TWO NEW GENERA OF APHIIDAE¹ (HOMOPTERA).

By Ryoichi Takahashi, Dept. Agri., Gov't Research Institute, Taihoku, Formosa.

Neophorodon new genus.

Wingless form.—Body provided with many distinct capitate hairs. Frontal tubercles conspicuous, lacking tubercles on the inner side. Antennae 6-jointed, spur of the 6th joint longer than the base, the 1st joint provided with a prominent tubercle on the inner side. Eyes normal. Dorsal and lateral tubercles absent. Cornicles long, gradually swollen on the distal half. Cauda stout, shorter than the cornicle, longer than wide, tapering. Anal plate and tarsi normal.

Winged form.—Body lacking capitate hairs. Frontal tubercles short. Antennae provided with circular or oval sensoria, the 1st joint with a small tubercle. Wing veins normal.

Type.—Neophorodon rubi new species.

This new genus is closely allied to *Phorodon* Passerini and *Acanthaphis* Matsumara, but differs from the former in lacking projections on the frontal tubercles, and from the latter in having no tubercles on the dorsum of the abdomen.

Neophorodon rubi new species.

Wingless viviparous female.—Pale yellow. Eyes black. Antennae mostly black. Cornicles pale brown, with black apices. Cauda yellow. Legs pale brown; apices of tibiae, and tarsi black.

Body oblong, provided with many rather long capitate hairs. Frontal tubercles conspicuous, almost as long as the 2d antennal joint; the inner side very slightly convex, lacking projections, but provided with 2 capitate hairs.

Antennae provided with a few short capitate hairs; the 1st joint much larger than the 2d, with a broad blunt tubercle, which does not reach the apex of the 2d joint and provided with two capitate hairs, on the inner side; the 2d joint lacking tubercles; the 3d joint slightly imbricated, lacking sensoria; the 4th joint imbricated; the relative length of joints as follows: III-33, IV-22, V-21, VI-61 (15 + 46).

Rostrum reaching middle legs. Eyes normal. Body lacking dorsal and lateral tubercles. Cornicles long, as long as the 6th antennal joint, almost reaching the base of the cauda, almost not imbricated, somewhat swollen on the distal half, expanded at the base, about 4.2 times as long as wide, about 4 times as long as the cauda. Cauda short, stout, triangular when seen from above, longer than wide, with the apex rounded, provided with 2 pairs of moderately long lateral bristles. Legs slender, furnished with many capitate hairs; hind tarsi a little shorter than the cauda. Length of body, 2.2 mm.; cornicle, 0.4 mm.; antenna, 1.3 mm.

Winged viviparous female.—Yellowish brown. Head, antennae, and thorax black. Abdomen somewhat dusky at the middle of the dorsum. Cornicles slightly dusky. Cauda yellow. Wings hyaline; stigma gray; veins dark

¹Takahashi's spelling Aphididae amended by the editor.

PROC. ENT. SOC. WASH., VOL. 24, NO. 7-8, OCT.-NOV., 1922 205

brown. Legs yellowish brown, apices of tibiae slightly dusky, tarsi blackish. Body lacking capitate hairs; head provided with some short normal bristles. Frontal tubercles very short, somewhat projecting on the inner side. Antennae lacking hairs; the 1st joint larger than the 2d, with a short blunt tubercle on the inner side, the 3d joint not imbricated, provided with 27 large oval sensoria scattered over the whole length; the 4th joint somewhat imbricated, provided with 14 large circular or oval sensoria scattered over the whole length; the 5th joint provided with 5 large sensoria in a row over the whole length, the apical sensoria large and oval, the relative length of joints as follows: III-49, IV-29, V-26, VI-67 (15 + 52). Rostrum reaching the middle legs. Subcosta provided with 7 small sensoria on the distal two thirds; the 2d branch of the 3d oblique rather short, hind wings with 2 almost parallel obliques; hooklets 3. Cornicles almost similar to those of the wingless form, moderately swollen on the distal two thirds, expanded at the base, 5 times as long as wide, as long as the spur of the last antennal joint, almost 4 times as long as the cauda. Cauda triangular when seen from above, almost as long as wide, provided with 2 pairs of lateral bristles. Legs slender, provided with many bristles; hind tarsi as long as the cauda. Length of body, 2.25 mm.; fore wing, 3.4 mm.; antenna, 1.5 mm.; cornicle, 0.37 mm.

Host.—Rubus sp. (Rubus fraxi nifolius?), attacking the leaf and the young shoot.

Hab.—Formosa (Kagi). Collected by the author in March, 1921.

Described from specimens preserved in alcohol. Type.—Retained by the writer.

Trichosiphonaphis new genus.

Wingless form.—Body wide, provided with some short capitate hairs. Frontal tubercles large, with a short blunt tubercle on the inner side. Antennae 6-jointed, spur longer than the base, the 1st joint slightly convex on the inner side. Dorsal and lateral tubercles absent. Cornicles cylindrical, somewhat swollen near the apex, provided with some prominent capitate hairs. Cauda large, longer than wide, somewhat constricted at the base, shorter than the cornicle. Tarsi and anal plate normal.

Winged form.—Body lacking capitate hairs. Frontal tubercles very short, slightly convex on the inner side. Antennal sensoria circular. The 3d oblique of the front wings twice forked; hind wings with one oblique. Cornicles cylindrical, slightly swollen near the apex, provided with some bristles which are not knobbed.

Type.-Myzus polygoniformosanus Takah.

This new genus is closely related to Myzus Passerini, but differs from it in the following characters.

1. Hind wings with only one oblique. 2. Cornicles provided with normal or capitate hairs.

Trichosiphonaphis polygoniformosanus Takah.

Myzus polygoniformosanus, Takahashi, Aphididae of Formosa, 1, Agr. Expt. St. Formosa, p. 18, pl. XIV, 1, figs. 1-3. (1921).

206 PROC. ENT. SOC. WASH., VOL. 24, NO. 7-8, OCT.-NOV., 1922

Winged viviparous female .- Body lacking hairs. Head provided with a few normal hairs. Frontal tubercles very short, somewhat convex on the inner side. Antennae imbricated, lacking hairs; the 1st joint almost straight on the inner side; the 3d joint provided with about 45 very small circular sensoria scattered over the whole length; the 4th joint provided with 18 similar sensoria; the 5th joint provided with about 8 sensoria almost in a row, the apical sensoria larger; the relative length of joints as follows: III-61, IV-37, V-32, VI-91 (13 + 78). Rostrum reaching the middle legs. Fore wings with the 3d oblique twice forked; subcosta provided with about 10 small circular sensoria on the distal half; stigmatic vein not strongly curved; hind wings with one oblique, hooklets 4, wing veins rather stout. Cornicles cylindrical, imbricated, very slightly dilated on the basal and apical portions, 25 times as long as the cauda, reaching almost to its base, 6 times as long as wide, provided with some moderately long hairs which are not knobbed. Cauda short, stout, broadened on the basal half, longer than wide, provided with 2 pairs of lateral bristles near the apex. Legs long and slender, provided with many setae; tarsi rather slender; hind tarsi as long as the cauda. Length of body, about 1.8 mm.; cornicle, 0.3 mm.; antenna, about 1.8 mm.; fore wing, 2.5 mm.

Host.—Polygonum perfoliatus, attacking the leaf and the stem. Hab.—Formosa (Taihoku, Kagi); Japan (Tokyo).

Actual date of publication, November 18, 1922.



Takahashi, Ryoichi. 1922. "Two new genera of Aphiidae (Homoptera)." *Proceedings of the Entomological Society of Washington* 24, 204–206.

View This Item Online: <u>https://www.biodiversitylibrary.org/item/20190</u> Permalink: <u>https://www.biodiversitylibrary.org/partpdf/14538</u>

Holding Institution Smithsonian Libraries and Archives

Sponsored by Smithsonian

Copyright & Reuse Copyright Status: NOT_IN_COPYRIGHT

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.