

Lathrobium densum and its Two New Relatives
(Coleoptera, Staphylinidae) from Western Honshu, Japan

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Abstract The staphylinid species *Lathrobium densum* BERNHAUER and its two new relatives are dealt with. Of these, the former is redescribed and the latter two are described as new species under the names *L. masatoi* and *L. izumoense*, both of which were obtained from Shimane Prefecture in western Honshu, Japan.

Lathrobium densum was described by BERNHAUER (1936, p. 307) on the basis of a female specimen obtained from Okayama of western Honshu, Japan. Since then, however, it has not been reported again from Japan. Through the courtesy of Mr. Masato MORI, I had an opportunity to examine some interesting specimens found in Ohara of Shimane Prefecture in western Honshu, Japan. These specimens were divided into two species, both of which were closely similar in colour and facies to *L. densum*. Therefore, I asked Dr. A. F. NEWTON, JR. of the Field Museum of Natural History, Chicago, for a loan of the type specimen of *L. densum* deposited in that museum for comparison with these two species.

As the result of comparison with them, it has become clear that both the two species may be new to science for reason of disagreement with the type specimen of *L. densum* in body size and external features. Therefore, they will be described together with a redescription of *L. densum* in the present paper.

Before going further, I wish to express my hearty thanks to Dr. Shun-Ichi UENO, Visiting professor at Tokyo university of Agriculture, for his kind advice on the present study, to Dr. A. F. NEWTON, JR., Field Mus. Nat Hist., Chicago, and Dr. L. H. HERMAN, American Mus. Nat. Hist., New York, for the loan of the type specimen of *L. densum*. Deep gratitude is also due to Mr. Masato MORI, Nishinomiya-shi, for his kindness in giving me the specimens used in this study and Dr. Hiroaki KOJIMA, Mr. Junnosuke KANTOH, Laboratory of Entomology, Tokyo University of Agriculture, and Mr. Arata ISHIZUKA, Wildlife Research Center for their assistance in taking the photographs inserted in this paper.

Lathrobium (Lathrobium) densum BERNHAUER

[Japanese name: Hizen-kobane-nagahanekakushi]

(Figs. 1–4)

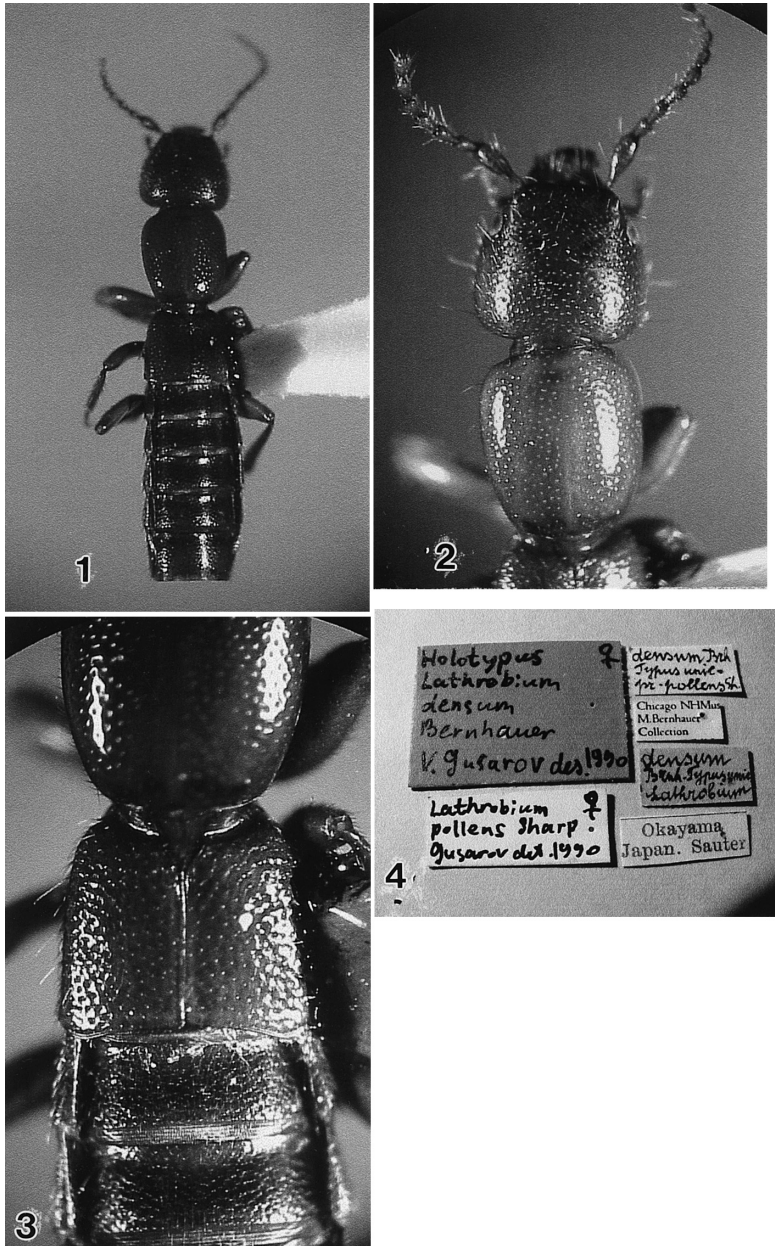
Lathrobium densum BERNHAUER, 1936, *Publ. Mus. ent. Pietro Rossi*, 1: 307.*Lathrobium (Lathrobium) densum*: SMETANA, 2004, *Cat. Palaearct. Coleopt.*, 2: 594.

Body length: 7.3 mm (from front margin of head to apical margin of 7th abdominal segment); 4.1 mm (from front margin of head to elytral apices).

Body elongate, subparallel-sided and somewhat depressed above. Colour brownish red and moderately shining, with abdomen somewhat darkened, and legs dark yellowish brown.

F e m a l e. Head subquadrate and somewhat depressed above, slightly narrowed anteriorly, a little transverse (width/length=1.13); lateral sides gently arcuate, frontal area between antennal tubercles transversely flattened and glabrous, provided with a large setiferous puncture inside each antennal tubercle; surface sparingly, distinctly and setiferously punctured, the punctures becoming closer in latero-basal parts than in medio-frontal part, and covered with extremely microscopic coriaceous ground sculpture only visible under high magnification; eyes small and flat, their longitudinal diameter shorter than one-fourth the length of postocular part. Antennae moderately long and somewhat slender, extending to near the middle of pronotum and not thickened towards the apical segment, three proximal segments polished, 4th subopaque and the remainings opaque, 6th to 10th more or less moniliform, 1st segment robust and apparently dilated apically, more than twice as long as wide, 2nd to 4th equal in width to one another, 2nd constricted at the base, distinctly longer than wide (length/width=1.43) but remarkably shorter (2nd/1st=0.44) and narrower (2nd/1st=0.70) than 1st, 3rd somewhat dilated apically, apparently longer than wide (length/width=1.79) and a little longer than 2nd (3rd/2nd=1.25), 4th distinctly longer than wide (length/width=1.43) but distinctly shorter than 3rd (4th/3rd=1.43), 5th equal in length to though somewhat narrower than 4th (5th/4th=0.89), 6th to 10th equal in both length and width to one another, each a little longer than wide (length/width=1.20) and equal in width to 5th, 11th fusiform, apparently longer than wide (length/width=1.80) and 1.5 times as long as 10th, subacuminate at the apex.

Pronotum convex medially and distinctly narrowed posteriorly, somewhat longer than wide (length/width=1.18), distinctly longer (pronotum/head=1.27) but slightly narrower (pronotum/head=0.96) than head; lateral sides gently arcuate, anterior margin very slightly emarginate at the middle, posterior margin truncate, anterior angles obtuse and invisible from above, posterior ones narrowly rounded; surface sparingly punctured, the punctures being closer and somewhat coarser than on medio-frontal part of head, bearing a narrow longitudinal smooth space along the median line through the length of pronotum. Scutellum small and subtriangular, provided with a few minute setiferous punctures near latero-posterior margin. Elytra subquadrate and somewhat



Figs. 1-4. *Lathrobium (Lathrobium) densum* BERNHAUER; habitus (1), head and pronotum (2), elytra and basal two abdominal segments (3), and type label (4).

dilated posteriad, a little transverse (width/length=1.17), distinctly shorter (elytra/pronotum=0.73) than though as wide as pronotum; lateral sides nearly straight, posterior margin broadly emarginate at the middle, posterior angles rounded; surface closely, roughly punctured and covered with fine brownish pubescence. Legs moderately long; profemora thickened though abruptly constricted near the apex; protibiae dilated apicad, hollowed in basal half on the inner face; meso- and metatibiae simple; 1st to 4th protarsal segments relatively widened; meso- and metatarsi thin.

Abdomen elongate, somewhat dilated from 3rd to 6th segments, 7th segment slightly narrower than 6th segment, 3rd to 7th tergites each shallowly, transversely depressed along the base, and closely, finely and superficially punctured, covered with fine brownish pubescence similar to those on elytra.

Male. Unknown.

Specimen examined. 1 ♀ (holotype), Okayama, Japan, SAUTER leg. (Field Mus., Chicago).

Distribution. Japan (Okayama, western Honshu).

Remarks. The holotype of *L. densum* is attached to the determination label inscribed *L. pollens* (SHARP, 1889, p. 254) by GUSAROV in 1990. *L. densum* is, however, different from *L. pollens* in details of external features as follows: head more transverse and less narrowed anteriorly, lateral sides less arcuate, surface more closely punctured; pronotum slightly more closely and slightly more finely punctured; elytra slightly more transverse and more distinctly dilated posteriad, surface slightly more densely and slightly more coarsely punctured; abdominal tergites each more densely and more finely punctured.

Bionomics. Unknown.

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

[Japanese name: Masato-kobane-nagahanekakushi]

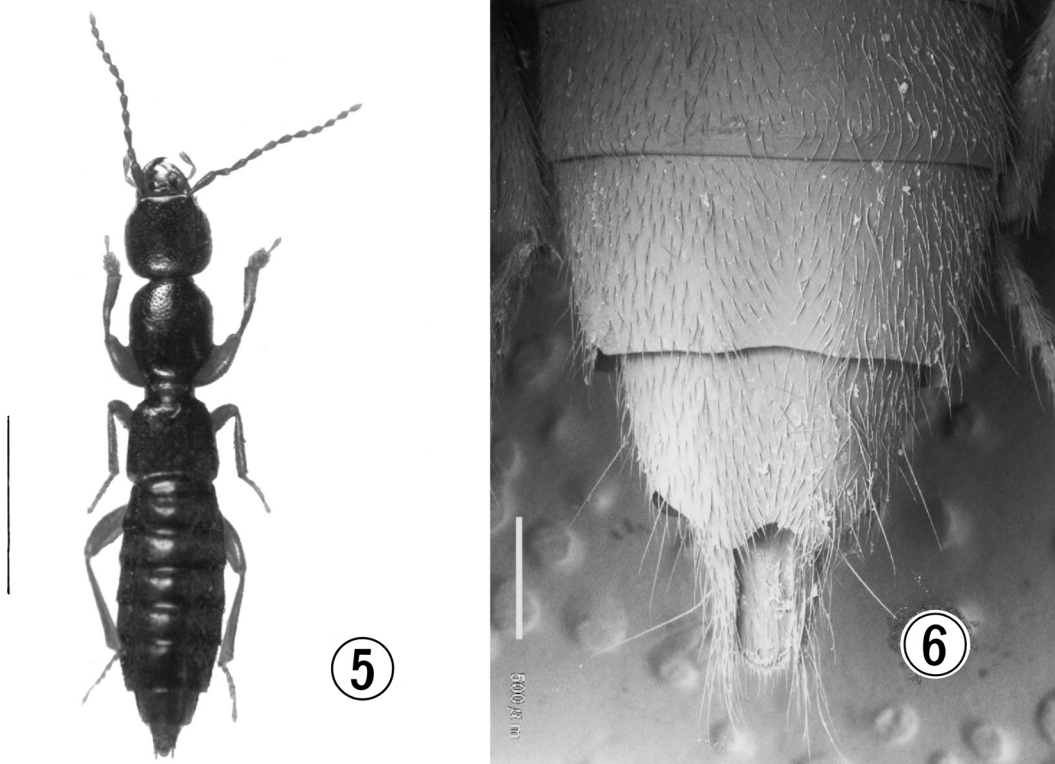
(Figs. 5–9)

Body length: 9.3–10.7 mm (from front margin of head to anal end); 4.6–4.8 mm (from front margin of head to elytral apices).

Body elongate, nearly parallel-sided and subdepressed above. Colour brownish red to blackish brown and moderately shining, with palpi and legs brownish yellow, sutural, and sometimes also apical marginal areas and two last abdominal segments reddish brown.

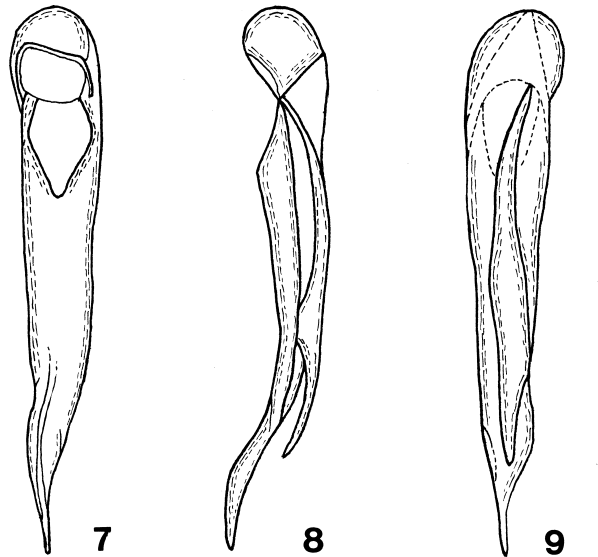
The present new species is similar in facies to the preceding species, but somewhat different from it in the larger body, and the following external features points:

Male. Head subquadrate and somewhat depressed above as in the preceding species though as long as wide or slightly transverse (width/length=1.02), widest at about the middle and slightly more strongly narrowed anteriorly than posteriad; lateral sides slightly arcuate; frontal area between antennal tubercles flattened and glabrous as



Figs. 5–6. *Lathrobium (Lathrobium) masatoi* sp. nov.; habitus (5), last three abdominal sternites in the male (6). Scale: 3.0 mm (5).

in the preceding species; surface coarsely, setiferously and slightly more sparingly punctured than in the preceding species except for smooth vertexal area, the punctures becoming closer and smaller in latero-basal areas, and covered with similar ground sculpture to that of the preceding species; eyes small and flat as in the preceding species. Antennae moderately long and somewhat slender, extending to the middle of pronotum and not thickened towards the extremity, 1st segment polished, 2nd subopaque and the remainings opaque, 6th to 10th somewhat moniliform as in the preceding species, 1st segment robust and dilated apicad, nearly three times as long as wide, 2nd constricted at the base, much longer than wide ($\text{length}/\text{width} = 1.67$), apparently shorter ($2\text{nd}/1\text{st} = 0.43$) and distinctly narrower ($2\text{nd}/1\text{st} = 0.75$) than 1st, 3rd obviously longer than wide ($\text{length}/\text{width} = 2.33$), apparently longer ($3\text{rd}/2\text{nd} = 1.40$) than though as wide as 2nd, 4th to 8th equal in both length and width to one another, each evidently longer than wide ($\text{length}/\text{width} = 1.67$), distinctly shorter (each of 4th to 8th / 3rd = 0.71) than though as wide as 3rd, 9th and 10th equal in both length and width to each other, each somewhat shorter (each of 9th and 10th / 8th = 0.90) than though as wide as 8th, 11th



Figs. 7–9. Male genital organ of *Lathrobium (Lathrobium) masatoi* sp. nov.; dorsal view (7), lateral view (8), and ventral view (9). Scale: 0.5 mm.

fusiform, twice as long as wide, distinctly longer (11th/10th = 1.33) than though as wide as 10th, subacuminate at the apex.

Pronotum subtrapezoidal and gently elevated medially as in the preceding species, a little longer than wide (length/width = 1.17), somewhat longer (pronotum/head = 1.13) but slightly narrower (pronotum/head = 0.97) than head, widest just behind anterior angles and more distinctly narrowed posteriad than anterior; lateral sides almost straight except near anterior and posterior angles, anterior and posterior margins, anterior and posterior angles similar to those of the preceding species; surface much more sparingly and much more coarsely punctured than in latero-basal areas of head except for a narrow smooth median space through the length of pronotum. Scutellum subtriangular, provided with some minute setiferous punctures on the surface. Elytra subtrapezoidal, somewhat dilated posteriad and subdepressed above, a little transverse (width/length = 1.10), distinctly shorter (elytra/pronotum = 0.85) but a little wider (elytra/pronotum = 1.10) than pronotum; lateral sides, posterior margin and posterior angles as in the preceding species; surface somewhat more sparingly and slightly more roughly punctured than in the preceding species and covered with fine brownish pubescence. Hind wings reduced to minute pads. Legs moderately long; profemora, protibiae and protarsi similar in structure to those of the preceding species.

Abdomen elongate, gradually dilated from 3rd to 6th segments, and then abruptly narrowed towards the anal end; 3rd to 6th tergites each shallowly and transversely depressed along the base as in the preceding species, and somewhat more sparingly and more shallowly punctured than in the preceding species, and covered with fine brownish

pubescence similar to those on elytra; 7th and 8th tergites each more sparingly, more finely punctured and pubescent than in the preceding tergites; 8th sternite subtriangularly excised at the middle of posterior margin and somewhat longitudinally depressed before the excision, surface of the depression more closely clothed with fine dark brownish setae than in other parts; 7th sternite much more broadly and more shallowly emarginate at the middle of posterior margin than in 8th sternite, and shallowly, linguiformly depressed in front of the emargination, surface of the depression more sparingly setose than in other parts with exception of glabrous medio-apical area; 6th sternite simple.

Genital organ elongate and somewhat asymmetrical. Median lobe not extending beyond the apex of fused paramere, with ventral sclerite elongate, widest at about the middle and slightly more strongly narrowed basad than apicad, apex bluntly pointed. Fused paramere gradually narrowed to constricted part at apical two-fourths, and then more strongly so towards the apical part which is prolonged like a spear-head, surface provided with a pair of fine longitudinal carinae along the median line, and with a fine short carina just inside each lateral side before the spear-head part.

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: ♀, Ohara, Unnan-shi, Shimane Pref., Honshu, Japan, 3-VIII-2005, M. MORI leg. Paratypes: 2 ♂♂, 1 ♀, 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. (Shimane Pref. in western Honshu).

Bionomics. The collected circumstance of this new species is unknown.

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

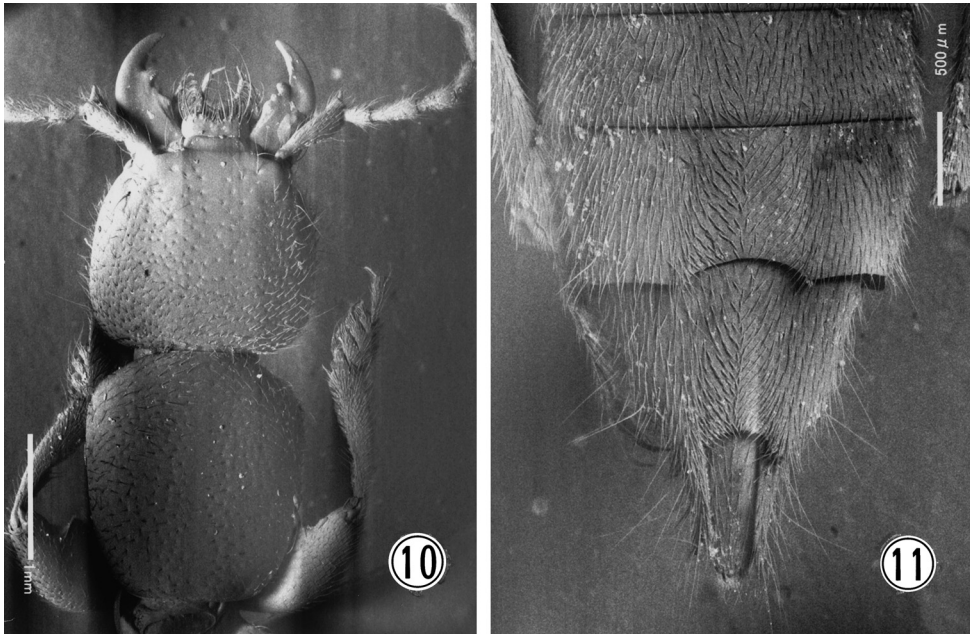
[Japanese name: Izumo-kobane-nagahanekakushi]

(Figs. 10–14)

Body length: 10.7 mm (from front margin of head to anal end); 4.8 mm (from front margin of head to elytral apices).

Similar in general appearance to *L. masatoi*, but differs from it in the body size, structure of secondary sexual characters of abdominal sternites and configuration of genital organ in the male, and the following points:

M a l e. Head feebly elevated medially and quadrate though slightly narrowed anteriad, slightly transverse (width/length=1.06); lateral sides more feebly arcuate than in *L. masatoi*; surface more sparingly and much more finely punctured than in *L. masatoi*; eyes small and flat, their longitudinal diameter less than one-fourth the length of postocular part. Antennae moderately long and somewhat slender as in *L. masatoi*, two proximal segments polished, the remainings opaque, and similar articulation to

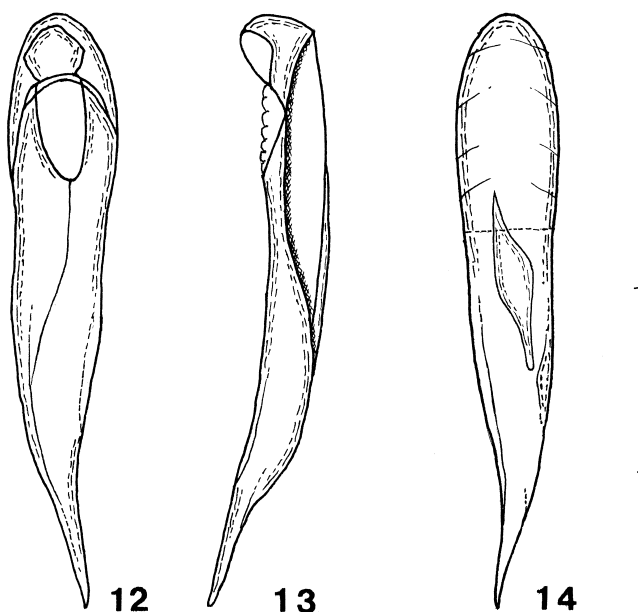


Figs. 10–11. *Lathrobium (Lathrobium) izumoense* sp. nov.; head and pronotum (10), last three abdominal sternites (11).

those in *L. masatoi*.

Pronotum subtrapezoidal, more strongly narrowed posteriad than in *L. masatoi*, somewhat longer than wide (length/width=1.18), distinctly longer (pronotum/head=1.18) but slightly narrower (pronotum/head=0.94) than head; lateral sides feebly arcuate, anterior and posterior margins as in *L. masatoi* anterior angles more distinctly angulate than in *L. masatoi* though posterior angles are similar to those in *L. masatoi*; surface coarsely and slightly more closely punctured than in *L. masatoi* except for a narrow median smooth space. Scutellum subtriangular, surface provided with a few minute setiferous punctures. Elytra somewhat depressed above and subtrapezoidal, dilated posteriad, distinctly transverse (width/length=1.20), apparently shorter (elytra/pronotum=0.75) but slightly wider (elytra/pronotum=1.06) than pronotum; lateral sides, posterior margin and posterior angles as in *L. masatoi*; surface closely and somewhat more roughly punctured than in *L. masatoi*. Legs moderately long, similar in structure to those of *L. masatoi*.

Abdomen elongate, slightly dilated from 3rd to 6th segments, and then abruptly narrowed towards the anal end as in *L. masatoi*; each tergite similarly punctured as in *L. masatoi* and covered with blackish brown pubescence; 8th sternite semicircularly excised at the middle of posterior margin and longitudinally depressed before the excision, surface of the depression more closely settled with blackish brown setae than



Figs. 12–14. Male genital organ of *Lathrobium (Lathrobium) izumoense* sp. nov.; dorsal view (2), lateral view (3); and ventral view (4). Scale: 0.5 mm.

in other parts; 7th sternite more broadly and more slightly shallowly emarginate at the middle of posterior margin than in 8th sternite and subtriangularly depressed in front of the emargination, surface of the depression more closely and more coarsely setose than in other parts; 6th sternite simple.

Genital organ elongate and somewhat asymmetrical. Median lobe with ventral sclerite widest at the middle and narrowed both basad and apicad, basal tip acutely pointed though apical tip narrowly rounded. Fused paramere gradually narrowed to apical fifth, and then abruptly so towards the pointed apex, apical fifth part curved to left side as seen from dorsal side, surface provided with an extremely fine carina which is straight in basal half at the middle and curved to right side in apical half.

F e m a l e. Unknown.

Type. Holotype: ♂, Ohara, Unnan-shi, Shimane Pref., Honshu, Japan, 3–VIII–2005, M. MORI leg.

Type depository. The holotype is deposited in the collection of the Laboratory of Entomology, Tokyo University of Agriculture.

Distribution. Japan (Shimane Pref. in western Honshu).

Bionomics. Unknown.

Etymology. The specific epithet of this new species is derived from “Izumo”, which is an old name of the northern part of Shimane Prefecture.

要 約

渡辺泰明: *Lathrobium densum* BERNHAUER の再記載および近縁の 2 新種 (コウチュウ目ハネカクシ科) の記載. — *L. densum* は “Okayama” で採集された 1 ♀ に基づいて 1936 年に BERNHAUER によって記載されたのみでその後の報告はない. 私は Field Museum (Chicago) に所蔵されている本種の基準標本を Dr. A. F. NEWTON, JR. および Dr. L. H. HERMAN 両博士のご配慮で検討することができたので再記載した. 一方, 森 正人氏から同氏が島根県雲南市で採集された本種に近縁と思われる 2 種を検討する機会を得た. その結果, これらの種は *L. densum* に類似しているが体が幾分大きいこと, 頭部や鞘翅に差異が認められることによって区別することができ, 未記載種と判定したので, マサトコバネナガハネカクシ *L. masatoi* およびイズモコバネナガハネカクシ *L. izumoense* と命名・記載した.

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Elytra, Tokyo, 38(1): 82–83, May 31, 2010

New Records of Staphylinid Beetles (Coleoptera, Staphylinidae) from the Island of Tanegashima, Japan

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Twenty-seven staphylinid species have hitherto been reported from the Island of Tanegashima in Kagoshima Prefecture by ADACHI (1957), WATANABE (1989, 1991), NAOMI and MARUYAMA (1997), and KISHIMOTO (2000). Examining the staphylinid beetles deposited in the collection of the Laboratory of Entomology, Tokyo University of Agriculture, I have found ten species not recorded from this island. They are recorded below with the collecting data.

1. *Bryoporus gracilis* (SHARP)
1 ♂, Shogayama, 12-VI-1994, S. ONODA leg.
2. *Osorius angustulus* SHARP
1 ♂, Manpa, 13-IV-1994, S. ONODA leg.; 1 ♂, Uchinoura, 16-V-1994, S. ONODA leg.;
2 ♂♂, Ooishino, 11-VI-1994, S. ONODA leg.; 3 ♂♂, 1 ♀, Shogayama, 12-VI-1994, S.
ONODA leg.
3. *Anotylus japonicus* (CAMERON)
1 ♂, Uchinoura, 16-V-1994, S. ONODA leg.
4. *Anotylus lewisius* (SHARP)
3 ♀♀, Manpa, 13-IV-1994, S. ONODA leg.; 1 ♂, 2 ♀♀, Homan-jinja, 13-IV-1994, S.
ONODA leg.; 2 ♂♂, 8 ♀♀, Ishinomine, 15-IV-1994, S. ONODA leg.; 2 ♂♂, Tashiro, 29-IV-
1994, S. ONODA leg.; 4 ♂♂, 4 ♀♀, Uchinoura, 16-V-1994, S. ONODA leg.; 1 ♀, Shogayama,
12-VI-1994, S. ONODA leg.; 3 ♂♂, 2 ♀♀, An'nou, 19-VI-1994, S. ONODA leg.; 1 ♂,
Noginodaira, 19-VI-1994, S. ONODA leg.
5. *Rugilus japonicus* Y. WATANABE
1 ♂, Tashiro, 29-IV-1994, S. ONODA leg.; 3 ♀♀, An'nou, 19-VI-1994, S. ONODA leg.
6. *Sunesta setigera* (SHARP)
1 ♂, Manpa, 13-IV-1994, S. ONODA leg.; 1 ♂, Ishinomine, 15-IV-1994, S. ONODA leg.;
6 ♂♂, 4 ♀♀, Tashiro, 29-IV-1994, S. ONODA leg.; 1 ♂, Ooishino, 11-VI-1994, S. ONODA
leg.; 1 ♀, Shogayama, 12-VI-1995, S. ONODA leg.; 1 ♀, An'nou, 19-VI-1994, S. ONODA leg.
7. *Pinophilus lewisius* SHARP
1 ♂, Ooishino, 11-VI-1994, S. ONODA leg.; 1 ♀, Ishinomine, 15-IV-1994, S. ONODA leg.;
1 ♀, An'nou, 19-VI-1994, S. ONODA leg.; 1 ♀, Noginodaira, 19-VI-1994, S. ONODA leg.;
1 ♀, Tashiro, 3-VII-1994, S. ONODA leg.
8. *Pinophilus punctatissimus* SHARP
1 ♀, Shogayama, 16-X-1961, K. BABA leg
9. *Tympanopolus sauteri sauteri* BERNHAUER
1 ♀, An'nou, 19-VI-1994, S. ONODA leg.
10. *Platydracus brevicornis* (MOTSCHULSKY)
1 ♂, An'nou, 19-VI-1994, S. ONODA leg.

I thank the late Dr. Kintaro BABA, Kurokawa, and Mr. Shigeru ONODA, Kanoya-shi, for their kindness in providing me with the specimens.

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