



# HOKKAIDO UNIVERSITY

Title	Charipidae of Japan (Hymenoptera)
Author(s)	Watanabe, Chihisa
Citation	Insecta matsumurana, 17(2), 85-89
Issue Date	1950-04
Doc URL	<a href="https://hdl.handle.net/2115/9516">https://hdl.handle.net/2115/9516</a>
Type	departmental bulletin paper
File Information	17(2)_p85-89.pdf



## CHARIPIDAE OF JAPAN

(Hymenoptera)

By CHIHISA WATANABE

Entomological Institute, Hokkaido University

The family Charipidae comprises a small assemblage of the superfamily Cynipoidea and its members are bred from various species of aphides (Aphididae). It may be, however, true that they are secondary parasites, feeding not directly on the aphides, but on the primary parasites (Aphidiidae) of the aphides. So far as we know, only a single species, *Charips japonicus* (Ashmead), has been recognized in Japan. In this paper are added to the fauna two other *Charips*-species, both of which are new to science.

Genus *Charips* MARSHALL*Allotria* WESTWOOD, Mag. Nat. Hist., 6 : 494, 1833 (non HÜBNER, 1816).*Xystus* HARTIG, Zeitschr. Ent., 2 : 186, 1840 (non SCHÖNHERR, 1826).*Charips* MARSHALL, Ent. Month. Mag., 6 : 181, 1870.Genotype—*Charips microcera* MARSHALL, 1870.

This genus is widely distributed over the world and its outstanding features are; (1) the fully developed wings, with the radial cell closed, and (2) the absence of parapsidal furrows of the mesonotum. The three species occurring in Japan may be distinguishable by the following key:

## Key to the species

1. ♂♂ (Antennae 14-jointed) ..... 2
- ♀♀ (Antennae 13-jointed) ..... 4
2. Head yellow; thorax brownish yellow, the mesonotum with a median streak and a lateral spot towards each tegula; 2nd and 3rd joints of the antennae slightly curved, equal in length, a little shorter than the 1st. Length, 1.1 mm. ....  
..... *Charips japonicus* (ASHMEAD)
- Head and thorax black or piceous-black; mesonotum with no median streak; 2nd joint of the antennae simple, not curved. .... 3
3. Piceous-black. Antennae yellow on the basal third, the rest fuscous; 1st joint a little longer than the 2nd, which is as long as the 4th; 3rd joint simple, not

- curved, a little more than 1.2 times as long as the 4th. Propodeum with no longitudinal carina. Length, 1—1.2 mm. .... *Charips simplex* mihi
- Black. Antennae reddish yellow, the two basal joints somewhat fuscous; 1st joint as long as twice the length of the 2nd, which is distinctly shorter than the 4th; 3rd joint apparently curved, more than 1.5 times as long as the 4th. Propodeum with two longitudinal carinae near the middle. Length, 2 mm. .... *Charips ishizawai* mihi
4. Piceous-black. Antennae yellow on the basal third, the rest fuscous; 1st joint a little longer than the 2nd, which is as long as the 4th; 3rd joint simple, a little more than 1.2 times as long as the 4th. Propodeum with no longitudinal carina. Length, 1—1.2 mm. .... *Charips simplex* mihi
- Black. Antennae reddish yellow, the two basal joints somewhat fuscous; 1st joint as long as twice the length of the 2nd, which is shorter than the 4th; 3rd joint simple, more than 1.5 times as long as the 4th. Propodeum with two longitudinal carinae near the middle. Length, 2 mm. .... *Charips ishizawai* mihi

### **Charips japonicus** (ASHMEAD)

*Xystus japonicus* ASHMEAD, Jour. New York Ent. Soc., 12: 77, ♂, 1904.

*Charips (Charips) japonicus* DALLA TORRE et KIEFFER, Das Tierreich, 24: 288, ♂, 1910.

No representative of this species has yet been seen by me. The original description reads as follows:

"Male.—Length 1.1 mm. Wings expanse about 3.8 mm. Head yellow, the eyes black; thorax brownish-yellow, the mesonotum with a median streak and a lateral spot towards each tegula, and the disk of the scutellum dark brown; abdomen black, beneath and at apex yellowish. Wings hyaline, the venation, except the costae basally which are yellowish, light brownish. The antennae are longer than the whole insect, 14-jointed, the basal third yellow, the apical two thirds dusky or brownish, joints 2 and 3 slightly curved, about equal in length and only a little shorter than the first, a little more than four times as long as thick, the joints beyond cylindrical, very imperceptibly shortening to the last, which is only a little more than twice as long as thick.

"Type.—No. 7137, U. S. National Museum.

"Japan. Received from Mr. A. KOEBELE, labelled No. 1268 and bred from an Aphis."

### **Charips simplex** sp. nov.

♂. Piceous-black; mandibles and tegulae brownish yellow; palpi pale yellow. Antennae yellow on the basal third, the rest fuscous. Legs yellow, the apical joint of the tarsi fuscous. Wings hyaline, the veins brownish yellow.

Head and thorax smooth and shining, with white pubescence. Antennae 14-jointed, longer than the body, slightly thickened towards the apex; 1st joint a little longer than the 2nd, which is as long as the 4th; 3rd joint simple, not curved, a little more than 1.2 times as long as the 4th; 4th to 13th joints equal in length; last joint as long as the preceding. Parapsidal furrows absent, and no fovea at the base of scutellum. Wings fully developed; radial cell closed, more than 2.5 times as long as wide; 2nd abscissa of the

radius slightly curved outwardly, as long as twice the length of the 1st abscissa, which is nearly straight. Propodeum densely pubescent, with no longitudinal carina. Abdomen smooth and shining, densely pubescent at the extreme base and obliquely truncated at the apex. Length, 1--1.2 mm.

♀. Closely resembles the male in general structure and color, but the antennae are 13-jointed, shorter than in the male, the last joint is a little longer than the preceding. Length, 1--1.2 mm.

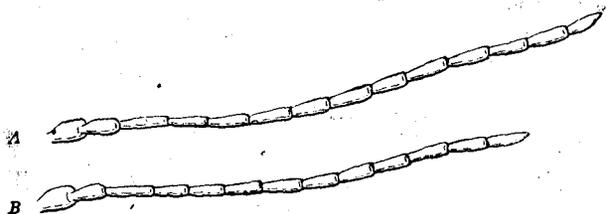


Fig. 1. Antennae of *Charips simplex* sp. nov.

A: ♂. B: ♀.

Holotype (♂) and Allotype (♀), Sapporo, VI. 1941, C. WATANABE leg. Paratypes: 5 ♂♂, 7 ♀♀, Sapporo, VI. 1941, C. WATANABE leg. and 10 ♂♂, 5 ♀♀, Sapporo, VII. 1938, C. WATANABE leg.

The type-specimens are placed in the Entomological Institute, Hokkaido University, Sapporo.

A series of the representatives was reared from *Amphorophora magnoliae* ESSIG et KUWANA, parasitized by *Praon volucris* HALIDAY,\* in June, 1941 and the other series was reared from *Amphorophora indica* VAN DE GOOT, parasitized by *Praon longicornis* HALIDAY\*, in July, 1938.

The present species closely resembles *Charips pusillus* (KIEFFER)\*\* from Europe, but may be easily distinguished from the latter by the large radial cell.

The present species closely resembles *Charips pusillus* (KIEFFER)\*\*

from Europe, but may be easily distinguished from the latter by the large radial cell.

### *Charips ishizawai* sp. nov.

♂. Black; face piceous-black; mandibles and tegulae reddish brown. Antennae reddish yellow, the two basal joints somewhat fuscous. Wings hyaline, with the veins brownish yellow. Legs reddish yellow, the coxae and the last joint of the tarsi fuscous.

Head and thorax smooth and shining, with white pubescence. Antennae 14-jointed, a little longer than the body, not thickened towards the apex; 1st joint as long as twice the length of the 2nd, which is distinctly shorter than the 4th; 3rd joint apparently curved, more than 1.5 times as long as the 4th; 4th to 13th joints equal in length; last joint as long as the preceding. Parapsidal furrows absent and no fovea at the base of scutellum. Wings fully developed; radial cell closed, more than 2.5 times as long as wide; 2nd

\* The two *Praon*-species have not yet been recorded from Japan. A detailed information on these species will be given in another paper.

\*\*Bull. Soc. Metz, (2), 10 : 12, ♀♂, 1902.

abscissa of the radius slightly curved outwardly, twice as long as the 1st abscissa, which is slightly curved inwardly. Propodeum densely pubescent, with two longitudinal carinae near the middle. Abdomen smooth and shining, densely pubescent at the extreme base

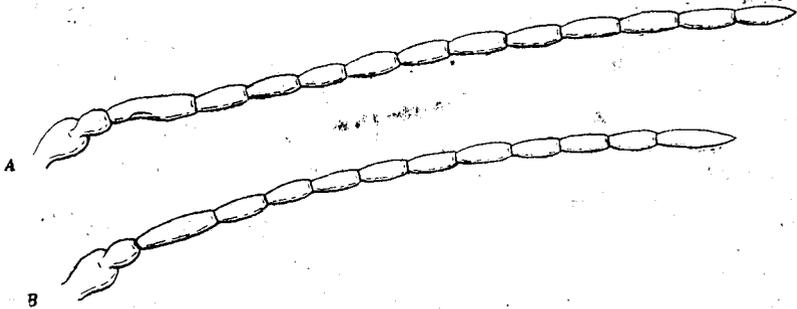


Fig. 2. Antennae of *Charips ishizawai* sp. nov.

A: ♂. B: ♀.

and obliquely truncated at the apex. Length, 2 mm.

♀. Closely allied to the male in general structure and color, but the antennae are 13-jointed, shorter than in the male, the 3rd joint is simple, not curved, a little more than 2.5 times as long as the 4th, and the last joint is a little longer than the preceding. Length, 2 mm.

Holotype (♂), Allotype (♀) and Paratypes (21 ♂♂, 14 ♀♀), Ogikubo, Tokyo, IV, 1939, T. ISHIZAWA leg.

The type-specimens are placed in the Entomological Institute, Hokkaido University, Sapporo.

All the representatives were reared from *Pterochlorus tropicalis* VAN DE GOOT, parasitized by *Aphidius japonicus* ASHMEAD, in April, 1939.

On account of the curved 3rd joint of the antennae in the male the present species comes near *Charips urticarum* (KIEFFER)\* from Europe, but may be distinguishable from the latter by the different relative length of the 3rd and 4th joints of the antennae and by the large size.

On this occasion I wish to express my sincere thanks to Mr. TAKEO JICHÔ ISHIZAWA for his kindness in sending the valuable material.

#### References

- ASHMEAD, W. H. : Descriptions of new Hymenoptera from Japan.—I. Jour. New York Ent. Soc., 12 : 65—84, 1904.  
CAMERON, P. : A Monograph of the British Phytophagous Hymenoptera, Vol. 3, 1889.  
DALLA TORRE, K. W. VON, et KIEFFER, J. J. : Genera Insectorum, Fasc. 9 & 10. Hymenoptera.

\* Bull. Soc. Metz, (2), 10 : 10, ♀♂, 1902.

Fam. Cynipidae, 1902.

DALLA TORRE, K. W. VON, et KIEFFER, J. J. : Das Tierreich, 24. Lieferung. Hymenoptera. Cynipidae, 1910.

KIEFFER, J. J. : in ANDRÉ, Spécies des Hyménoptères d'Europe & d'Algérie, Tome septième bis Cynipides, Tome 2, 1905.

ROHWER, S. A. et FAGAN, M. M. : The Type-species of the Genera of the Cynipoidea, or the Gall Wasps and Parasitic Cynipoids. Proc. U. S. Nat. Mus., 53 : 357—380, 1917.

ROHWER, S. A. et FAGAN, M. M. : Additions and Corrections to "The Type-species of the Genera of the Cynipoidea or the Gall Wasps and Parasitic Cynipoids". Proc. U. S. Nat. Mus., 55 : 237—240, 1919.