably shorter (2nd/1st=0.55) and a little narrower (2nd/1st=0.73) than 1st, 3rd to 11th equal in width to one another, 3rd about twice as long as broad, somewhat longer than 2nd (3rd/2nd=1.33), 4th to 6th equal in length, each 1.5 times as long as broad, 7th a little longer than broad (length/width=1.38), but slightly shorter than 6th (7th/6th=0.92), 8th to 10th equal in length to one another, each somewhat longer than broad (length/width=1.25), 11th fusiform, twice as long as broad and distinctly longer than 10th (11th/10th=1.60), subacuminate at the tip.

Pronotum nearly oblong and convex medially, almost parallel-sided from posterior parts of anterior angles to posterior fourth, and then clearly narrowed posteriad, distinctly longer than broad (length/width=1.24), apparently longer (pronotum/head= 1.37) and slightly broader (pronotum/head=1.05) than head; lateral sides straight except near arcuate parts of anterior and posterior angles as seen from dorsal side, anterior margin gently rounded though nearly straight at the middle, posterior margin subtruncate, anterior angles obtuse, posterior ones narrowly rounded; surface more closely and more coarsely punctured than on head except for a narrow smooth median space through the length of pronotum. Scutellum subtriangular, surface provided with a few minute setiferous punctures in posterior area. Elytra subtrapezoidal and somewhat dilated posteriad, a little transverse (width/length=1.19), distinctly shorter (elytra/pronotum=0.71) but slightly broader (elytra/pronotum=1.05) than pronotum; lateral sides

Yasuaki WATANABE





feebly arcuate, posterior margin broadly emarginate at the middle, posterior angles nearly rounded; surface closely and roughly punctured and covered with fine brownish pubescence. Legs relatively short, profemora, protibiae and protarsi similar in structure to those of *L. brachypterum*.

Abdomen elongate, nearly parallel-sided from 3rd to 6th segments, and then abruptly narrowed towards the anal end, 3rd to 6th tergites each closely covered with fine and superficial punctures, 7th tergite slightly more sparingly punctured than in the preceding tergites; 8th and 9th tergites each much more sparingly punctured than in the preceding tergites; all the tergites covered with fine brownish pubescence; 8th sternite New Lathrobium from the Bôsô Peninsula

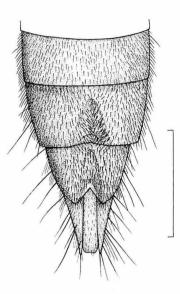


Fig. 2. Last four abdominal sternites in male of Lathrobium (s. str.) kasaharai sp. nov. Scale: 0.5 mm.

subtriangularly excised at the middle of posterior margin and narrowly, longitudinally depressed at the middle in front of the excision, each side of the excision and surface of the depression clothed with short blackish setae; 7th sternite more broadly and much more shallowly emarginate than in 8th sternite at the middle of posterior margin, and depressed in a V-shape at the middle before the emargination, surface of the depression provided with similar setae to those of 8th sternite.

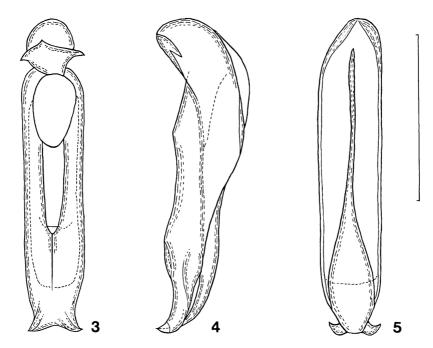
Genital organ elongate and almost parallel-sided, well sclerotized except for dorsal side of median lobe. Fused paramere almost symmetrical and nearly parallel-sided though abruptly constricted before the apex which is shallowly emarginate at the middle, each side of the emargination projected forwards obliquely posteriad, dorsal surface provided with a Y-shaped carina near the middle. Median lobe slightly shorter than fused paramere, dorsal side with a remarkably elongate ventral piece which is widest before the apex and much more strongly narrowed basad than apicad.

Female. Similar in general appearance to male, but different from it in the following points: 1st to 4th protarsal segments not so widened, abdomen with 8th sternite narrowed posteriad and narrowly rounded at the apex, and the 7th sternite simple.

Type series. Holotype: \Im , allotype: \Im , near Kameyama-ko, Kimitsu City, Chiba Pref., Honshu, Japan, 8–XI–1998, H. MIZUSHIMA leg. Paratypes: $\Im \Im \Im$, $1 \Im$, same data as for the holotype.

Distribution. Japan (central Honshu).

Remarks. The present new species is similar in body size and facies to *L. brachypterum* SHARP (1889, p. 255) described from Miyanoshita in central Honshu, but differs from it in the following points: head more weakly narrowed anteriad, sur-



Figs. 3–5. Male genital organ of *Lathrobium* (s. str.) *kasaharai* sp. nov.; dorsal view (3), lateral view (4), and ventral view (5). Scale: 0.5 mm.

face more numerously and more finely punctured, pronotum more finely and more shallowly punctured, elytra more distinctly transverse and less coarsely punctured on the surface, 3rd to 6th abdominal tergites each less closely punctured, secondary sexual characters of 7th and 8th abdominal sternites and genital organ in male different in structure. This new species is also somewhat similar to *L. susumui* Y. WATANABE (1984, p. 135) from northeastern Honshu in the structure of secondary sexual characters of the abdominal sternites in male, but distinguished from it by the smaller body size and different configuration of the male genital organ.

Bionomics. The type series was extracted by a Tullgren funnel from leaf-litter accumulated in a deciduous broadleaved forest near Kameyama-ko in Kimitsu-shi at an altitude of about 180 m.

Etymology. The present new species is dedicated to the memory of the late Mr. Sumao KASAHARA, who was an intimate friend of mine through the study of the Coleoptera.

要 約

渡辺泰明:千葉県房総半島から採集されたコバネナガハネカクシ種群(甲虫目ハネカクシ科) の1新種. — コバネナガハネカクシ種群に含まれる種は,通常,落葉広葉樹林の落葉下から 採集され,これまで日本から10種以上が報告されている.最近,私は水島大樹君によって千葉 県房総半島の亀山湖附近で採集された本種群に含まれる1種を検討した結果,新種であること が判明したので,Lathrobium (s. str.) kasaharaiと命名・記載した.この種は,外部形態および体 長がヒメコバネナガハネカクシに類似しているが,雄の腹部第二次性徴と交尾器の形状が異な り,また雄の腹部第二次性徴はオバココバネナガハネカクシに類似しているが,交尾器の形状 に明らかな差異が認められることで,これらの2種から容易に区別される.

なお,本種の種小名は,本学会の元幹事で,日本産オサムシ科の分類に多大の貢献をなされ た故笠原須磨生氏に献名したものである.

References

SHARP, D., 1889. The Staphylinidae of Japan. Ann. Mag. nat. Hist., (6), 3: 249–267.
WATANABE, Y., 1984. The brachypterous staphylinid beetles from the Tôhoku District, Northeast Japan, with descriptions of four new species. Mem. natn. Sci. Mus., Tokyo, (17): 131–144.