CYCLORRHAPHA

FAM. SAPROMYZIDAE and ORTALIDAE

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J. R. MALLOCH (Washington)

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BY

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FAM. SAPROMYZIDAE.

The life-histories of the species of this family are practically unknown and it appears strange to me that in several years work on the immature stages of the Order during which I assiduously hunted for larvae in all manner of habitats this family entirely eluded me. They are reported to occur in the larval and pupal stages in humus and earth, and where the flies are met with they are usually abundant on low vegetation.

The most recent work on the family in the Orient is that which I published a few years ago (1) and in describing the two new species in the present paper I refer to the key to the genus of which they form a part as it is given therein.

It may be mentioned in passing that had the male and female of dimorpha which are mounted in copula in the present material not been so mounted it would not have been possible for me to determine that they belong to the same species as ordinarily the difference in markings such as is here shown would be accepted as valid grounds for considering them as distinct species.

Genus HOMONEURA VAN DER WULP.

Tijdschr. v. Ent., vol. 34, p. 213 (1891).

This genus was erected for the reception of a black species, picea van der Wulp, which belongs to a small group containing four or five oriental species that can not be sufficiently well differentiated from the great mass of the oriental species to justify the pale coloured species such as are contained in the two segregates dealt wirth herein being considered as generically distinct.

The genus in its widest sense is found all over the world, but is commonest in the Orient.

⁽¹⁾ Proc. U. S. Nat. Mus., vol. 74, Art. 6, pp. 1-97, pls. 1-6 (1929).

Homoneura ambusta new species.

Female. — General colour brownish yellow, distinctly shining, with fuscous markings. Frons brownish black, becoming yellowish at anterior margin, third antennal segment brownish, palpi brownish yellow, upper margin of occiput slightly darker than the lower central portion; all hairs and bristles black. Thorax more brownish on disc of mesonotum than elsewhere except the disc of the scutellum which latter is almost entirely fuscous, darkest apically, and less shining than the mesonotum. Abdomen with blackish apices to the tergites except the first which become broader apically until the fifth appears entirely black. Legs tawny yellow. Wings hyaline, with a distinct yellowish brown clouding on the costa which is most evident apically over tip of the second vein, the outer cross vein with slight brown cloud. Fringes of squamae dark brown. Halteres yellow.

Frons slightly wider than long and fully one-third of the head width, all the bristles strong, the anterior orbitals shorter than the posterior pair, ocellars quite long, postverticals longer than ocellars, upper half of postocular cilia quite stout; third antennal segment about twice as long as wide, rounded at apex; longest hairs on arista about as long as width of third antennal segment; eyes higher than long, narrowed below; cheek about as high as width of third antennal segment; palpi narrow. Thorax with the dorsum quite densely covered with short black decumbent hairs of which there are 10-12 series between the anterior dorsocentrals, the latter just behind the suture, the two pairs behind these equally long and strong; prescutellar acrostichals strong; prealar and intraalar undeveloped; anterior sternopleural bristle much shorter and weaker than the posterior one; mesopleura with one strong hind marginal bristle and numerous hairs; prosternum haired on sides; scutellum flattened on disc, apex almost transverse, with four marginal bristles, the apical pair widely separated. men elongate ovate, all tergites with rather well developed apical bristles. Legs normal; fore femora with a fine anteroventral comb on apical half and a series of quite strong posteroventral bristles which are widely separated; mid femur with about five short stout bristles on anterior surface of apical third and one apical bristle on posterior surface; mid tibia without submedian posterior bristles, the apex with several strong bristles; hind femur without strong ventral bristles; hind tibia with only the preapical dorsal bristle and a very short curved apical ventral spur. Wings normal, first posterior cell not obviously narrowed at apex, inner cross vein slightly beyond apex of first vein and at about twofifths from base of discal cell, untimate section of fourth vein subequal to penultimate section.

Length, 6 mm.

Type, forest between Lomira and lake Kamakahwalla, New Guinea, 19.III.1929.

This species will run down to the section of my key to the genus containing the species of *Homoneura* sens. str., and to Caption 60, second section, which contains *strigipennis* de Meijere. It may be distinguished from that species by the yellow face and cheeks, the less distinctly darkened mesonotum, and the paler halteres. The type of wing markings present in this species is found only in certain species from the same island and some of those in that immediate region.

Homoneura dimorpha new species.

MALE and FEMALE. — General colour shining testaceous yellow, with black spots on the abdomen which are differently arranged in the sexes.

Frons dull except on the orbital stripes which are narrow and slightly shining, the antennae and palpi yellow, the only black mark on head being a small one between the ocelli. Abdomen of male with a central spot on fourth

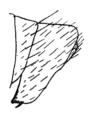


Fig. 1. — Hypopygium of male of Homoneura dimorpha from the side.

tergite only, female with a similar spot on fourth but an additional black spot on each side on that segment and also on the second and third segments. Wings yellowish hyaline. Halteres yellow.

Frons longer than wide, about one-third of the head width, all the bristles well developed except the ocellar pair, which though rubbed off in all three specimens are, judging from the scars remaining, very short; third antennal segment about 1.5 as long as wide, rounded at apex; longest hairs on arista not longer than its basal diameter; eye higher than long, allmost oval; cheek about as high as width of third antennal segment. Thorax with the usual three pairs of dorsocentral bristles and with three pairs of well developed bristles, the anterior pair close to the suture, the fine hairs in about eight series, anterior sternopleural bristles very short and fine, prosternum haired on sides, scutellum less flattened on disc and more rounded in outline than in the preceding species, with four marginal bristles. Abdomen short and stout, the hypopygium of the male with the basal portion large, terminating in a transverse margin (Fig. 1). Legs normal, armature almost as in the preceding species but the anterior series of bristles on the mid femur much weaker, and the hind femur with two very fine hair-like bristles near apex on the anteroventral surface; fore femur with two posteroventral bristles on apical half in male. Wings much narrower than in the preceding species, the inner cross vein close to middle of discal cell and almost below apex of first vein, the penultimate section of fourth vein rather more than half as long as ultimate section.

Length, 3 mm.

Type, male, and allotype, mounted in copula, and one male paratype from which the figure of the hypopygium is made, I. Weeim, N. Misool, 28.II.1929.

This is the first case of colour dimorphism known to me in the genus, all the other species in which the abdomen is spotted with black being similarly marked in both sexes as far as my material is concerned.

The species will run down to the same segregate, Homoneura sens. str. in my key to the species as does the one already dealt with herein, but is distinguished by the well developed acrostichals which are present in addition to the posterior pair, and thus runs into the section which contains acrostichalis de Meijere and its allies. The spotting of the abdomen and the structure of the hypopygium will readily distinguish it from those in Captions 52 and 53 in my key.

Homoneura nudifrons (Kertesz).

Lauxania nudifrons Kertesz, Ann. Mus. Nat. Hungarici, vol. 11, p. 99 (1913).

Two specimens which I identify as this species with data as follows: Samarinda, Bornéo, 8.XI.1929, and mouth of the Mahakam, East of Samarinda, Borneo, 9.II.1929.

FAM. ORTALIDAE.

Genus SCHOLASTES LOEW.

MON. NORTH AMER. DIPTERA, vol. 3, p. 38 (1873).

This genus extends from India to New Guinea and contains about half a dozen species, only one of which is in the present collection.

Scholastes cinctus Osten Sacken.

A very common and the most widely distributed species of the genus. Represented by two specimens with the following data:

Siwi, New Guinea, 19.III.1929, and « forest between Lomira and lake Kamakahwalla », New Guinea, 19.III.1929. Correctly identified, by Dr. J. C. de Meijere.