## CHERMIDAE FROM THE SOCIETY ISLANDS\*

Bv

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#### INTRODUCTION

This is the second report on the collection of Chermidae made in the South Pacific islands by the Pacific Entomological Survey. The first <sup>1</sup> dealt with new species from the Marquesas. In the material from Society Islands the following two species are represented.

#### CARSIDARINAE CRAWFORD

# Genus MESOHOMOTOMA Kuwayama

Mesohomotoma hibisci (Froggatt) (fig. 1).

Tyora hibisci Froggatt, Proc. Linn. Soc. New South Wales for 1901, vol. 26, p. 287, 1902.

Length to tip of folded wing, 4.5 mm. to 5.5 mm.; length of body mounted on slide, 3.9 mm. to 4.5 mm.; length of fore wing, 3.5 mm. to 4.4 mm.; width of fore wing, 1.2 mm. to 1.6 mm.; width of head, 0.7 mm. to 0.8 mm. General color light greenish yellow to brown, in the latter case with the head, thorax, and legs rusty or chocolate brown and the abdomen darker brown. Tips of antennal segments 3, 4, 5, 6, 7, and 8 black, and segments 9 and 10 entirely black. Eyes darker than general color of head. Fore wings hyaline or tinged very faintly brownish, with noticeable dark-brown spots at the extremities of R<sub>1</sub>, R<sub>8</sub>, M, M<sub>1+2</sub>, M<sub>3+4</sub>, Cu<sub>1</sub> and Cu<sub>2</sub>, and with a small and a large fumate area along the anal vein as illustrated (fig. 1, c). Characters of the genus well developed.<sup>2</sup>

Head slightly wider than prothorax; very nearly horizontal in position; shape and proportions as illustrated (fig. 1, a, b), the vertex markedly depressed on either side of and parallel to the median furrow, with the outer anterior angles of the vertex terminating in a cone-like process at each side of the head; the ventral side of the head sharply angular at the outer anterior margin on either side (fig. 1, b). Antennae 10-segmented (fig. 1, a); three times as long as width of head; the 2nd (fig. 1, a), 4th, 5th, 6th, 7th, and 8th antennal segments bearing sensoria.

Thorax scarcely arched, the posterior two-thirds of the pronotum horizontal, the anterior third sharply deflexed forward and downward, bearing a conical projection on either side of the median line where the deflection commences; the thoracic dorsum bearing relatively very few, fine hairlike setae. Posterior tibia with a single large and conspicuous claw at the base (fig. 1, p), with a single black tooth on the outer margin of the apex and four similar teeth on the inner margin, the posterior tooth set on a

<sup>&</sup>lt;sup>1</sup> Klyver, F. D., Anonioterga tahuata, new genus and species, and other Chermidae from the Marquesas Islands: B. P. Bishop Mus., Bull. 98, Pac. Ent. Survey Pub. 1, art. 8, 1932.

<sup>&</sup>lt;sup>2</sup> Boselli, F. B., Studii sugli Psyllidi, 6 (Homoptera: Psyllidae o Chermidae): Lab. Zool. Gen. Agr., Portici, Bull. 9, pp. 188-191, fig. 5, 1-13, 1930.

<sup>\*</sup> Pacific Entomological Survey Publication 6, article 5. Issued December 30, 1932.

thumblike process, and, sometimes (fig. 1, i), with a small subapical toothlike seta on the outer aspect of the posterior tibia. First posterior tarsal segment with a single large claw on the outer aspect. Fore wings hyaline or tinged very faintly brownish; wing shape and venation as illustrated (fig. 1, c), with the pseudo-vein or callus joining the radial sector and media conspicuously developed, length of fore wing about three times its greatest width, the wing membrane punctate (fig. 1, c, d) in a sharply delimited area between C +Sc and R, and similarly in an area paralleling the anal vein for about half its length, two alar radulae present, one in the second marginal cell, the other between Cu<sub>1</sub> and M<sub>3+4</sub>.

Abdomen, particularly that of the male, elongate, with the tergites and sternites moderately and uniformly chitinized. Genitalia of the male exceedingly complex (fig. 1, j-n), the proctiger consisting of four parts, a cylindrical and vertical process

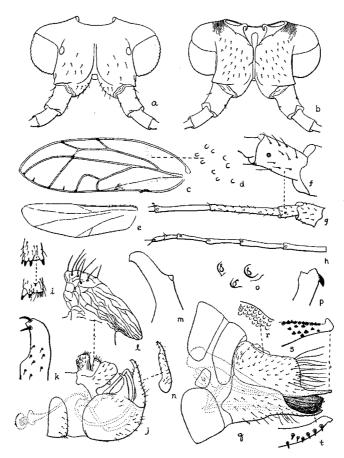


FIGURE 1. Mesohomotoma hibisci (Froggatt): a, dorsal aspect of head; b, ventral aspect of head; c, fore wing; d, detail of fore wing; e, hind wing; f, sensorium on second antennal segment; g, h, antenna; i, apex of posterior tibia; f, male genitalia; f, inner aspect of clasper, greatly enlarged; f, median lobe of proctiger; f, inner aspect of hook of ventral valve; f, inner aspect of clasper; f, detail of spermatheca wall; f, base of posterior tibia; f, female genitalia; f, detail of circum-anal ring; f, apex of dorsal valve; f, apex of ventral valve.

with the anus on the anterior side of the apex, two lateral lobes distended posteriorly, and a double-pointed median lobe (fig. 1, l) situated posterior to the anal process and between the two lateral lobes; the claspers of the male elongate and relatively simple in shape (fig. 1, n), but with two clawlike setae on the anterior mesal side of the apex (fig. 1, k); ventral valve of the male genital segment bearing two large anteriorly directed hooks on the dorsal margin (fig. 1, j, m). Female genitalia (fig. 1, q) robust in anterior two-thirds, then abruptly and exceedingly constricted in the apical third, the dorsal valve terminating in a blunt hook beset with short, knoblike setae (fig. 1, s) and the ventral valve in a slender point beset with short, stout setae, the dorsal valve bearing large setae as illustrated, and the pores of the circum-anal ring being strangely crescent shaped (fig. 1, r).

Tahiti: Paea, August 29, 1928, on *Hibiscus tiliaceus*, 5 males and 4 females (FK300.1-300.9), Adamson; Fautaua Valley, altitude 50 feet, September 7, 1928, on the same host, 6 males and 8 females (FK301.1-301.14), Adamson; Mataiea, December 19, 1928, on sugar cane, one male (FK302.1), Mumford and Adamson; Fautaua Valley, altitude 1,500 feet, September 11, 1928, host unrecorded, one male (FK303.1) Adamson; Tuauru Valley, altitude 50 feet, September 5, 1928, host unrecorded, one male (FK304.1), Adamson; Papenoo Valley, altitude 500 feet, October 22, 1928, host unrecorded, one male and one female (FK305.1-305.2), Adamson; Papenoo Valley, altitude 500 feet, October 25, 1928, host unrecorded, two males and one female (FK306.1-306.3), Adamson.

The specimens before me in this collection include the entire range of color variations on which Crawford based his key of the four known species of this genus.<sup>3</sup>

### TRIOZINAE PUTON

### Genus PHYLLOPECTA Zacher

# Phyllopecta vitiensis (Kirkaldy).

Detailed description and figures of this species were published in my Marquesan paper. A single specimen was collected in the Society Islands. Moorea: Opunohu Valley, altitude 100 feet, November 30, 1928, host unrecorded, 1 male (FK307.1), Adamson.

<sup>&</sup>lt;sup>8</sup> Crawford, D. L., The Homopterous genus Mesohomotoma (Psyllidae or Chermidae): Hawn, Ent. Soc., Proc., vol. 6, p. 33, 1925.