

## NOTES ON PSYLLIDÆ

By D. L. CRAWFORD

*Of the University of Hawaii, Honolulu*

### ONE TEXT FIGURE

In the examination of specimens of Psyllidæ from the Philippine Islands and other Pacific regions, several new species have appeared, and these are used as the basis for the following notes:

#### Genus *STENOPSYLLA* Kuwayama

This is a specialized genus of Triozinæ, and is characterized conspicuously by the very thick and densely pubescent antennæ. Two very closely similar species have been known in this genus, *S. nigricornis* Kuwayama<sup>1</sup> and *S. longicornis* Crawford,<sup>2</sup> and now a third species appears, similar in most respects but very strikingly different in wing venation. In spite of this difference, however, it appears to be congeneric with the two species mentioned above.

#### *Key to the species of Stenopsylla Kuwayama.*

*a*<sup>1</sup>. Venation of forewing triozone (that is, basal vein branching at one point into three veins, cubitus, media, and radius).

*b*<sup>1</sup>. Body yellowish or light brown, dorsum flecked with brown; genal cones acutely pointed; antennæ half as long as forewings; insect about 5 to 6 millimeters long. (Formosa.)

*S. nigricornis* Kuwayama.

*b*<sup>2</sup>. Body light brown, mesothoracic dorsum and vertex black or dark brown; genal cones broadly rounded at apex; antennæ three-fourths as long as forewings; insect 6 to 7 millimeters long. (Philippines.)

*S. longicornis* Crawford.

*a*<sup>2</sup>. Venation of forewing not as above; cubitus branching off first, then media and radial sector more distad (see fig. 1). *S. bakeri* sp. nov.

*Stenopsylla bakeri* sp. nov. Fig. 1.

A large species, body from head to tip of folded wings being about 8 millimeters long; forewings, 6 to 6.5. General color

<sup>1</sup>Trans. Sapporo Nat. Hist. Soc. 3 (1910) 53.

<sup>2</sup>Philip. Journ. Sci. 15 (1919) 203.

light yellowish brown; dorsulum and eyes black, vertex brown and antennæ brown to black, except apical one-fifth white.

Head broad, vertex very concave, posterior ocelli elevated; genal cones about half as long as vertex, very broad and bluntly rounded. Antennæ long, nearly as long as forewings (about 5 millimeters), thick (nearly as thick as legs), very densely pubescent.

Thorax long, not very broad, pronotum short and much depressed below level of head and dorsulum. Legs stout, hind tibiæ armed with black spines apically. Forewings very large, hyaline and transparent except a narrow black stripe along axial vein, acutely pointed; venation as shown in fig. 1; hind wings about half as long as front wings.

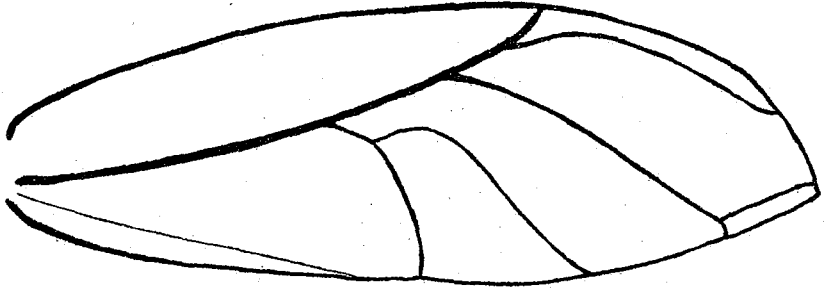


FIG. 1. *Stenopsylla bakeri* sp. nov., venation of forewing.

Abdomen (female) long, moderately slender, with genital segment relatively very short and blunt.

Locality, Philippines, Mindanao, Iligan (C. F. Baker), 1 female.

*Euphalerus nigrivittatus* Crawford pubescens var. nov.

A single specimen of this species, taken by C. F. Baker on Basilan Island, Philippines, shows a number of superficial variations worthy of note. The black vittæ from eyes to base of wings are wanting, the thorax and vertex being more or less uniformly straw color or whitish; the antennæ are uniformly straw color, not black at tip of each segment as is usually the case in the species. The clear spots in the apical brown band of the forewing are larger and more conspicuous, being circular instead of crescentic.

The genal cones are not squarish as in the species, but bluntly rounded and divergent. On the dorsum of thorax as well as on the vertex there is a conspicuous though not dense pubescence.

## Genus STROPHINGIA Enderlein

(Including *Haplaphalara* Uichanco)

This genus is very close to *Aphalaroida* and might conceivably be merged with it. In the matter of priority, *Aphalaroida* was described one month before the other<sup>3</sup> and so would have the right of priority. However, there appear to be several distinctive characteristics separating the two genera, making it advisable to consider both as valid groups of the subfamily Aphalarini.

The genus *Strophingia* was erected for an old species, *Rhinocola ericae* Curtis, and doubtless will have a considerable number of old and new species added to it in due time. The type species of *Rhinocola* is *R. aceris* Linnæus, which is very different<sup>4</sup> in several respects from most of the other species subsequently referred to that genus. Some of these probably will go to *Eurhinocola* Crawford,<sup>5</sup> but some, also, should be referred to Enderlein's *Strophingia*.

*Strophingia* differs from *Aphalaroida* chiefly in the texture of the forewings. *Strophingia* has semitransparent wings, whereas the forewings of *Aphalaroida* are thick and opaque. *Aphalaroida*, furthermore, has a conspicuous and distinctive clothing of thick, glandular hairs on the body surface and sometimes on the wing surface as well, whereas the other genus lacks this characteristic entirely.

*Haplaphalara* Uichanco<sup>6</sup> was erected in 1921 for a previously known species of *Aphalara* (*Aphalara dahli* Rübsaamen), which is not congeneric with other species of that genus. However, between this species and those referred to *Strophingia* there are no real generic differences, and therefore I propose that *Haplaphalara* be considered a synonym of *Strophingia*.

*Description*.—Usually very small insects, body about 1 to 2 millimeters long; head small; vertex flat, about half as long as wide, with front ocellus on its anterior margin. Frons a small sclerite beneath vertex, visible from in front or in ventral aspect, bearing the front ocellus at its anterior end; genæ slightly swollen beneath vertex, but not produced in conical processes or lobes.

<sup>3</sup> *Aphalaroida*, U. S. Nat. Mus. Bull. 85 (June 3, 1914) 38.

<sup>4</sup> *Strophingia*, Ent. Mitt. 3 (July 1, 1914); see U. S. Nat. Mus. Bull. 85 (1914) 24.

<sup>5</sup> Rec. Ind. Mus. 7 (1912) 422.

<sup>6</sup> Philip. Journ. Sci. 18 (1921) 260.

Antennæ short, usually about as long as width of vertex (between eyes), but sometimes as long as width of head including eyes, or longer. Eyes hemispherical.

Forewings usually semihyaline or hyaline (not thick and opaque), broadly rounded; pterostigma usually present, either closed or open; membrane often maculated or colored.

Type of genus, *S. ericae* (*Rhinocola ericae* Curtis).

In addition to the type species, the following three species should be referred to this genus:

*Rhinocola targioni* Licht., Verh. Zool. Bot. Ges. Wien 38: 12.

*Paurocephala orientalis* Crawford, Philip. Journ. Sci. 10 (1915) 261.  
Locality, Philippine Islands.

*Aphalara* (*Haplaphalara*) *dahli* Rübsaamen, Marcellia 4 (1905) 22;  
Philip. Journ. Sci. 18 (1921) 260. Localities, Bismarck Archipelago and Philippine Islands.

*Spanioneura arcuata* Crawford.

*Katacephala arcuata* CRAWFORD, Bull. U. S. Nat. Mus. 85 (1914) 115.

This species appears to be more closely allied to the old genus *Spanioneura* than to *Katacephala*, since the latter has broad, rhomboidal wings.

Locality, Mexico.

*Spanioneura conigera* Crawford.

*Paurocephala conigera* CRAWFORD, Philip. Journ. Sci. 15 (1919) 151.

This species was referred to *Paurocephala* with some doubt as to its proper relations. It appears to be closely related to species of *Spanioneura*.

Locality, Moluccas, Amboina.

*Spanioneura quadrimaculata* sp. nov.

Very similar to *S. conigera* Crawford, differing most strikingly in the presence of four conspicuous, square, black spots on vertex, two on each side of front ocellus.

Head flexed sharply downward into a vertical position; vertex large, about twice as broad as long, slightly convex. Genal cones large, broad, nearly contiguous on inner margin, subacutely pointed. Antennæ twice as long as width of head, very slender.

Forewings semitransparent (slightly thickened or coriaceous), with a tinge of brown at apex; venation similar to that of *S. conigera*.

Locality, Philippines, Mindanao, Dapitan (*Baker*), 1 specimen.

## ILLUSTRATION

TEXT FIG. 1. *Stenopsylla bakeri* sp. nov., venation of forewing.