THREE NEW SPECIES OF TWO-WINGED FLIES OF THE FAMILY BOMBYLIIDAE FROM INDIA

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The following new species of Bombyliidae were reared by C. P. Clausen as secondary parasites on Hymenoptera of the genus Tiphia, which were parasites of scarabaeid beetles of the subfamily Rutelinae in India. Mr. Clausen also reared *Hyperalonia oenomaus* Rondani with the same habits and in the same region.

APHOEBANTUS CLAUSENI, new species

Male.—Ground color black except femora and tibiae. Head globose, hind margin of eye with the usual deep notch and bisection; occiput with deep cleft behind vertex; front at vertex twice as wide as ocellar triangle, gradually widening to antennae, where it is about one-fourth of the head width; face receding; front and face with black hairs, the former with golden appressed scales, the latter with erect vellow hairs mixed with the black; antennae short, the third joint obliquely onion-shaped, the basal enlarged part shorter than second joint, the style about equal to half the slender part of the joint. Dorsum of thorax and scutellum thinly covered with appressed deep golden tangled hairs mixed with erect slender black ones; a collar of vellow hairs next to head; pleurae glaucous, mesopleura with abundant vellow hairs; three rather large black bristles before base of wing and several on postalar callus; scutellum with four pairs of black bristles on margin, equally spaced. Abdomen with same golden appressed hair as mesonotum, mixed with black hairs not so erect; first segment with dense brush on each side of erect blunt yellow hairs. Legs yellow, the coxae, base of front femora, tip of hind femora above, and tarsi black; all the tibiae with rows of small spines; pulvilli normal; hind femur without row of bristles on lower hind edge. Halteres vellow, distal part of stem and base of knob infuscated. Wings brown, gradually paler posteriorly; second vein branching from third opposite extreme base of

discal cell; anal cell wide open; second vein joining costa at a right angle.

Length, 4.5 to 6 mm.

Described from three males, Shillong, India.

Type.—Male, Cat. No. 40301, U.S.N.M.; one paratype will be deposited in the British Museum.

Only one species of *Aphoebantus* has been described from India heretofore, *ceylonicus* Brunetti, which has the thoracic and scutellar bristles yellow, as well as the erect hairs on thorax and abdomen: the description indicates that the abdomen is more or less banded, which is not the ease in *A. clauseni*.

APHOEBANTUS SERATUS, new species

Male.—Differs from A. clauseni only in the following: The front at vertex is considerably narrower; the middle femora are black on basal half or more; the hind femora have a row of distinct spines on lower inner edge from base almost to tip; the wings are paler, the only distinct infuscation being at extreme base and in the subcostal cell; the first and third veins on the dorsal surface are smooth, while under high power they appear dotted in A. clauseni as if hairy, although I can see no hairs on them in my specimens. Third antennal joint missing.

Length, 5.2 mm.

Described from one male, Shillong, India.

Type.—Male, Cat. No. 40302, U.S.N.M.

EXOPROSOPA SIPHO, new species

Female.—Ground color black except the tibiae and basitarsi. Wings deeply infuscated on basicostal half with spots on the forks of veins in the clear portion.

Front of head at vertex about one-fifth the width of the head, widening to one-third at the antennae. Thinly sprinkled with elongate yellow appressed scales and erect black hairs. Face with the same covering, slightly brown at edge of mouth. Proboscis considerably elongate, when directed forward exceeding the antennae.

Thorax rather sparsely sprinkled with the same scales as on the head, more dense on scutellum; some black bristles in front of wing and on the postalar region, the latter also having rather dense and somewhat elongated yellow hair. Mesonotum and scutellum also with erect delicate hairs which are more brown than black in the middle part. Pleura with a dense tuft of black hairs on upper half of mesopleura, the lower half with thin and delicate but rather long hair. Sternopleura with a few mostly yellowish hairs which extend upward along the anterior part of the pteropleura, the metapleura with long dense bristly hairs which are about one-half yellow.

Abdomen black with mixed black and yellow appressed scales. On the first segment there are dense long, erect, scaly hairs at the sides. continuing in a thin and reduced series across the middle. second segment shows a few paler scales across the base, hardly enough to call crossbands; the following segments show scarcely any banding except the last three which when viewed from behind show mostly black scales across the base. The sides of the abdomen are fringed with large blunt, black scales, a few whitish. The venter is covered with long, slender, yellow hairs not very dense. Legs covered with mixed light and dark scales. Pulvilli wanting; hind femur with a row of about seven bristles on the lower front edge. Wing dark brown on basicostal half, brownish hyaline on the remainder, the line of division not very distinct, running obliquely from the middle of the axillary cell to the costa just before the apex. All the forks and crossveins bear spots and there is a slight trace of additional infuscation along the anterior fork of the second vein near its tip, a less distinct trace on the posterior fork of the same and a slight spot in the open apex of the anal cell.

Length, 4.6 and 4.8 mm.

Described from two females, Shillong, India.

Type.—Female, Cat. No. 40303, U.S.N.M.

This species is close to Exoprosopa insulata Walker, but according to the descriptions of Brunetti and Nurse E. sipho differs in having a much longer proboscis, the dense bristly hairs of the pleura confined to the upper edge, the abdomen with very indistinct bands and with well-developed scales along the edges, and the venter covered with pale hairs. In the paratype specimen the proboscis would, if directed forward, extend a little beyond the antennae, but in the type the organ is lengthened out as if by the straightening of an elbow so that it is about as long as the whole body not counting the head; or as it projects downward from the head its length is equal to about two and a half times the vertical diameter of the head. The paratype specimen will be deposited in the British Museum.