# A New Species of the Genus *Phloeotrya* (Coleoptera, Melandryidae) from Central Japan

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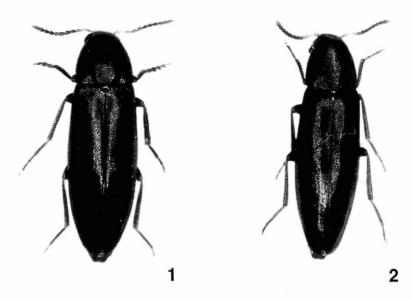
**Abstract** A new species of the melandryid genus *Phloeotrya* is described from the montane zone of central Honshu, Japan, under the name of *P. ishikawai* sp. nov. It is related to *P. subtilis* REITTER, but differs in some peculiarities of the prothorax.

In the spring of 1992, the present author made a short trip to Sugadaira (ca. 1,100 m in alt.), the montane area of the northeastern part of Nagano Prefecture, and collected dead twigs of *Fraxinus mandshurica* var. *japonica* attacked by larvae of several coleopteran species. From the last decade of May through June of the same year, some adults of a strange species of the genus *Phloeotrya* were emerged from these twigs together with many adults of the cerambycid beetle, *Obrium japonicum* PIC. At the first glance this species resembles small-sized individuals of *Phloeotrya obscura* (LEWIS, 1895), but is quite different in some important characteristics.

After a careful study, the author came to the conclusion that this species is new to science, though it is very closely allied to *Phloeotrya subtilis* REITTER, 1897 from Europe to southeastern Siberia.

Before going further, the present author expresses his sincere gratitude to Dr. Masatoshi Takakuwa of the Kanagawa Prefectural Museum of Natural History, Odawara, for his critical reading of the manuscript and to Dr. Nikolai B. Nikitsky of the Zoological Museum of Moscow Lomonosov State University for his kind guidance and help for this study. His hearty thanks are due to Mr. Yutaka Ishikawa of Marukomachi, Nagano Prefecture, for his useful advice and cooperation. He is also deeply indebted to Mr. Hiromu Kamezawa of Showa-machi, Saitama Prefecture, for his kindness in giving the author an opportunity to examine invaluable materials. Further, he thanks Mr. Hisayuki Arimoto for his invaluable advice and taking photographs inserted in this paper.

The holotype and one female paratype will be deposited in the collection of the National Science Museum (Nat. Hist.), Tokyo, and the other paratypes are preserved in the collections of Mr. Yutaka ISHIKAWA and the author.



Figs. 1–2. Phloeotrya ishikawai sp. nov.; 1, male (paratype); 2, female (paratype).

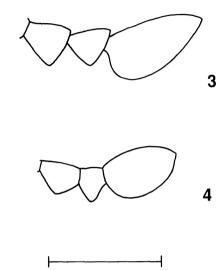
### Phloeotrya ishikawai Toyoshima, sp. nov.

[Japanese name: Shinano-hoso-nagakuchiki] (Figs. 1–4)

Male. Length: 3.1–4.8 mm. Humeral width: 0.8–1.3 mm. Small, slender and cylindrical though slightly depressed above. Head, pronotum and elytra black. Antennae blackish brown except for three basal segments which are yellowish brown. Ventral surface except for abdominal segments blackish brown. Legs and abdominal segments dark reddish brown. Body uniformly covered with recumbent and brown pubescence, which is very fine and short on abdomen.

Head shallowly and coarsely punctulate, interspace between punctures closely micro-punctulate; frons wide and transverse, interocular space much wider than eye lobe in frontal view; hind portion of vertex shallowly foveolate in the middle. Eyes moderately large, elongate-ovate and feebly narrowed inferiorly; anterior margins not emarginate. Antennae subfiliform, reaching basal angles of pronotum or a little beyond them; each segment longer than wide; each of 3rd to 10th segments thickened apicad and subobconical; 1st segment clavate apicad, 0.72 times as long as 3rd; 2nd the shortest, 0.56 times as long as 3rd; 3rd 1.13 times as long as 4th; 5th and 6th equal in length, 0.94 times as long as 4th; each of 7th to 10th somewhat compressed, subequal in length and slightly shorter than 1st; 11th the longest, 1.92 times as long as 10th, thickened near base, then gently attenuate apicad, apex rather acute.

Maxillary palpus finely punctulate; 2nd segment subtriangular, a little broader



Figs. 3–4. *Phloeotrya ishikawai* sp. nov.; three apical segments of maxillary palpus: 3, male; 4, female. Scale: 0.25 mm.

than 3rd; 3rd acutely triangular, with apical margin a little longer than basal one and very slightly shorter than outer one; terminal one broadly subcultriform, much larger than 2nd, outer margin feebly curvate near apex, apical angle acute and inner one widely rounded, apical margin between these angles feebly arcuate outwards.

Pronotum almost semiovate in dorsal view, longer than wide (ratio:— 1.15: 1), widest just before the base, then gently roundly narrowed apicad and slightly so towards the basal corners which are very narrowly rounded; anterior margin strongly arcuate outwards; lateral sides completely margined from base to apex though the marginations are somewhat obsolete at the front corners; basal margin almost straight though very slightly bisinuate; disc moderately convex and feebly depressed medially, bearing a pair of rather broad and subtriangular foveae beside the middle of base, coarsely and closely punctate, interspace between punctures very closely micro-punctulate, middle of the disc not rugose and sometimes with very narrow short longitudinal impunctate area.

Elytra widest near the middle, slightly wider than the widest portion of pronotum, gently and roundly narrowed apicad, very slightly so basad, apices narrowly dehiscent and each narrowly rounded; disc moderately convex though feebly depressed, without visible veins or costae, shallowly, coarsely and very closely punctulate, the punctures being smaller than those on pronotum, basal portions just inside humeri somewhat impressed. Scutellum relatively large in proportion to the size of body, transverse with posterior margin rounded, moderately convex above, coarsely and closely punctulate.

Legs rather short though stout, aciculately punctate or finely sculptured; fore coxae closely contiguous to each other; all femora flattened and clavate; each segment of fore tarsus flattened and dilated apicad except for simple and very slender 5th segment, 1st a little longer than 2nd which is the broadest, and 4th bilobed; middle and

hind tibiae subequal to respective tarsi in length; middle and hind tarsal segments simple and cylindrical; ratio of lengths of middle and hind tarsal segments as follows:— 1: 0.55: 0.45: 0.21: 0.44 and 1.60: 0.66: 0.30: 0.43, respectively; middle tibiae much shorter than hind ones; each pair of middle and hind tibial spurs short, unequal in length; claws simple with basal half of inner edge thickened.

Prosternum closely punctulate; middle of intercoxal portion short, feebly angulate backwards. Mesosternum coarsely and finely punctate in the middle and extremely closely micro-punctulate laterally; median process rather broadly and triangularly projecting backwards with apex reaching a little before the middle of coxae which are contiguous behind.

Abdomen with 5 visible sternites; each sternites simple, without impressions or tuberculous projections, finely and closely punctulate; 5th sternite widely emarginate on apical margin, with apico-lateral corners obtusely angulate; apical margin of anal tergite feebly emarginate.

Female. Length: 2.9–5.9 mm. Humeral width: 0.7–1.9 mm. Coloration as in male. Body somewhat slenderer than in male. Antennae shorter, reaching basal corners of pronotum or a little before them; each of 3rd to 10th segments subcupulate, feebly thickened apicad; apicalmost apparently shorter than in male, feebly attenuate apicad. Maxillary palpus shorter and slenderer than in male; apical margin of 3rd segment moderately incurvate; apicalmost apparently shorter than in male, with apical margin more strongly rounded. Pronotum slightly narrower than in male. Legs slenderer than in male; fore tarsal segments slender and cylindrical, not dilated; 1st segments of hind tarsus longer than in male. Apex of 5th abdominal segment almost straight or very feebly arcuate. Apex of anal tergite almost straight or feebly emarginate in the middle.

Type series. Holotype: & Sugadaira (ca. 1,100 m in alt.), Sanada-machi, Chiisagata-gun, Nagano Pref., Japan, 21–V–1992 (reared and emerged from dead twigs of Fraxinus mandshurica var. japonica, which were collected on 30th April, 1992), Ryôji Toyoshima lgt. Paratypes: 1 \( \rangle \), same data as the holotype. Same data as the holotype except for the emerged dates, 2 \( \delta \delta \), 1 \( \rangle \), 22–V–1992; 1 \( \delta \), 25–V–1992; 1 \( \delta \), 27–V–1992; 1 \( \rangle \), 28–V–1992; 1 \( \rangle \), 2–Vi–1992; 1 \( \rangle \), 25–V–1992. Same data as the holotype except for the collected date of the host (30th April, 1993) and the emerged dates, 1 \( \delta \), 22–V–1993; 1 \( \delta \), 4 \( \rangle \rangle \), 26–V–1993; 1 \( \delta \), 30–V–1993, 1 \( \rangle \), same locality as the holotype but collected in the field, 26–VII–1989, Hiromu KAMEZAWA lgt.

Notes. This new species is very closely allied to *Phloeotrya subtilis* REITTER, 1897 distributed from Europe to southeastern Siberia, but differs from it in having closer and finer punctures on the prothorax and the lateral sides of the pronotum completely margined from base to apex. It also somewhat resembles *P. obscura* (LEWIS, 1895) from Japan, but is distinguished from the latter by the smaller body, the shorter prosternal process, the finer punctures on the pronotum and the simple abdominal sternites in the male without sexual impressions. Further, this species may be distinguishable from *P. parvula* (LEWIS, 1895) by the different color of body and shorter mesosternal process.

This species is named after Mr. Yutaka ISHIKAWA in honor of his many discoveries in the melandryid fauna of Nagano Prefecture.

#### 要約

豊嶋亮司:中部日本から発見されたPhloeotrya属の1新種. — 長野県菅平で採集したヤチダモ枯枝より羽化した小型のナガクチキムシを新種と認め、シナノホソナガクチキPhloeotrya ishikawai Toyoshima, sp. nov. と命名して記載した. 本種はヨーロッパからシベリアにかけて分布する P. subtilis Reitter に酷似するが、前胸部はより微細に点刻され、その側縁は基部から先端まで完全に縁取られることで区別される. さらに本種は、日本に分布するビロウドホソナガクチキ P. parvula (Lewis, 1895) およびニセビロウドホソナガクチキ P. parvula (Lewis, 1895) に似ているが、前者とは体がより小型で前胸腹板突起がきわめて短いこと、前胸背板の点刻がより微細であること、よの腹板が単純であることなどにより、また後者とは色彩が異なり中胸腹板突起が短いことにより区別できる. なお、本種の種名は長野県在住のナガクチキ研究家である石川豊氏に因む.

#### References

Lewis, G., 1895. On the Cistelidae and other heteromerous species of Japan. *Ann. Mag. nat. Hist.*, (6), **15**: 250–278, 422–448, 8 pls.

NIKITSKY, N. B., 1989. The beetle families Tetratomidae and Melandryidae of the USSR Far East. *Sb. Trud. zool. Muz. MGU*, **27**: 3–87. (In Russian.)

REITTER, E., 1897. Phloeotrya subtilis n. sp. Dt. ent. Z., 23: 246.

1911. Fauna Germanica. Die Käfer des Deutschen Reiches, 3. 436 pp., 48 pls. Stuttgart.

SEIDLITZ, G., 1898. In ERICHSON, W. F. (ed.), Naturg. Ins. Deutschl., 5(2): 305–680.