

shorter and more convex than in *ferruginata*, and there is no long ventral bristle on the basal segment of the mid tarsus.

Upolu: Apia, February, 1925, fowl dung, Buxton & Hopkins. One specimen.

A Palearctic species that has been recorded from the Seychelles and Fiji.

40. *Leptocera curvinervis*, Stenhammar.

Four specimens that agree with the description and figure of the wing given by Duda in his paper on the European species, and that run down to this species in Richard's key to the British species are in the Samoan collection.

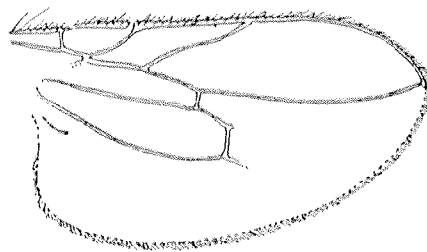
The fourth wing vein is evenly curved forward, the second costal division is over 1.5 times as long as the third, the costa has some short but quite evident bristles on its basal section, and the scutellum has six marginal bristles.

Savaii: Safune, E. H. Bryan, Jr.

A Palearctic species not previously recorded from the Pacific Region, but no doubt found elsewhere than in Samoa in that region.

Leptocera sp. (Text-fig. 14).

One female of a species that may be undescribed is before me, but I do not care to erect a new species on the strength of this single example in a genus so likely to contain widely spread species. I figure the wing (Fig. 14), which closely resembles that of *czernyi* Duda, so that should further material be obtained its identity may be determined.



Upolu: Apia, 16.v.1924, Buxton & Hopkins. TEXT-FIG. 14.—Wing of *Leptocera* sp. n. ?

MILICHIIDAE.

This family contains comparatively few species, but it is very widely distributed, occurring in all faunal regions. The larvae as far as we know are scavengers feeding in decaying vegetable and animal matter, which no doubt accounts for the widespread distribution of some of the species.

There are but two genera in the Samoan material, both of which were recorded by Bezzi from Fiji.

Milichiella Giglio-Tos.

Bezzi in his book on the Diptera of Fiji erroneously credits this genus to Meigen. There are a number of species of the genus, but only one of them is widely distributed, being almost cosmopolitan, and included amongst the Samoan material.

41. *Milichiella lacteipennis* (Loew).

A glossy black species, the male without any white dust on the abdomen and with the apical visible tergite elongated and rather long bristled on the sides. The wings are milky, less markedly so in the female, and the third and fourth veins are quite noticeably convergent apically.

Upolu : Apia, August, 1924, bred from guinea-pig dung, Buxton & Hopkins. Two specimens.

Desmometopa, Loew.

The species of this genus are rather similar in general appearance and it is difficult to determine them by the use of printed descriptions which are mainly based upon colour of the halteres, palpi, and the legs. I have separated the species now before me on the basis of structural as well as colour characters, and hope that it may be possible for subsequent workers to determine these species on the same bases. To facilitate identifications, I present below a key to the species.

KEY TO THE SPECIES.

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|---|--------------------------------|
| 1. Genae fully as high as width of the third antennal segment, with a glossy blackish brown streak below the eye which is angularly widened just behind the vibrissa (Fig. 15) | <i>m-nigrum</i> Zetterstedt. |
| — Genae not as high as width of the third antennal segment and with at most a linear upper marginal shining black streak | 2 |
| 2. Palpi pale yellow with a central dark brown mark across the surface, and much widened, distinctly broader than the third antennal segment, the bristles longer and stronger than usual; tarsi distinctly fulvous yellow, the fore pair least noticeably so | <i>palpalis</i> de Meijere, ♂. |
| — Palpi darker yellow, distinctly and rather broadly blackened at apices | 3 |
| 3. Mid and hind tarsi very noticeably brownish yellow | <i>palpalis</i> de Meijere, ♀. |
| — All tarsi fuscous | <i>ciliata</i> Hendel. |

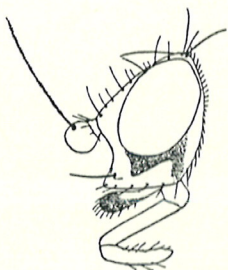
41A. *Desmometopa m-nigrum* Zetterstedt. (Text-fig. 15).

This species is not amongst the Samoan material, but it has been recorded from Fiji and I have it from Sydney, N.S.W., so that it in all probability occurs in the Samoan group.

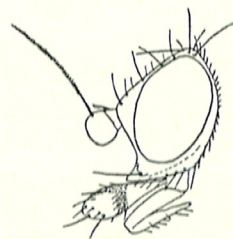
The much higher genae, with the angulate lower margin of the upper glossy black stripe as shown in Fig. 15 readily distinguish it from the other two species in my material. The short fringe of bristles on the base of the costal vein consists of longer and finer bristles than in the other two species, a character used by Hendel in his differentiation of it from *ciliata*.

42. *Desmometopa ciliata* Hendel.

A rather smaller and darker species than *m-nigrum*, with the genae almost as in *palpalis*, and the palpi small and coloured as in the former. The fringe



TEXT-FIG. 15.—Head of *Desmometopa m-nigrum*, male, in profile.



TEXT-FIG. 16.—Head of *Desmometopa palpalis*, male, in profile.

of bristles at the base of the costal vein is shorter and closer and consists of finer bristles than in *m-nigrum*, being almost identical with that of *palpalis*.

Upolu: Apia, ii, 1925, ex-fowl dung, Lot 731, Buxton & Hopkins.

I suspect that this is the species recorded from Fiji under the name *tarsalis* Loew, but an examination of Bezzi's material is essential to a definite conclusion on the point. An Australian species which I have from Sydney, N.S.W.

43. *Desmometopa palpalis* de Meijere (Text-fig. 16).

The large pale yellow brown-marked palpi are characteristic of the male only, the female having these organs very similar to those of the preceding two species even to the restriction of the dark markings to the apex and upper

margins. The mid and hind tarsi are quite conspicuously brownish or fulvous yellow as compared with the fuscous tarsi of the other two species.

There is no previous reference to this distinction in the palpi of the sexes. Head of male as in Fig. 16.

Upolu : Apia, ii, 1925, ex-fowl dung, Buxton & Hopkins.

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- Fig. 1. *Samoaia ocellaris*, wing.
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 „ 3. „ *comma*, wing.
 „ 4. „ *hirta*, wing.
 „ 5. *Zygothrica samoaënsis*, head in profile.
 „ 6. *Upolomyia pictifrons*, head in profile.
 „ 7. „ „ wing.
 „ 8. *Mycodrosophila buxtoni*, abdomen from above.
 „ 9. *Hopkinsomyia convergens*, head in profile.
 „ 10. *Drosophila convexa*, head in profile.
 „ 11. „ *upoluae*, genital process of female in profile.
 „ 12. „ *hypopygialis*, genital process of female in profile.
 „ 13. *Eupsilopa fascipennis*, wing.
 „ 14. Wing of *Leptocera*, sp. n. ?
 „ 15. Head of *Desmometopa m-nigrum* male, in profile.
 „ 16. Head of *Desmometopa palpalis* male, in profile.