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Psyllidae of Pacific Entomological Survey¹

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Two papers on the Psyllidae of the Pacific Entomological Survey were published in 1932 by F. D. Klyver. In examining the specimens in Bernice P. Bishop Museum, I have found that there is considerable material present which was not included by Klyver, apparently having been sent to him after his papers were completed. In this material I find two undescribed species as well as additional specimens of several known previously. One of the new species is of especial interest, as it is the farthest known outlying species of the genus *Ctenarytaina* previously known from New Zealand, Australia, Fiji, and the Society Islands. The types of the new species are deposited in Bishop Museum; paratypes are in my collection. The drawings have been made by Marian Adachi of the Department of Zoology and Entomology, University of Hawaii.

Ctenarytaina remota, new species (fig. 1).

Length to tip of folded wings 1.85 (male) to 2.25 mm. (female).

Color: Brown. Dorsum and forewings dark brown (except for pale area at apex of clavus), venter and genitalia lighter.

Structure: Body surface rugulose, with very short sparse pubescence. Head and pronotum very strongly deflexed. Head wider than mesonotum. Vertex large, broadly impressed, bulging anteriorly, overhanging, rounded to genal processes without suture, postero-lateral angles strongly raised, bearing lateral ocelli. Genal processes conical, appressed basally, covering frons. Eyes elongate, strongly recessive, covering pronotum laterally. Antennae arising laterally, slightly longer than width of head. Mesonotum broad, flat. Forewings 2.5 times as long as broad, broadly rounded apically, costal margin straight along pterostigma, veins strongly raised, setate, membrane shagreened; basal vein short, pterostigma present, long,

¹ Pacific Entomological Survey Paper 11.

Rs long, straight, medial cell small, apical, cubital cell larger, elongate, clavus long, claval suture reaching beyond midpoint of wing. Tibial comb of mesothoracic legs prominent. Metacoxa large with stout prominent meracanthus. Metatibia with five stout black apical spines. Proximal segment of metatarsus with two black claws.

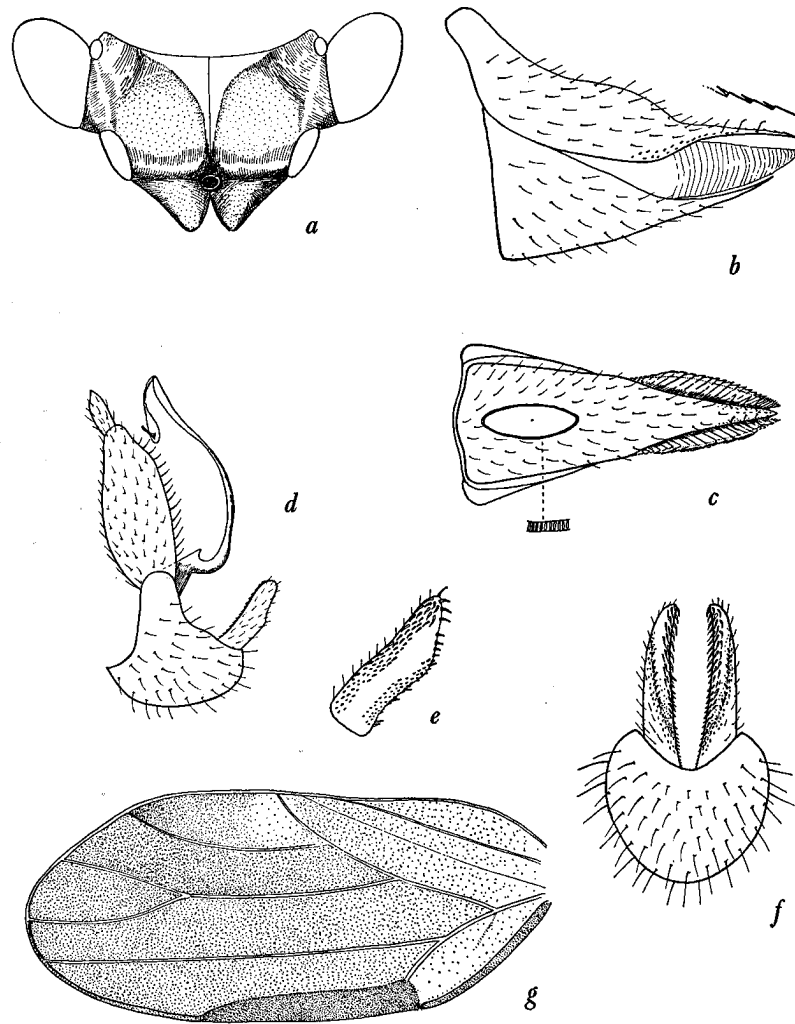


FIGURE 1.—*Ctenarytaina remota*: a, frontal aspect of head; b, lateral aspect of female cauda; c, dorsal aspect of same; d, lateral aspect of male cauda; e, medial aspect of clasper; f, caudal aspect of male cauda; g, forewing.

Male genitalia very large, structure shown in figure 1, *d-f*. Female genitalia long, dorsal valve longer than ventral, lateral valvulae with strongly sclerotized ridges on sides, toward apex, as shown in figure 1, *b, c*.

Marquesas Islands: Hivaoa; Temetiu Summit, 4,160 feet, January 20, 1932, LeBronnec, holotype male (Bishop Museum 2376), allotype female, and one male paratype; Feani Ridge, 3,900 feet, January 19, 1932, one female paratype. Three of the specimens bear labels "on *Metrosideros collina*" the fourth "*Rapanea* sp."

This species resembles *C. distincta* Tuthill from the Lau Islands in general appearance but differs from it in many characteristics; for instance, the nearly unicolorous, broadly rounded forewing, the shape of the genal processes, and the genitalia. Of the species known to me, the structure of the head most closely resembles *C. eucalypti* (Maskell).

***Trioza bimaculata* Tuthill.**

Three specimens of this Society Islands species, heretofore known only from the types, bear the following data. Society Islands: Tahiti, Hitiaa, 1,000 feet, 4 miles from sea, 11-20-28, A. W. Adamson, *Metrosideros*.

***Trioza alipellucida* Klyver.**

In addition to the specimens recorded by Klyver (B. P. Bishop Mus., Bull. 98: 97, 99), there are 28 from Uapou and Nuku Hiva. The specimens of neither series is identical with the type material in color and in other minor details. Most of them were taken from *Metrosideros collina*, as was the type series. This suggests a complex of species and forms on *Metrosideros* similar to that found in Hawaii. Determination of the exact relationship of such forms can be determined only by experiment. Therefore, I am referring these to *T. alipellucida*.

A series of 68 specimens from Uapou represents a distinct species.

***Trioza significans*, new species (fig. 2).**

Length to tip of folded wings 3.5 to 4.0 mm.

Color: General color dark brown. Base of antennae, genae, tibiae, membranes, and margins of abdominal sclerites tan to yellow. Wings with membrane white, veins brown, both pairs embrowned at base.

Structure: Body surface shagreened, with long, very slender pubescence. Head nearly as wide as mesonotum. Vertex with sulcate discal impressions, somewhat bulging anteriorly each side of medial suture. Genal processes slender, conical, longer than medial length of vertex. Antennae slender, 2.3 times as long as width of head. Pronotum not depressed, broad, with small, distinct, raised

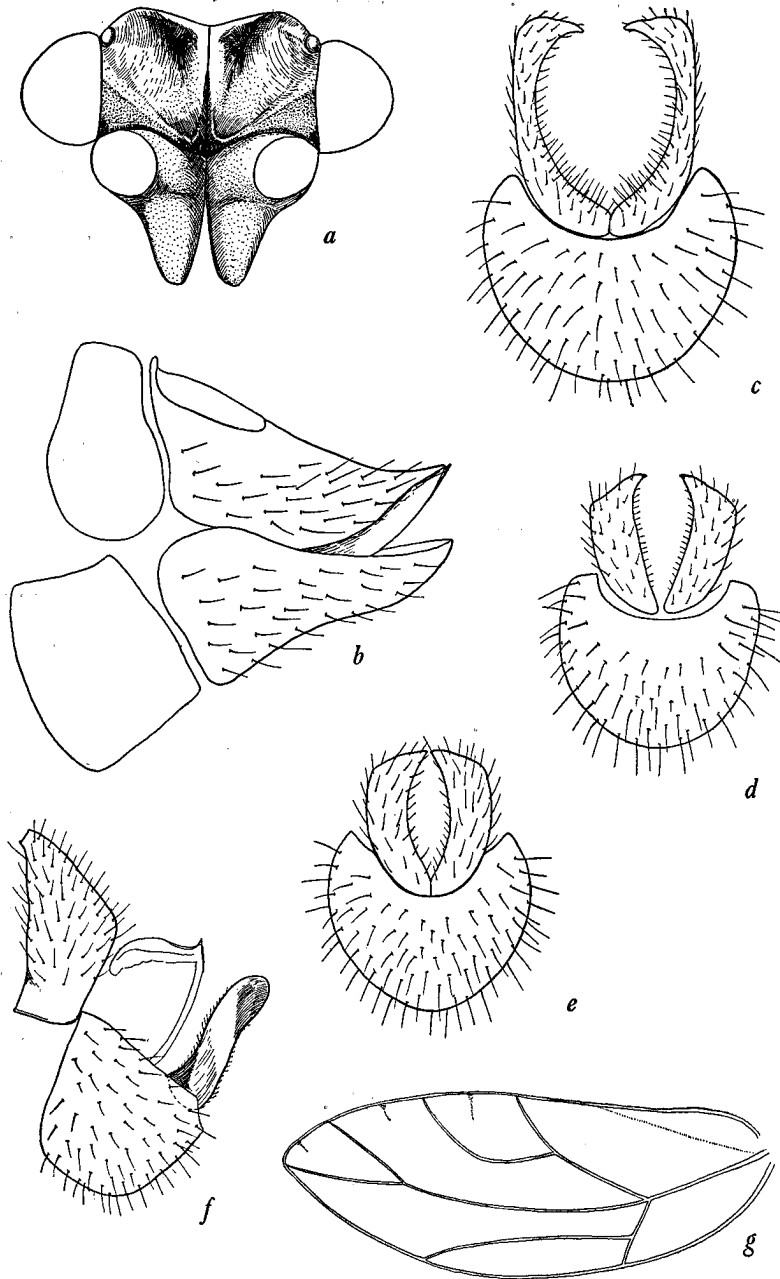


FIGURE 2.—a-c, f, g, *Trioza significans*: a, frontal aspect of head; b, lateral aspect of female cauda; c, f, caudal and lateral aspects of male cauda; g, forewing. d, caudal aspect of male cauda of *T. alipellucida*. e, caudal aspect of male cauda of *T. alifumosa*.

epiphysis medially on caudal margin. Forewings 2.7 times as long as wide, angulate, radular areas distinct, Rs short, curved to costa, not extending as far as Cu₁, cubital cell slightly larger than medial. Hind wings 0.6 as long as forewings. Metatibia with serrate basal carina, strongly flared apically, with one outer and three inner large apical spines. Hind coxa raised on anterior margin, meracanthus of moderate size.

Male genitalia large; proctiger in lateral aspect broadly produced caudad basally, narrowing toward apex, with distinct epiphysis; forceps as long as proctiger, in lateral aspect stout, parallel-sided, slightly sinuate, in caudal aspect evenly bowed to nearly touching sharp black apices. Female genitalia shorter than rest of abdomen, structure as in figure 2, b.

Marquesas Islands: Uapou, Teavaituhai, Paaumea side, 3,020 feet, November 19 and 20, 1931, beating *Vaccinium* and *Cyrtandra* spp., LeBronnec, 26 males and 20 females, including holotype male (Bishop Museum 2374) and allotype female; 6 male and 8 female paratypes also from Teavaituhai, Hakehetau Valley 3,020 feet, November 20, 1931, collected by LeBronnec by beating *Cyrtandra*, *Vaccinium*, or *Freycinetia*; 2 male and 6 female paratypes also from Uapou, Tekohepu Summit, 3,000-3,200 feet, November 27, 28, and 30, 1931, beaten from various plants by LeBronnec.

Inasmuch as some of the paratypes of the first two series are but slightly sclerotized, evidently having just emerged as adults, it is probable that either *Vaccinium* or *Cyrtandra* is the host. This species resembles *T. alifumosa* Klyver but is easily distinguished from it by the long genal processes, the short Rs of the forewing, and the male genitalia.

