HOKKAIDO UNIVERSITY

Title	Two new species of Roproniidae (Hymenoptera)
Author(s)	Yasumatsu, Keizo
Citation	Insecta matsumurana, 19(3-4), 117-122
Issue Date	1956-02
Doc URL	https://hdl.handle.net/2115/9571
Type	departmental bulletin paper
File Information	19(3-4)_p117-122.pdf

Hokkaido University Collection of Scholarly and Academic Papers : HUSCAP

TWO NEW SPECIES OF ROPRONIIDAE

(Hymenoptera)

By KEIZÔ YASUMATSU

Entomological Laboratory, Kyushu University, Fukuoka

The Roproniidae is a very small but a most remarkable family of Hymenoptera, being represented by only a single genus, *Ropronia* PROVANCHER, and recorded so far from North America and South China. In 1948 Dr. TOWNES published redescriptions of the three previously described species of the genus, a description of a new species from China, together with a key to the four species. In the fall of 1954 I had the good fortune to visit the Entomological Laboratory of Ehime University, where my attention was attracted to a specimen of a curious wasp in the collection of Dr. ISHIHARA. Careful examination of the specimen has led me to the conclusion that it clearly represents a new species of the genus *Ropronia*, hitherto unrecorded from Japan. In the course of preparing a paper on this new species, Dr. TOWNES and Mr. NAGASE were so generous as to send me additional specimens of the genus *Ropronia* in their collection. In this paper I describe two new species of the genus *Ropronia* together with a key to all the known species.

Before going further I wish to thank Professor TAMOTSU ISHIHARA for the gift of this interesting specimen. I am also grateful to Professor HENRY TOWNES and Mr. HIROHIKO NAGASE in giving me the opportunity of studying their collections of *Ropronia* and for the gift of specimen of *Ropronia garmani* and a paratype of *Ropronia brevicornis* for comparison. My special thanks are due to Mr. KARL V. KROMBEIN, who has made available the paper by Dr. TOWNES, and who has assisted in the preparation of this paper. Further I wish to thank Professor TEISO ESAKI for his constant encouragement and to Mr. YÔZÔ MURAKAMI for his help in preparing the illustrations accompanying the present paper.

Family **Roproniidae**

(Japanese name: *Ishiharabachi-ka*)

Genus *Ropronia* PROVANCHER

(Japanese name: *Ishiharabachi-zoku*)

Key to the species of *Ropronia*

(Modified from TOWNES, 1948)

1. Head and thorax mostly or entirely ferruginous; postscutellum elevated as an acute pyramid (U. S. A.) . . . . . *californica* ASHMEAD, 1899

- Head and thorax black, sometimes marked with white; postscutellum convex, not conspicuously elevated 2
2. Nervulus antefurcal; frons and top of head coarsely rugosopunctate (Canada and U. S. A.) . . . . . *pediculata* PROVANCHER, 1886
- Nervulus postfurcal; frons and top of head not rugosopunctate . . . 3
3. Fore wing with a large fuscous spot below stigma (China and Japan). . . . . *brevicornis* TOWNES, 1948
- Fore wing without a spot 4
4. Head, seen in front, much wider than high; top of head with rather close, sharp, medium-sized punctures; mesoscutum with medium-sized punctures separated by about their diameter (U. S. A.) . . *garmani* ASHMEAD, 1899
- Head, seen in front, subcircular in outline; top of head impunctate; mesoscutum almost impunctate or with some very minute punctures . . 5
5. Head, seen in profile, with eyes about as long as temples. Second abdominal tergite, seen in profile, with a greatly curved dorsal line (♀); dorsal area of the abdominal petiole densely and distinctly punctured. Second discoidal cell of fore wing very narrow, distinctly more than twice as long as wide (Japan) . . . . . *townesi* sp. nov.
- Head, seen in profile, with eyes distinctly shorter than temples. Second abdominal tergite, seen in profile, with a highly curved dorsal line (♀); dorsal area of the abdominal petiole with some irregular sculpture. Second discoidal cell of fore wing not very narrow, about twice as long as wide (Japan) . . . . . *ishiharai* sp. nov.

Ropronia ishiharai sp. nov.

(Japanese name: *Ishiharabachi*)

Female. Black. Apex of the apical segment of maxillary palpi, tegulae, apex of fore and mid-femora, fore tibiae and tarsi brownish. Venation brownish-black. Apex of abdominal petiole brownish. Wings transparent and slightly smoky.

Pubescence on head, thorax, coxae, trochanters, femora and abdominal petiole dense and silvery; that on tibiae, tarsi and abdomen yellowish grey and somewhat appressed; that on antennae very short, dense and dark brownish, that on the underside of the entire length of the first flagellar segment ferruginous.

Head, seen in front, much wider than high, with the inner orbits almost parallel to each other. Head, seen from above, about as wide as thorax. Head, seen in profile, with eyes about as long as temples. Vertex flat and wide, very slightly convex. Ocelli arranged in an obtuse-angled triangle, minimum distance between posterior ocelli and the posterior margin of vertex as long as ocellocular line. Postocellar line slightly shorter than ocellocular line. Frons with a median, dorsal, longitudinal, very high tubercle which projects outward and upward. Frons between inner orbits and the antennal sockets with sharp ridges, so that antennae arise from an area having a deeply excavated appearance. Frons below the median tubercle wide and slightly convex, with a short, median, longitudinal

carina at the middle. Clypeus short, transverse, slightly longer than postocellar line, with the anterior margin almost straight and very much shining. Anterior margin of labrum rounded, with a fringe of very dense yellowish-white pubescence. Antennal scape curved and narrowed at the base: third flagellar segment about three-times as long as wide. Mesoscutum much wider than long (about 3 : 2), with deep, costate, parapsidal furrows, and with traces of notaulices. Scutellum moderately convex, with a deep, large, transverse furrow (which has three longitudinal costae) at the anterior margin. Abdomen, seen from above, with the second tergite about two-thirds as wide as head, much compressed laterally, ratio of width to height about 20 : 32; first segment long, about as long

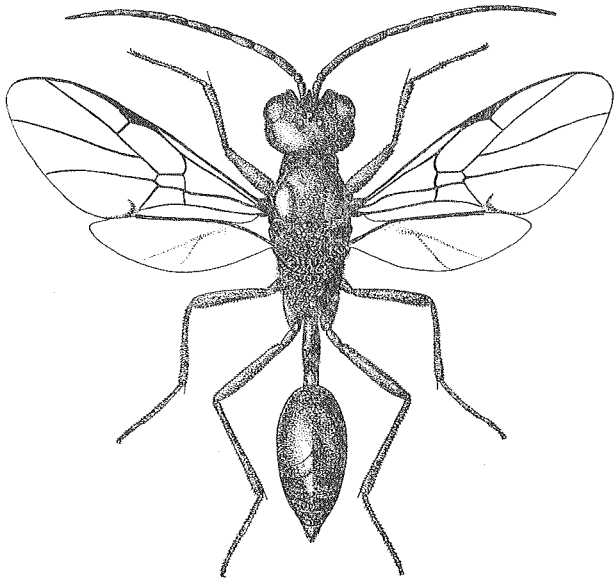

Fig. 1. *Ropronia ishiharai* sp. nov., ♀.

as midfemur, widest at the middle and slightly narrowing both anteriorly and posteriorly, about four times as long as high; second tergite large, seen in profile, with the dorsal line very much rounded.

Upper half of head almost impunctate; lower half of temples with dense minute punctures; frons between anterior ocellus and frontal tubercle with some irregular wrinkles, on the same plane as vertex; frontal surface below frontal tubercle somewhat rough; ocellar triangle with a weak longitudinal carina between posterior ocelli. Clypeus with some minute punctures; mandibles with some coarsely scattered minute punctures. Mesoscutum dull and without punctures, area between parapsidal furrows with some irregular longitudinal wrinkles on the posterior portion; scutellum, postscutellum and propodeum reticulated;

sides of pronotum with dense, irregularly shaped, large punctures; anterior portion of mesopleuron with irregular wrinkles; mesopleuron with a large but shallow horizontal furrow on the central portion. Dorsal area of the abdominal petiole defined by a pair of latero-dorsal carinae, with some irregular sculpture (for example, short wrinkles), with impunctate lateral surfaces and ventral surface densely and minutely punctured.

Length of body ca. 10 mm., length of forewing ca. 7.5 mm.

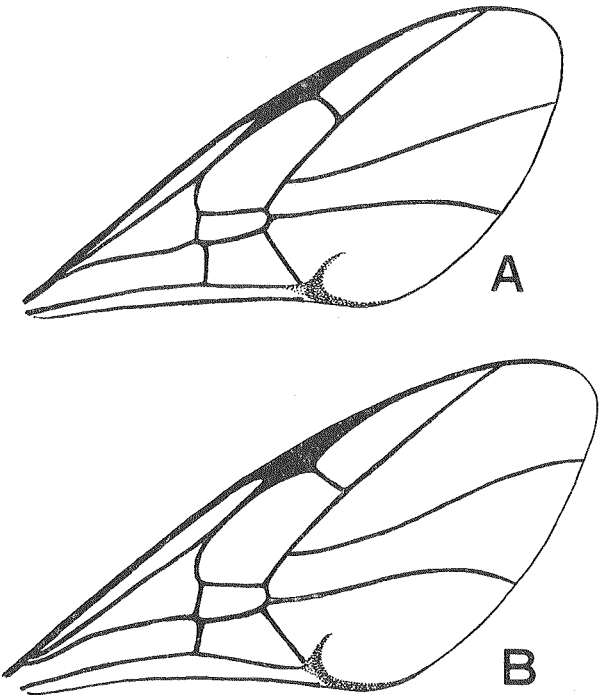

Fig. 2. Fore wing of: (A) *Ropronia townesi* sp. nov.; (B) *R. ishiharai* sp. nov.

Male. Underside of the antennal segments 1–5 greyish-white. Legs much paler in coloration. Second abdominal tergite, seen in profile, with gently curved dorsal line.

Length of body ca. 7–9 mm., length of forewing ca. 6–8 mm.

Habitat: Japan (Honshu).

Holotype: Female, Mt. Dogo, Hiroshima Prefecture, Honshu, 4. vii. 1954, T. ISHIHARA leg., in the collection of the Entomological Laboratory, Kyushu

University, Fukuoka.

Allotype: Male, Mt. Norikura, Nagano Prefecture, Honshu, 6, viii. 1954, H. NAGASE leg., in NAGASE's collection.

Paratype: Male, Tochimoto, Chichibu, Saitama Prefecture, Honshu, 4. ix. 1954, H. NAGASE leg., in NAGASE's collection.

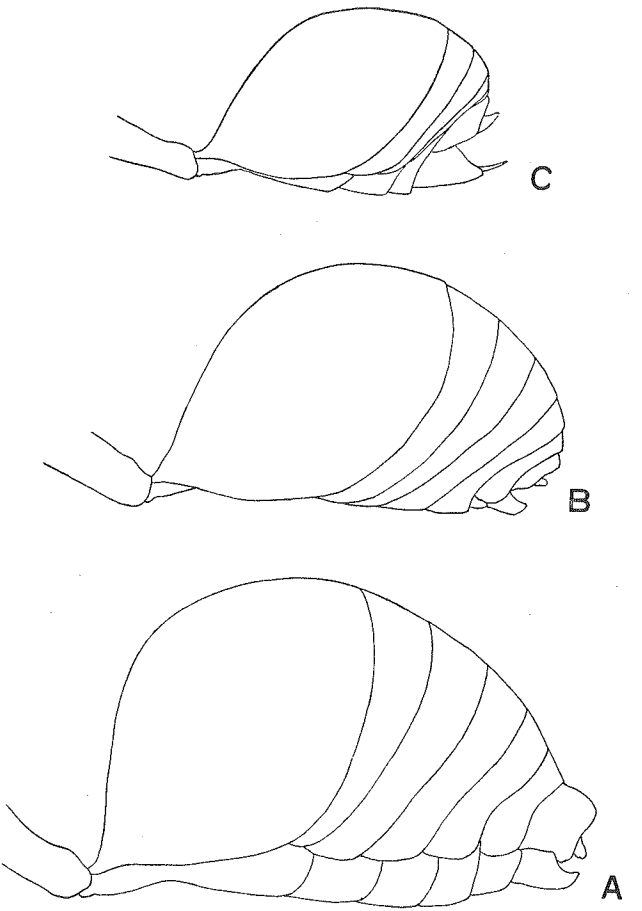

Fig. 3. Abdomen of: (A) *Ropronia ishiharai* sp. nov., ♀; (C) the same, ♂; (B) *R. townesi* sp. nov., ♀.

This new species is very closely allied to *R. garmani* ASHMEAD, but may be distinguished by the characters given in the foregoing key.

It is with pleasure that I name this species in honor of Dr. ISIHARA who

collected the type.

Ropronia townesi sp. nov.

(Japanese name: *Ishiharabachimodoki*)

This species is very closely related to *R. ishiharai*, but may be separated from the latter in the following points: Female. Underside of the antennal segments 2–8 ferruginous or dark brownish. Head, seen in profile, with eyes about as long as temples. Second abdominal tergite, seen in profile, with a gently curved dorsal line; dorsal area of the abdominal petiole densely and distinctly punctured. Second discoidal cell of fore wing very narrow, distinctly more than twice as long as wide.

Length of body ca. 8.5 mm., length of forewing ca. 7 mm.

Habiatat: Japan (Hokkaido).

Holotype: Female, Sapporo, Hokkaido, 7. vii. 1954, TOWNES' Family leg., in TOWNES' collection.

It is with pleasure that I name this species in honor of Dr. TOWNES who collected the unique type.

Ropronia brevicornis TOWNES

(Japanese name: *Himeishiharabachi*)

1948. *Ropronia brevicornis* TOWNES, Proc. U. S. Nat. Mus., 98 : 88–89, (Foochow, China.).

Specimen examined: Male, Kamikochi, Nagano Prefecture, Honshu, 25. vii. 1954, TOWNES' Family leg., in TOWNES' collection.

Although this specimen differs in having a somewhat different type of punctation on the head, scutellum and the petiole of abdomen, I refer it to *R. brevicornis* for the time being. Further material will be necessary to determine whether Japanese specimens represent another subspecies of *R. brevicornis* or not.