



| | |
|------------------|---|
| Title | Some foreign Aphididae (Homoptera) |
| Author(s) | Takahashi, Ryoichi |
| Citation | Insecta matsumurana, 15(4), 146-150 |
| Issue Date | 1941-12 |
| Doc URL | https://hdl.handle.net/2115/9474 |
| Type | departmental bulletin paper |
| File Information | 15(4)_p146-150.pdf |



SOME FOREIGN *APHIDIDAE* (*HOMOPTERA*)

By

RYOICHI TAKAHASHI

(高橋 良一)

(With 2 Textfigures)

Many specimens of foreign *Aphididae* have been received from various sources and this paper represents a part of the results of my examination of them.

A new species from Sumatra

Greenidea eugeniae n. sp.

(Wingless viviparous female) In specimens treated with caustic potash, dark brown, paler on the head and prothorax and at the hind end, but not so on the marginal area of abdomen, antennae dusky brown, cornicles dark brown or black, sometimes paler on the basal part, body setae yellow. Abdomen much widened, and rounded on the side, sclerotised on the dorsum. Body setae rather stout, stiff or slightly curved, mostly fimbriated apically. Head with no protuberance on the front, with 6 setae in a row between the eyes, and about 3 pairs of setae on the median area between the antennae; the setae shorter than the basal 2 antennal segments together. Antennae rather stout, imbricated, with many setae, most of which are rather stout, stiff or slightly curved, and slightly branched at the tip; the 3rd segment without sensoria as usual, as long as, or a little shorter than, the width of head including the eyes, with about 20 setae; the 4th with about 6 setae; relative length of the segments about as follows: III—20, IV—7, V—10, VI—7+14. Rostrum reaching beyond the hind coxae. Abdomen with many minute granules on the dorsum; dorsal setae in irregular rows or scattered, with an indistinct, but rather large scleroite at the base. Venter with many granules on the lateral parts of thorax and abdomen. Cornicles gradually narrowed on both ends, curved, reticulate basally, slightly longer than the 3rd antennal segment, as long as the width of head including the eyes, with many spinules and many long bristles except on the base, the bristles absent also on the distal part, longer than the width of cornicles, some of them branched at the tip. Caudal segment

with a distinct process, which is conical, rounded apically, and as long as wide. Hind tibiae a little imbricated, with 3 spines at the tip, one of which is stout.

Body 1.6 mm. long, 1.0 mm. wide, head including eyes 0.42 mm. wide, antenna 1.1 mm. long, 3rd antennal segment 0.032–0.037 mm. wide at middle, cornicle 0.42 mm. long, 0.046 mm. wide at base and at tip (including flange), 0.069 mm. wide at middle, hind tibia 0.032 mm. wide, longer seta on dorsum 0.06 mm. (on head), 0.073 mm. (on front), 0.074 mm. (on abdomen), longer seta on antenna 0.069 mm., longer seta on cornicle 0.106 mm.

Host plant—*Eugenia spicata*.

Many specimens were collected by Dr. VAN DER MEER MOHR at Lau Deboek, Sumatra, Feb. 17, 1935.

Closely related to *Greenidea anonae* PERGANDE, but the abdomen not paler on the marginal area, with distinct dorsal granules, and the antennae shorter, with the distal part of the last segment being relatively shorter. A specimen in the collection represents an intermediate form between the alate and the apterous forms. It has no wings, but the meso- and meta-thoraci are a little protruding laterally, the head is with 3 small ocelli, the 3rd antennal segment is provided with 20, oval or circular, rather large sensoria mostly in a row except on the basal and distal small parts, and the cornicles are longer, measuring about 0.46 mm. in length.

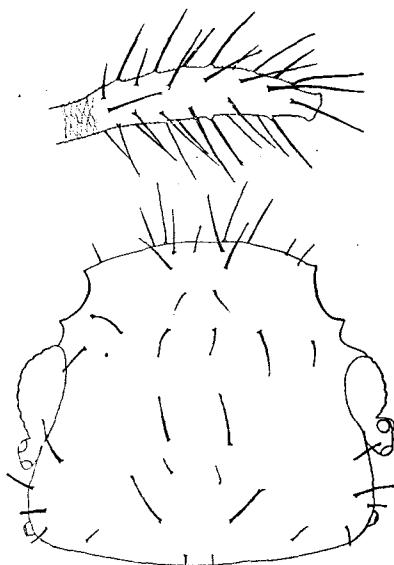


Fig. 1.

Greenidea eugeniae n. sp.
(Wingless viviparous ♀)

Cornicle and cephalo-prothorax.

Species new to India

Chaitophorus hickeliana MIMEUR

Rev. Pathol. Vég. et Ent. Agr., 1931, 6, p. 201 (1931).

(Wingless viviparous female) In specimens preserved in alcohol, body pale brownish yellow, with the appendages pale in colour. Body not sclerotised, rounded on the side of abdomen. Head with many very small indistinct granules on the lateral and anterior marginal areas of dorsum, and with about 17

long dorsal setae; the setae distinctly expanded and flattened on the apical part, bifid at the tip, of which about 8 are much larger, very stout, a little curved, nearly as long as the basal 2 antennal segments together, and 4 of them are in a row between the eyes and 2 pairs are between the antennae; the shorter setae slightly shorter than the basal antennal segment. Front nearly straight, with 2 pairs of very long setae, of which a pair is longer, fine, and not expanded at the tip. Ventral setae of head long, fine, pointed. The 2nd antennal segment as long as the 1st, longer than wide; the 3rd somewhat imbricated, not curved, lacking sensoria, with about 5 thin setae, the longer 3 of which are stiff or slightly curved, slightly capitate, and as long as, or slightly longer than, the width of the segment; the 4th sometimes fused with the 3rd; the 5th narrowed towards the base; relative length of the segments about as follows: III—34, IV—24, V—18, VI—16+50. Rostrum stout, reaching beyond the middle coxae; the distal segment a little longer than the penultimate; about 2.5 times as long as wide. Setae on the thorax and abdomen as in those on the dorsum of head, but dorsal setae on the last abdominal tergite and lateral ones on the posterior part of abdomen not dilated, simple at the tip. Pronotum with about 14 setae in 2 rows (8 setae in the posterior row); mesothorax a little longer than the pronotum, almost as long as the head, with many setae not in rows; metanotum and the 1st, 7th and 8th abdominal segments defined, but other abdominal segments fused together; metanotum and each of the basal abdominal segments with about 14 setae in a row, the 7th and 8th tergites with about 8 or 9 setae. Cornicles normal in shape, reticulate, striate on the base, expanded basally, shorter than the long dorsal setae, with no flange. Cauda distinctly knobbed. Anal plate not or scarcely indented. Legs not striate; trochanters defined; tibiae lacking sensoria, with many fine simple setae, the longer ones of which are much longer than the width of tibiae and slightly curved; tarsi striate.

Body 1.15 mm. long, 0.72 mm. wide, head 0.14 mm. long, 0.32 mm. wide across eyes, 0.185 mm. wide between antennae, eye 0.05 mm. long, antennae 0.76 mm., 0.019 mm. wide on 3rd segment, longer seta on 3rd antennal segment 0.023 mm., cornicle 0.04 mm. in diameter at apex (including margin), 0.09 mm. in diameter at base, cauda 0.046 mm. wide at knobbed part, hind tibia 0.4 mm. long, 0.028 mm. wide, longer seta on hind tibia 0.069 mm., hind tarsus 0.09 mm., longer seta on head 0.09 mm., smaller seta on head 0.032-0.037 mm., larger dorsal seta on abdomen 0.069-0.1 mm., longer lateral seta on abdomen 0.13 mm.

Host plant—White popula.

Some specimens taken in India on July 13, 1933, were sent by the Im-

perial Institute of Entomology, England. Hitherto known from Morocco.

The specimens differ from the original description in the longer distal part of the last antennal segment, the antennae with shorter setae, the dorsal setae of head of 2 types, etc., but now this name is adopted tentatively. Differentiated from *Chaitophorus clarus* TSENG et TAO from China by the shorter head and the longer bifid dorsal setae on the body, and from *C. populifoliae* OESTL. by the slender distal segment of rostrum.

***Saltusaphis scirpus* THEOBALD**

Bull. Ent. Res., VI, p. 138 (1915); BAKER, Can. Ent., XLIX, p. 6 (1917); HALL, Minist. Agr. Egypt, Tech. Sc. Serv., Bull. 68, p. 5 (1926).

Host plant—Unknown.

Some alate and apterous forms were taken by Mr. GHULAM ULLAH at Dehli, India, March 1938. New to the fauna of India. The genus *Saltusaphis* THEOBALD has not been known from the Oriental Region.

Specie new to Malaya

***Oregma nicolaiae* TAKAHASHI**

Miscell. Zool. Sumatra., XCVII, p. 6 (1935).

Host plant—*Elattaria cardamomum*.

Many specimens were collected by entomologists of the Department of Agriculture, Malaya, in March 1937. Hitherto known only from Sumatra.

In the apterous form, cornicles on large sclerotised areas, which are confluent with the lateral sclerotised areas on the 5th abdominal segment and with about 7 long setae. Closely related to *Oregma sundanica* VAN DER GOOT, but differs in the longer dorsal setae, the wax-pores more developed etc., in the apterous form.

***Trichoregma nipae* VAN DER GOOT**

Contrib. Fauna Indes Neerland., I, 3, p. 209 (1917).

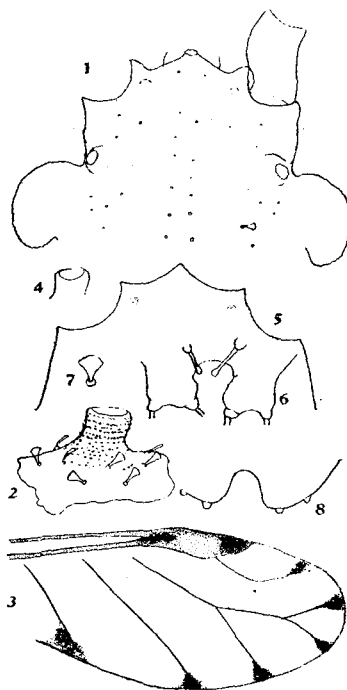


Fig. 2.

Saltusaphis scirpus THEOBALD.

(Winged viviparous ♀)

1. Head showing distribution of setae.
 2. Cornicle and its basal area.
 3. Fore wing.
- (Wingless viviparous ♀)
4. Cornicle.
 5. Head (anterior outline).
 6. Dorsal tubercles on last abdominal segment.
 7. Dorsal seta.
 8. Anal plate.

Host plants—Zalacca (a palm), Elaeis.

Many apterous forms were taken at Kuala Lumpur, Malaya, by the Department of Agriculture, Malaya, December 9, 1937, and a few apterous ones by me at Singapore, March 17, 1940. New to the fauna of Malaya.

Species new to Australia and New Zealand

The aphids of Australia and New Zealand have not been thoroughly explored and about 30 species are hitherto recorded by G. H. HARDY, E. H. ZECK, W. COTTIER and others (Proc. Roy. Soc. Queensland, XLIII, no. 6, pp. 31-36, 1931; Austr. Nat., June 1929, Oct. 1933; Dept. Sc. & Indust. Res., Plant Diseases Div., Bull. no 15, 1938, etc.). The following species are new to the faunas of these districts and all of them are introduced species.

Cinara cupressi BUCKTON

Host plant—*Cupressus torulosa*.

A few alate and apterous females were collected by Mr. R. T. M. PEScott at Burnley, Victoria, Australia, September 9, 1938.

Rhopalosiphum maidis FITCH

Host plant—Maize.

Some specimens were taken by Mr. R. T. M. PEScott at Burnley, Victoria, Australia, March 20 and 28, 1939.

Aphis citricidus KIRKALDY

Host plant—Citrus.

Some alate and apterous females were taken by Mr. R. T. M. PEScott at Burnley, Victoria, Australia, March 8, 1939.

Myzus ornatus LAING

Host plants—Passion-fruit, clover.

A few apterous and alate forms were collected by Mr. W. COTTIER at Palmerston North, New Zealand, October 5, 1937, and November 14, 1938.

Cavariella aegopodii SCOPOLI

Host plant—*Salix vitelliosa*.

Some alate and apterous forms were collected by Mr. R. T. M. PEScott at Burnley, Victoria, Australia, September 7, 1938. *Cavariella capreae* FAB. was already recorded from Australia by E. H. ZECK (Austr. Nat., Oct. 1933).

Trifidaphis phaseoli PASSERINI

Host plant—Sugar beet (root).

A few apterous and some alate forms were taken by Mr. R. T. M. PEScott at Maffra, Victoria, Australia, April 14, 1938.