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**タイトル**
ハビスカのハビスカ、北海道で発見された新種（北方日本ハビスカダクトリノギに関する研究、2）

**著者**
近見松治

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APHIDS INFESTING LONICERA MORROWII
ASA GRAY IN HOKKAIDO,
WITH DESCRIPTION OF A NEW SPECIES
(STUDIES ON APHIDIDAE OF THE NORTHERN
PART OF JAPAN, II)

By
MATSUJI HORI

Up to the present time three species of Aphididae have been recorded in Hokkaido as infesting Lonicera Morrowii which is one of the peculiar plants of Japan. On this occasion one new species should be added to the Aphid pests of this plant. It is an interesting fact that all the species belong to different genera, being distinguishable as in the following key:

1. Body covered with white woolly secretion

2. Body yellowish green; feeding on leaves

3. Body dark reddish or greenish brown; feeding on tender shoots and twigs

4. Body yellowish; feeding on leaves

5. Body greenish brown or dark brown; feeding on twigs and sprouts

Amphorophora lonicericola Takahashi


Locality—Sapporo.

General Distribution—Japan (Hokkaido); China (Kiangsu).

Biology and Notes—This aphid feeds on the underside of the leaves of Lonicera Morrowii, and never curls the leaves like Procephalus kōnoi. The affected leaves turn yellow, showing purplish dots. The stem mother matures in the latter part of June and begins to deposit her living young, which are always alate forms according to the present writer's observation. During July all the aphids leave Lonicera, but no definite information with regard to the alternate

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host plant has been reported. From the latter part of September the autumn
migrants, including gynoparae and males, fly back to the primary host plant.

Japanese name—*Kuwayama-aburamushi*.

Taxonomy—This species is closely allied to *Amphorophora lonicerae* (Sei-
Bol) in colour and structure, but can easily be distinguished from the latter
by the absence of the secondary sensoria on antennal joints IV and V of the
alate viviparous female.

2. *Amphicercidus japonicus* (Hori)


Locality—Sapporo.

Gen. Distr.—Japan (Hokkaido).

Notes—This aphid feeds on tender shoots and twigs, rarely on young fruits.
The white masses produced by this aphid on the twigs are very conspicuous as
in the case of the woolly apple aphid (*Eriosoma lanigerum*).

Jap. name—*Kwaihoku-no-wataaburamushi*.

Taxonomy—This species is closely allied to *Amphicercidus flacculosa* (Gil-
lette et Palmer), but differs from the latter in the absence of sensoria of antennal
joint V and in having a large number of sensoria on joint III of the alate viviparous
female.

3. *Prociphilus (Stagona) konoii* Hori

*Prociphilus (Stagona) konoii* Hori, Ins. Mats., XII, p. 199 (1938).

Locality—Sapporo.

Gen. Distr.—Japan (Hokkaido).

Notes—This aphid alternates between *Lonicera Morrowii* and *Picea Glehni*
(Akaezomatsui). It feeds on the rootlets of the latter plant in the nursery stage,
causing great damage to them.

Jap. name—*Kono-owataaburamushi*.

4. *Aulacorthum lonicerae* sp. nov.

Apterous viviparous female (Fundatrix)

Colour: Generally greenish brown. Antennae dark brown except the basal
two-thirds of joint III pale brown. Legs light brown, with the apical halves of
femora, the apices of tibiae and the whole of tarsi blackish. Cornicles and cauda
concolorous with the body.

Structural characters: Body oval, imbricated especially on the front of head
and frontal tubercles. Antennae as long as the body, with a few rather short
bristles; joint I longer and broader than II; III slightly shorter than IV and V
taken together, with one or two secondary sensoria at the basal part; IV longer
than V; VI very long, as long as III and V taken together; flagellum of VI
eight times as long as the basal part. Hind tarsi shorter than the cauda. Cornicles slightly longer than antennal joint III, conspicuously imbricated, strongly expanded towards the base, and abruptly swollen at the apical portion. Cauda conical, longer than broad, with four moderately long bristles on each side.

Measurements: Body, 2.0 × 1.6 mm.; antennae, 2.04 mm. (I—0.12, II—0.08, III—0.54, IV—0.34, V—0.24, VI—0.72, (0.08 + 0.64)); cornicles, 0.58 mm.; cauda, 0.22 mm.; hind femora, 0.80 mm.; hind tibiae, 1.40 mm.; hind tarsi, 0.16 mm.

Alate viviparous female (Emigrant)

Colour: Generally dark brown. Head and antennae black. Rostrum pale greenish brown with the apex blackish. Legs pale brown except the apical halves of femora, the apices of tibiae and the whole of tarsi dusky. Abdomen with six blackish spots on each side. Cornicles and cauda light brown with the base and apex of the former blackish.

Structural characters: Frontal tubercles distinct but weakly developed, imbricated, not provided with spinules. Ocular tubercles normal, not large. Antennae imbricated with short non-capitate bristles, slightly shorter than the body; joint I longer and stouter than II; III nearly as long as IV and V taken together, with 30 to 33 circular sensoria irregularly scattered over the whole surface; IV with 4 or 5 sensoria arranged irregularly on the distal portion; VI longer than III and V taken together; flagellum of VI very long, about ten times the length of the basal part. Rostrum reaching to a point near the 3rd coxa. Hind tarsi slightly shorter than the cauda. Wing venation normal. Abdomen rather oval, without lateral tubercles. Cornicles long and slender, as long as antennal joint III, imbricated, expanded towards the base, and abruptly swollen at the apical portion. Cauda short, with four rather long bristles on each side.

Measurements: Body, 2.12 × 0.96 mm.; antennae, 1.78 mm. (I—0.11, II—0.08, III—0.46, IV—0.13, V—0.20, VI—0.80 (0.07 + 0.73)); cornicles, 0.45 mm.; cauda, 0.15 mm.; hind femora, 0.72 mm.; hind tibiae, 1.36 mm.; hind tarsi, 0.14 mm.

Alate viviparous female (Gynopara)

Colour: Generally dark greenish brown. Antennae black except the extreme base of joint III pale. Legs paler in colour than the body, with the greater part of femora except at the bases, the apices of tibiae and the whole of tarsi blackish. Several lateral black spots visible on the dorsum. Cornicles pale brown with the apices blackish. Cauda concolorous with the body. Abdomen with a large black area on the dorsum and with several black spots on the sides.

Structural characters: Frontal tubercles weakly developed. Antennae imbricated; joint III slightly longer than or as long as IV and V taken together,
broad, with 57 to 62 irregularly sized secondary sensoria; IV longer than V, with 20 to 22 sensoria; V two times the length of the base of VI, with 4 or 5 sensoria; flagellum very long, eight times as long as the basal part. Cornicles longer than antennal joint IV, nearly two times the length of the cauda. Cauda short, with three pairs of lateral bristles.

Measurements: Body, 2.00 mm. in length; antennae, 2.06 mm. (I-0.10, II-0.08, III-0.54, IV-0.28, V-0.20, VI-0.86 (0.10+0.76)); cornicles, 0.40 mm.; cauda, 0.13 mm.; hind femora, 0.72 mm.; hind tibiae, 1.52 mm.; hind tarsi, 0.14 mm.

**Alate male**

Structural characters: Smaller and slenderer than the gynopara. Antennae slightly longer than the body; joint III as long as IV and V taken together, with 75 to 80 secondary sensoria; IV about two times the length of V, with 30 to 35 sensoria; V longer than the base of VI, with 5 to 7 sensoria; flagellum very long, over ten times the length of the base, and longer than III and V taken together. Cornicles as long as the antennal joint IV. Cauda conical, shorter than one-third the length of the cornicles, with three pairs of bristles on the sides.

Measurements: Body, 2.00 x 0.84 mm.; antennae, 2.18 mm. (I-0.10, II-0.08, III-0.54, IV-0.34, V-0.18, VI-0.94, (0.08+0.86)); cornicles, 0.34 mm.; cauda, 0.10 mm.; hind femora, 0.64 mm.; hind tibiae, 1.48 mm.; hind tarsi, 0.11 mm.

**Apterous oviparous female**

Colour: It resembles the fundatrix.

Structural characters: Body oval. Hairs very few and not capitate. Front of the head and frontal tubercles imbricated, not provided with spinules. Antennae slightly shorter than the body, without capitate hairs, imbricated; joint VI the longest, slightly longer than III and IV taken together; flagellum of VI six times the length of the basal part; IV and V almost equal in length. Hind tibiae much swollen, with numerous circular sensoria. Abdominal lateral tubercles on the dorsum obsolete. Rostrum reaching to a point near the 3rd coxa. Cornicles longer than antennal joint III, imbricated, expanded towards the base and slightly swollen at the apical portion. Cauda as long as antennal joint V, with four rather long hairs on each side.

Measurements: Body, 1.7 x 1.0 mm.; antennae, 1.33 mm. (I-0.10, II-0.08, III-0.30, IV-0.18, V-0.16, VI-0.51 (0.07+0.44)); cornicles, 0.34 mm.; cauda, 0.16 mm.; hind femora, 0.61 mm.; hind tibiae, 0.96 mm.; hind tarsi, 0.21 mm.

Type-locality: Sapporo.

Many examples were collected by the writer at the Botanical Garden of the
Hokkaido Imperial University and at the Hokkaido Agricultural Experiment Station in 1924.

Biology and notes—The eggs are laid on the bark of the twigs in the latter part of October. They hatch usually in the early part of the following May. The stem mother matures and begins to deposit the living young in the crevices of the twig. During June and July the alate females migrate to the secondary host plant, Polygonum Blumei (Inu-tade), and feed on the rootlets, forming numerous colonies. The autumn migrants, including gynoparce and males, return to the primary host plant (Lonicera Morrowii) in the beginning of October.

Jap. name—Kūginbokutō-akaaburamushi.

The greater part of the type-specimens are in the writer's collection, while the others are in the Entomological Institute of the Hokkaido Imperial University and in the Hokkaido Agricultural Experiment Station.

Taxonomy—This species is easily distinguished from the congeneric species by the shape of the frontal tubercles.

In presenting this paper the writer wishes to express his sincere thanks to Dr. R. Takaishi for his kind assistance in determining the species. Acknowledgments are due to Dr. S. Kuwayama and Dr. H. Kono for their kindness in sending material and also to Dr. C. Watanabe for his kind advice in compiling this manuscript.

**Explanation of Plate III**

*Aulacortllum lonicerae* sp. nov.

Apterus viviparous female (Fundatrix): 1, frontal tubercle; 2, antenna; 3, cornicle; 4, cauda.

Alate viviparous female (Emigrant): 5, frontal tubercle and antennae; 6, cornicle; 7, cauda; 8, fore wing.

Alate viviparous female (Gynopara): 9, frontal tubercle and antenna; 10, cauda; 11, cornicle.

Male: 12, frontal tubercle and antennae; 13, cornicle; 14, cauda.

Apterus oviparous female: 15, head; 16, antennae; 17, cornicle.
HORI: APHIDS INFESTING *Lonicera Morrowii* ASA GRAY IN HOKKAIDO

摘 要

北海道に於けるキンゾウボクに寄生する蚜虫類
並に1新種の記載
(北日本産蚜虫科の研究 II)

本邦特産植物の1たるキンゾウボク (*Lonicera Morrowii*) に寄生する蚜虫類は従来北海道に於ては次の3種が知られてゐる。

1) *Amphorophora lonicericola* Takahashi クワヤマアブラムシ
2) *Amphicerus japonicus* (Hori) キンゾウボクノリタアブラムシ
3) *Prociphilus* (Stagona) hōnai Hori コウノホオリタムシ

僅コウノホオリタムシはアカエゾマツの根にも寄生しこれに大害を與へる注目すべき種類である。

筆者は更に従来記録せられなかった珍稀な1種を発見したので兹にこれを発表した。本種は新種と認むべきもので次の如く命名した。

4) *Altocorhithon lonicerae* Hori (sp. nov.) キンゾウボクノアカアブラムシ (新種新種)

叙上の如く北海道に於てはキンゾウボクに4種の蚜虫の寄生を見るが、是等4種が各異つた屬に隷属してゐるのは興味深きことである。