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**Descriptions and Records of Some Fijian Psyllidae**  
**(Homoptera)**

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This paper is based on a small group of Psyllidae collected in the Fiji Islands in 1938 by E. C. Zimmerman. Of the eleven species represented, seven are new to science and three of the remaining four have been known from Fiji previously. Three subfamilies are represented.

All holotypes and allotypes, except those otherwise designated, are in Bernice P. Bishop Museum; paratypes have been retained by the author.

SUBFAMILY PAUROPSYLLINAE

**Pauropsylla triopectera** Crawford, Philippine Jour. Sci. 8:296, 1913; Uichanco, Philippine Jour. Sci. 18:266-268, 1921.

Viti Levu, Tholo North, Mt. Victoria, west slope, Sept. 16, 1938, 3,000 ft., one male.

The one specimen at hand seems to differ in several minor respects from the species as described by Crawford. The antennae are much longer than recorded by either Crawford or Uichanco, the coloration is different, the vertex appears to be much more strongly concave, and the male genitalia are different from those shown in Uichanco's figure. Probably this represents a distinct species, but, as the head is somewhat mutilated, it is tentatively referred to *P. triopectera*. I doubt that Crawford and Uichanco had the same species.

**Paurocephala longicella**, new species (figs. 1, *a, b*; 2, *a*).

Length to tip of folded wings 2.5 mm.

*Color*: General color brownish yellow. Dark brown markings as follows: discal foveae and circular spot near each posterior ocellus, on vertex; median

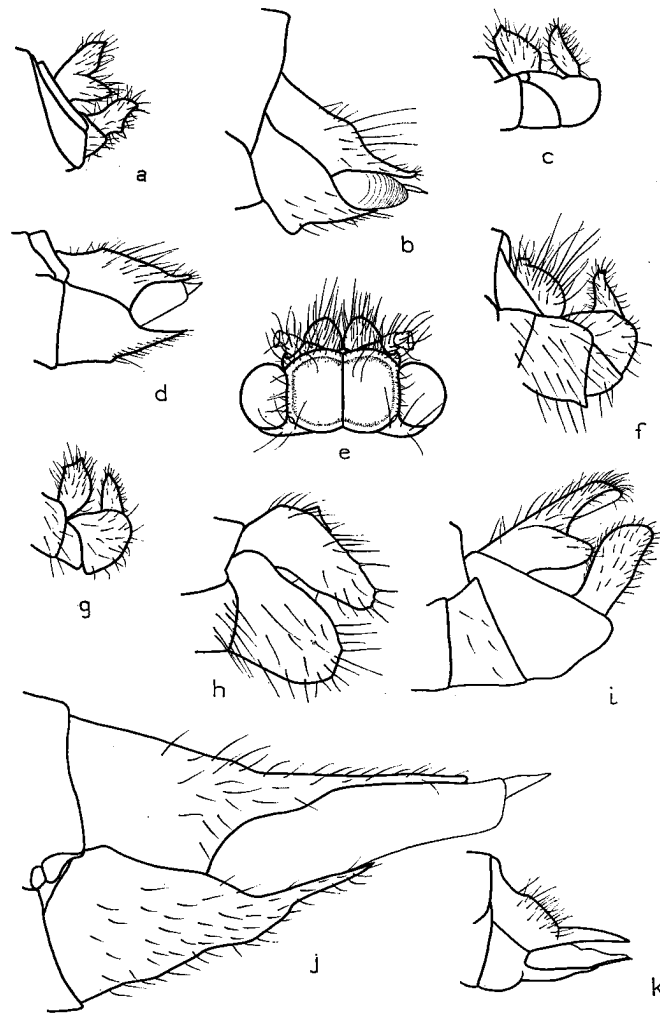


FIGURE 1.—a, *Paurocephala longicella*, male genitalia; b, *P. longicella*, female genitalia; c, *Trioza tericeps*, male genitalia; d, *T. tericeps*, female genitalia; e, *Megatrioza concava*, dorsal view of head; f, *M. vittata*, male genitalia; g, *Trioza fulva*, male genitalia; h, *Megatrioza sweszei*, male genitalia; i, *Leuronota magna*, male genitalia; j, *L. magna*, female genitalia; k, *Papiana distincta*, female genitalia.

line and two pairs of spots on pronotum; four pairs of longitudinal lines on mesoscutum; median line on metascutum and scutellum; abdominal sternites; irregular darker areas on front margin of vertex, on prescutum. Forewings brown.

*Structure:* Head strongly deflexed, wider than thorax. Vertex almost vertical, sharply rounded anteriorly, with prominent discal foveae. Anterior ocellus visible from front. Frons small. Genae not swollen beneath. Antennae slightly shorter than width of head. Eyes extending back over propleurites. Thorax broad, strongly arched, prescutum and pronotum nearly vertical. Forewings slightly more than twice as long as wide, thickened, punctate and somewhat rugose; costal margin setate, straight from  $R_1$  to near apex; pterostigma large, somewhat indefinite;  $R_s$  curved toward costa apically, marginal cells very long, medial curved. Hind wings large, punctate, embrowned on costal margin, unbranched radius and media with common base, base of cubitus apparently lacking. Legs of moderate size. Metatibiae without basal armature, with seven apical spines. Proximal segment of metatarsi with two black claws. Metacoxal spurs small.

*Genitalia:* Male genitalia small. Proctiger short, axial portion tapered apically, caudal lobe similar to axial portion in size and shape. Forceps in lateral view broad, short, caudal margin excavate in apical half, apex black; in caudal view moderately broad, slightly arched to blunt, shining black tips, angularly produced medially near base. Female genital segment shorter than rest of abdomen; dorsal valve longer than ventral, slender apically, tip subacute; ventral valve narrowed apically, upturned, acute.

Viti Levu, Nandarivatu, Sept. 3, 5, 1938, 3,600-3,700 ft., 2 males and 2 females. Holotype male.

In wing venation this species is quite unlike any *Paurocephala* heretofore described. As it also differs in some other respects from Crawford's description of the genus, it is possible that it should be placed in a separate genus.

#### SUBFAMILY TRIOZINAE

***Trioza tericeps***, new species (figs. 1, *c*, *d*; 2, *b*).

Length to tip of folded wings 2 mm.

*Color:* General color dark brown. Thorax yellowish ventrad. Legs light. Forewings hyaline except humeral and anal angles brown.

*Structure:* Head about as broad as thorax. Vertex somewhat raised above eyes, anterior margin rounded, strongly rounded down anteriorly, discal foveae small, close together. Genal processes 0.5 as long as vertex, contiguous, rounded apically. Antennae about 1.67 times as long as width of head. Thorax strongly arched. Pronotum short, much depressed below plane of vertex. Forewings three times as long as wide, angulate apically;  $R_s$  short, curved to costa; marginal cells small, equal. Hind wings long, slender. Hind tibiae minutely serrate basally, with one outer and three inner apical spines. Metacoxae not produced anteriorly.

*Genitalia*: Male proctiger obtusely produced caudad. Forceps as long as proctiger; in lateral view broad, cephalic margin curving to acute apices; in caudal view broad basally, evenly tapered and arched to acute apices. Female genital segment large, dorsal and ventral valves subequal in length, both slender apically, dorsal blunt, ventral acute.

Lau Islands: Munia, Aug. 3, 1938, 800-900 ft., 1 male and two females; Viti Levu, Mt. Korombamba, Aug. 1, 1938, 1,300 ft., 1 male. Holotype male from Munia.

The remaining three specimens are all quite teneral. The rounded vertex makes this species quite distinct.

***Trioza fulva*, new species (fig. 1, *g*; 2, *c*).**

Length to tip of folded wings 3.5 mm.

*Color*: General color yellowish brown. Abdomen darker.

*Structure*: Head narrower than thorax. Head and thorax sparsely pubescent. Vertex punctate, discal foveae distinct. Genal processes slender, blunt, somewhat divergent, 0.8 as long as vertex (as long as vertex medially). Antennae slender, slightly over twice as long as width of head. Thorax strongly arched. Pronotum strongly descending cephalad, not depressed below plane of vertex. Forewings slender, three times as long as wide, glassy, acutely angled;  $R_s$  of moderate length, curving to costa, marginal cells nearly equal, medial elongate, three radular areas distinct. Hind wings almost 0.67 as long as forewings, iridescent, with minute setae. Legs long. Hind tibiae with serrate basal carina, one outer and two inner apical spines. Metacoxae not produced anteriorly. Abdomen with very short, sparse pubescence.

*Genitalia*: Male genitalia small. Proctiger short, straight, slightly produced caudad. Forceps 0.5 as long as proctiger, stout; in lateral view broad basally, tapered, most strongly in apical 0.33, to acute black apices; in caudal view broad basally, evenly tapered and arched to acute black apices.

Viti Levu, Nandarivatu, Sept. 5, 1938, 3,600 ft., 1 male.

This species resembles *T. zimmermani* but may be distinguished from the latter by the longer genal processes, the wing venation and the genitalia.

***Megatrioza concava*, new species (fig. 1, *e*; 2, *e*).**

Length to tip of folded wings 5 mm.

*Color*: General color yellowish. Brown to black dorsally, especially on abdomen. Forelegs dark. Hind legs light. Ventral side of mesothorax dark.

*Structure*: Body sparsely clothed with long pubescence. Head narrower than thorax. Vertex 1.5 times as wide as long, strongly concave, very smooth, margin raised all around, median suture very prominent, each side curved anteriorly and posteriorly giving the appearance of the figure 8. Eyes small. Genal processes broadly rounded, contiguous, 0.5 as long as vertex. Thorax strongly arched. Pronotum short and strongly depressed. Legs large. Hind tibiae with serrate basal carina, one outer and two inner apical spines. Metacoxae hardly produced anteriorly, not spiniform. Forewings large, three times as long

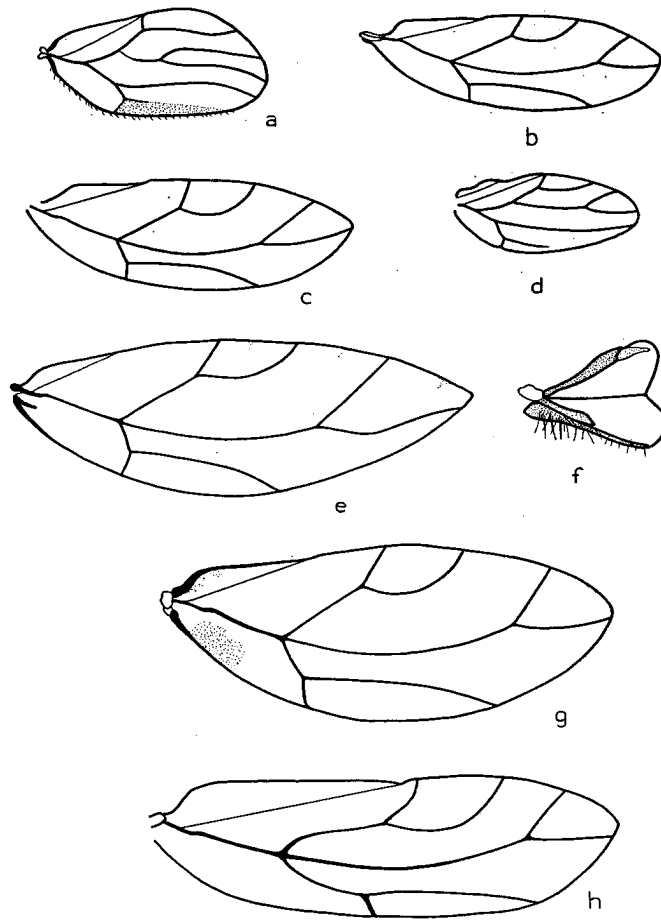


FIGURE 2.—a, *Paurocephala longicella*, forewing; b, *Trioza tericeps*, forewing; c, *T. fulva*, forewing; d, *Papiana distincta*, forewing; e, *Megatrioza concava*, forewing; f, *M. sweseyi*, hind wing; g, *M. vittata*, forewing; h, *Leuronota magna*, forewing.

as wide, acutely pointed;  $R_s$  short, curved to costa; medial cell much larger than cubital. Hind wings much reduced, less than 0.33 as long as forewings, membranous, veins almost completely absent.

*Genitalia*: Female genital segment short; ventral valve blunt; dorsal valve extending beyond ventral, a slender acuminate apical portion surrounded by many long setae.

Vanua Mbalavu, Buthalevu, Aug. 10, 1938, 200-300 ft., 1 female. The antennae and mesothoracic legs are lacking and the genitalia are in poor condition.

The strongly concave vertex and venation of the forewing will serve to distinguish this species from those heretofore described.

**Megatrioza vittata**, new species (figs. 1, *f*; 2, *g*).

Length to tip of folded wings 4.5 to 5 mm.

*Color*: General body color chocolate brown. Vertex, a broad median vitta on thorax, pleurites, margins of abdominal segments, meso and metatibiae yellow. Forewings yellowish, with two brown spots in base. Hind wings black in anal angle.

*Structure*: Entire body with long sparse pubescence. Head large, nearly as broad as thorax. Vertex with deep pit on each side, diagonal sulcus extending antero-laterad to margin. Eyes large, hemispherical. Genal processes 0.67 as long as vertex, nearly vertical, divergent, blunt. Antennae slightly over twice as long as width of head. Thorax moderately arched. Pronotum depressed below plane of vertex. Forewings large, nearly three times as long as wide; marginal cells subequal;  $R_s$  moderately long, curved to costa. Hind wings slightly over 0.5 as long as forewings. Hind tibiae with serrate basal carina; one outer and two inner apical spines. Metacoxae somewhat platelike anteriorly, not spiniform.

*Genitalia*: Male genitalia small. Proctiger short, slightly produced caudad. Forceps shorter than proctiger; in lateral view broad basally, tapered to blunt apices, curving caudad; in caudal view stout, broad basally, arched and tapered to acute apices. Female genital segment short; ventral valve swollen, not at all produced caudad; dorsal valve small, broadly blunt, somewhat overhanging.

Viti Levu: Navai-Nasonga Trail, Sept. 12, 1938, west slope, 2,500-3,000 ft., 2 males and 2 females; Navai Mill near Nandarivatu, Sept. 7, 1938, 2,700 ft., 1 male. Holotype male.

This species appears to be very close to *M. eugenioides* Crawford but is considered distinct until such time as specimens of *eugenioides* are available for comparison. It differs from the description of the latter species in concavity of vertex, length of antennae, color markings, and possibly genitalia.

**Megatrioza swezeyi** Crawford, *Insects of Samoa* 2(1): 32, 1927 (figs. 1, *h*; 2, *f*).

Male genital segment very large. Subgenital plate elongate, bluntly produced caudad. Proctiger short, produced caudad as very long, large processes surrounding forceps. Latter very heavily pubescent.

Viti Levu, Nandarivatu, Sept. 2, 1938, 1 male.

Originally described from two specimens (females) from Samoa and one from Lau, Fiji. The extreme reduction of the hind wings makes this species distinct. The specimen at hand is designated allotype.

\**Leuronota magna*, new species (figs. 1, *i*, *j*; 2, *h*).

Length to tip of folded wings 5.5 mm.

*Color*: General color greenish brown, irregularly darker dorsally. Abdomen reddish tinged, margin of segments red. Forewings yellow brown with numerous small, dark brown spots, small black spot at tip of each vein.

*Structure*: Head large, nearly as broad as thorax. Vertex plane, finely pubescent, all margins very distinct, raised, each half a distinct parallelogram, with discal foveae. Eyes large. Posterior ocelli unusually large, on posterior corners of vertex. Genal processes 0.6 as long as vertex, pubescent, divergent apically, rounded, on same plane as vertex. Antennae twice as long as width of head or more, segments 1 and 2 large, remainder unusually slender. Thorax very slightly arched. Pronotum broad, with median anterior epiphysis. Mesothoracic pleurites very large. Forewings 3.5 times as long as wide, nearly parallel sided, angulate apically;  $R_s$  long; cubital cell larger than medial, latter inclosing apex. Hind wings large, long, with unbranched radius, media and branched cubitus prominent. Legs stout. Hind tibiae with small basal spur, one outer and two inner apical spines.

*Genitalia*: Male genitalia of moderate size. Proctiger long, slender, a broad caudal lobe extending dorsad. Forceps shorter than proctiger; in lateral view spatulate; in caudal view slender, slightly arched, apices incurved, subacute, black. Female genital segment elongate, nearly as long as rest of abdomen; dorsal valve slender in apical 0.6, blunt tipped; ventral valve shorter than dorsal, large basally, apical portion slender, acute.

Viti Levu: Nandarivatu, Aug. 31, 1938, at light, 1 male; Mt. Korombamba, Aug. 1, 1938, 1,300 ft., beating shrubs, 1 female.

Male holotype in Bishop Museum, female allotype in author's collection.

This species appears to be nearest *Leuronota attenuata* Crawford, described from Borneo, but is quite distinct.

#### SUBFAMILY PSYLLINAE

*Euphalerus maculosus* Crawford, Philippine Jour. Sci. 15: 170-171, 1919.

Viti Levu, Tholo-i-suva, July 27, 1938, 2 males and 2 females.

*Arytaina quadrioculata* Laing, Ann. Mag. Nat. Hist. IX, 9: 556, 1922.

\* The name *Leuronota magna* is preoccupied by *L. magna* Laing (Ann. Mag. Nat. Hist. IX, 11: 699, 1923). The name *Leuronota ampla* is proposed for *L. magna* Tuthill.

Viti Levu, Lami Quarry near Suva, July 24, 1938, 10 to 250 ft.,  
4 males.

Vanua Mbalavu, Mvana, Aug. 9, 1938, 200 ft., 1 male.

Type locality Fiji, Labasa [Lambasa ?].

***Papiana distincta***, new species (figs. 1, *k*; 2, *d*).

Length to tip of folded wings 2 mm.

*Color*: General color brown, lighter ventrally. Forewings very dark in basal 0.67, clear apically.

Structure similar to *P. lulla* except as follows: Genal processes less rounded apically. Antennae nearly as long as width of head. Eyes extending back over pronotum, not reaching base of forewings. Forewings 2.5 times as long as wide; marginal cells less elongate; other differences as figured.

*Genitalia*: Female genital segment large, as long as rest of abdomen, swollen basally, apical portion attenuate; dorsal valve longer than ventral, acute, down-curved; ventral valve straight, spatulate, nearly as long as dorsal.

Lau Islands, Mango Island, 1 mile south of Marona, Aug. 14,  
1938, 200 to 300 ft., 2 females.