NOTES ON SOME TROPICAL PHORIDÆ¹

BY CHARLES T. BRUES

The following notes and descriptions are based on material contained in several small collections of Phoridæ received for identification from correspondents.

Diploneura Lioy**Diploneura** (*Diploneura*) **scoparia** sp. nov.

♂. Length 2.5 mm. Thorax and most of abdomen yellowish brown; head and abdominal markings black; wings tinged with brown and distinctly infuscated apically. Antennæ brown, palpi reddish yellow; pleuræ and legs brownish yellow, the hind femora tipped with black; scutellum piceous; abdomen above rather bright yellow with a lateral spot on the second to sixth tergites; these increase in width behind. Those on the second small and those on the sixth are nearly coalescent; posterior borders of the tergites yellow; hypopygium black; wing veins very dark brown, the infuscated area of the wing including the apical fourth and most of the cell anterior to the fourth vein. Front as high as broad, its bristles all very large and strong; two postantennal bristles, inserted very close together and widely divergent; lowest row of four equidistant, the middle ones placed distinctly lower than the lateral ones which are almost as far from the eye margin as from the inner bristles; upper frontal row of four equidistant, curved upwards medially with the lateral one close to the eye. Ocelli large, the occipital ridge sharp, but not elevated; postocular cilia very strong; cheeks each with two conspicuous, downwardly directed bristles, also a smaller bristle inside the eye-margin just below the antenna. Palpi stout, broadened

¹ (From the Entomological Laboratory, Harvard University).

apically, each with an irregular row of six or seven short, stout bristles at the tip. Antennæ small, oval; the arista longer than the head-height, with very short pubescence. Mesonotum finely pubescent, with one pair of dorsocentral macrochætæ and some strong bristles along the lateral margins. Propleura with two large bristles (one above the other) below the spiracle; also a fan-shaped series of four or five above the base of the coxa, the anterior one large and the others rapidly becoming smaller. Mesopleura entirely bare. Front tibia with a large bristle externally just before the middle and a series of about seven on the apical half, the latter small but clearly bristles and not strong hairs. Middle tibia with a pair of strong bristles externally at the base and two hair-seams with a groove between which bears a scattering row of hairs; the inner hair-seam is complete, but the outer one extends only to a little beyond the middle; beyond this there are several oblique rows of comb-like bristles and a series of small bristles that lie near the hair-seam and form the apical part of the row of hairs in the groove. Hind tibiæ with two complete, strong hair-seams on the dorsal edge, connected by eight strongly oblique rows of strong comb-like bristles; in addition with a series of scattering bristly hairs in the groove between the seams, these not very easily noticed on account of the conspicuous oblique rows of bristles that extend across them. Scutellum with four equally strong bristles. Sides of second segment of abdomen bare; third to fifth tergites subequal in length; sixth twice as long. Costa extending nearly to the middle of the wing, its bristles fine and closely placed; first section four and one-half times as long as the other two together since the first, second and third veins enter the costa very close together, the second almost midway between the first and third; fourth vein lying unusually near the costal margin, gently arcuate and strongly recurved at the tip; fifth and sixth veins very little curved; seventh strong. Halteres pale brownish yellow.

Female. Resembles the male, except that the four tergites of the abdomen are entirely yellow. The third and fourth are small and no fifth one is visible.

One specimen of each sex; male from Sydney, New South

Wales (H. J. Carter) and the female from Brisbane, Queensland (A. J. Turner).

This species does not fit very well into any of the subgenera adopted by Schmitz. The armature of the hind tibia consists really of two distinct hair-seams, but the space between these bears the numerous oblique comb-like rows of bristles as described above. This condition might also arise from the presence of three hair-seams in which the middle one became broken up into a number of separated oblique groups. As the species does not resemble the only one of the two species of which I have specimens that are placed in the subgenus *Tristoechia* and as it does resemble a certain one placed in *Diploneura* s. str. I have placed it there. Another striking character is the extremely short second section of the costa.

Syneura Brues

***Syneura cocciphila* Coquillett**

This species appears to be widely distributed in the warmer parts of America. I have recently seen specimens sent by Dr. M. D. Leonard reared from *Icerya purchasi* at San Juan, Porto Rico, and there are also in my collection others reared from *Icerya* in Arizona. Several South American species have been described by Borgmeier, one of which is I think without doubt the same as *S. cocciphila*. This is *S. infraposita* Borgm. (Deutsch Ver. f. Wissensch. u. Kunst in São Paulo, Jahrg 3, p. 133 1922, (1923) and Arch. Mus. Nac. Rio de Janeiro, vol. 25, p. 227 (1925)). The very complete descriptions given by Borgmeier agree closely with a single cotype specimen and the above mentioned examples reared from *Icerya*. Unfortunately the old descriptions of Coquillett and myself omit certain of the characters more recently used in classification and no complete description was available to Borgmeier. This is the only one of the neotropical species with the mesopleura hairy above.

Homalophora Borgmeier

Vozes de Petropolis, vol. 17, p. 849 (1923).

Deutsch Ver. Wiss. u. Kunst, São Paulo, Jahrg 3, p. 177 (1923).

This genus is based upon a single South American species, *H. reichenspergeri* described in the publications mentioned above which has been found living with the termite, *Conitermes*.

Several years ago I received through Mr. S. W. Bromley two wingless phorids which he had taken in a nest of the large Cuban leafcutting ant, *Atta insularis* Guér. at Santiago de las Vegas near Havana. These are undoubtedly referable to *Homalophora*, although they represent a distinct species from the termitophilous form. The apterous female of *Homalophora* resembles the two widespread genera, *Puliciphora* and *Chonocephalus*, but is readily distinguishable from the former by the absence of a curved slit in the fifth abdominal tergite, and from the latter by the presence of ocelli.

***Homalophora cubensis* sp. nov.**

♀. Length 1.1 mm. Dark brown, the antennæ, mouthparts, thorax, legs and membranous parts of the abdomen testaceous. Front somewhat longer than broad; four nearly equal, erect and laterally divergent post-antennal bristles, the upper pair much farther apart than the lower ones. Occipital row as in *H. reichenspergeri*. Ocelli very small and forming a small triangle, the posterior ones very close to the two ocellar bristles which are set between them. Mesonotum twice as wide as long; with a strong backwardly directed bristle near, but clearly inside of the lateral margin just behind the middle; near the posterior margin with four bristles, each inner one twice as far from the other as from the adjacent lateral bristle, which in turn is twice as far from the lateral margin as from the adjacent inner bristle; these bristles of equal size, or with the lateral ones somewhat stronger. Six abdominal tergites, clothed with sparse, minute hairs, but without stout hairs or bristles along the hind margins; first half as long as the mesonotum; second tergite twice as broad as long, nearly twice as long as the thorax; third but little narrower than the second, but not much more than half as long; fourth narrower but nearly as long as the third, a little more than twice as wide as long, fifth smaller, twice as wide as long,

half as wide as the second, without a slit, but with a slight transverse impression at the base; sixth very small. Abdomen slightly, but not greatly flattened, the membranous segments (1-6) visible at the sides, slightly on second, but broadly behind, with scattered hairs set in minute black spots; anal tube very pale and soft. Eye in lateral view about half as high as the head. Antenna smaller than the eye, with strongly pubescent arista; palpi small, with several long, but delicate bristles, directed mainly laterally. Proboscis as long as the head, rather thick and not heavily chitinated. Legs rather stout, of the usual form.

Described from two females from a nest of *Atta insularis* Guér. at Santiago de las Vegas, Havana, Cuba (S. W. Bromley).

This species differs from *H. reichenspergeri* Borgm. by the brown, not black, abdominal tergites and comparatively larger second tergite; also the outer bristle on the hind margin of the mesonotum is not weaker than the inner one. Since the size of the abdomen varies, the greater extension of the membrane cannot be regarded as a specific character.

Ptochomyia Silvestri

Boll. Zool. Gen. Agr., Portici, vol. 14, p. 272 (1920).

Ibid., l. c., p. 275 (1920).

This most remarkable form was described from Cameroon, Nigeria and French Guinea where it lives in the nests of *Ancistrotermes*. I have a single female specimen sent to me some time ago by Dr. Alfred Emerson, who received it with the termites of the American Museum Congo Expedition, 1909-1915. It was collected at Niangara, Belgian Congo, May 20, 1913 by Herbert Lang, in a nest of *Macrotermes* (*Bellicositermes*) *natalensis* Haviland.

Ptychomyia is clearly related to *Termitoxenia* and *Termitomyia*, especially the latter, differing in the form of the proboscis in which the labium is greatly enlarged and swollen. The present specimen agrees closely with Silvestri's description and figures although the abdominal bristles are much weaker than they are shown in his figures. However, in the description these are referred to as "*setis minimis*" which suggests that their size may have become accentuated

in the reproduction of the drawings. Otherwise I cannot find any striking differences as the form of the head, which serves to distinguish three varieties, falls within the range figured by Silvestri. The mesothorax is considerably wider than long, whereas in *P. afra* it is described as about equal in these two dimensions; one of Silvestri's figures (Fig. III, 1), however, shows it as more elongate.

The acquisition of further specimens may perhaps show that the present specimen really represents a second species as the host termite belongs to another genus.

NOTE ON *HAPLODICTYUS INCERTUS* NAVAS

BY F. M. CARPENTER

Museum of Comparative Zoology, Harvard University

In 1926 Navas published a description of a Mecopteron, *Haplodictyus incertus*, belonging to the family Bittacidae.¹ Following the description he gives the type locality as "Wilmerding Pa. A. Heine", and then adds, "Wahrscheinlich aus Africa". The similarity of the locality mentioned to Wilmington, Pa. (Pennsylvania) leads to doubtful suspicions, especially since Navas himself was apparently not quite certain that the place referred to was in Africa; and an examination of his figures of the genitalia and fore wings shows that *incertus* is in fact *Bittacus apicalis* Hagen, which inhabits the eastern part of the United States, from Georgia to New York. Inasmuch as the genitalia and wing markings of this species are very distinctive (cf. the figures in my revision, Bull. Mus. Comp. Zool., 70, 1931), there can be no doubt that *incertus* is a synonym. The fact that Navas placed *apicalis*, a perfectly typical Bittacus, in the genus Haplodictyus Navas substantiates Esben-Petersen's contention (Selys coll., Monograph Mecoptera, 1921) that Haplodictyus is only a synonym of Bittacus.

¹ Trichoptera, Megaloptera and Neuroptera aus dem Deutsch. Entomolog. Institut. (Berlin-Dahlem). 2nd ser. Ent. Mitteil., 15(1): 57-63. 1926.