

New Syrphid Flies

By F. M. HULL, University of Mississippi

This paper describes the new species and varieties of Syrphid flies which have accumulated during the last two years.

Cerioides malleus n. sp.

A small species with club shaped abdomen. Wing with a single brown spot at apex. Face with a thick armed yellow V, narrowly margined by brown.

Male. Length 10 mm. *Head*: vertex, except for the area across and immediately after and before the ocelli and the upper part of the occiput which is brownish red, light yellow. The face and front and cheeks are light yellow, marked with brownish red, as follows: a small spot on the eye margin on the posterior part of the cheeks, a broad band from the lowest portion of the epistoma almost to the eye margins. Also there is an area reaching from the anterior tip of epistoma in the form of narrow linear vittae. These two vittae diverge on either side of the face at the same angle as the band of the lower face diverges and they continue to widen until they become confluent above with a broad, similarly colored area that occupies almost exactly one half the width of the face below the antennae, and which area also extends half the length of the face beneath the antennae. This upper block of reddish brown encloses the lower half of the short front; it contains just below its middle a pair of pale yellow ventrally rounded triangles narrowly separated from one another. Also the large red brown block sends a short, sharp, small projection into the yellow of the lateral portion of the face. Finally the yellow triangle which remains upon the lower half of the face is narrowly divided upon its upper portion by a linear brown stripe. The central area is enclosed by the brown. The cheeks and all of the lower portion of the face are silvery pubescent; the upper block of brown has minute brown patches bare of pubescence. The antennae are missing. The frontal prominence is completely

lacking in this species. *Thorax*: brownish red, a little darker upon the central portion of the mesonotum which, however, is not black, but is darker due to the very thick accumulation of microscopic black setae. The lateral half of the transverse suture is margined with pale yellow which continues down narrowly upon the posterior part of the mesopleura, across the middle of the sternopleura almost to touch the arcuate yellow stripe upon the upper part of sternopleura. There is a wider, pale yellow stripe across the middle of the metapleura. The humeri, the narrow subapical margin of the scutellum and a long slender, narrow margined vitta upon the posterior part of the mesonotum which runs from the suture slightly obliquely almost to post calli are pale yellow. The pile of the mesonotum, though exceedingly short, is all golden and the reddish color is overlaid especially laterally and particularly upon the pleura and upon the coxae as well as the legs with quite microscopic silvery pubescence. *Abdomen*: club-shaped, rather short, the first two segments almost as long as the remaining three and greatly narrowed. The abdomen is narrowest just before the middle of the second segment, but the apex of that segment is considerably wider than its base which in turn is more narrow than the base of the first segment. The hypopygium is quite large, protuberant and bluntly rounded and not greatly smaller than the third segment. The third and fourth segment and the protuberant hypopygium form a large, oval, broadly rounded club. The abdomen is reddish brown, a little darker upon the third segment, its posterior margin laterally and narrowly, the whole posterior margin of the cylindrical second segment and the whole wider posterior margin of the third segment pale yellow. There is an obscure, transverse, narrow, dorsal and ventral fascia of yellow across the apical portion of the hypopygium. *Legs*: brownish red, the basal sixth of the hind femora and the basal portion of their tibiae pale yellow. The brown of the tibiae, however, extends almost to the base ventrally. The hind tarsi are lacking, the anterior tarsi quite dark reddish brown, the apical segment very pale, the middle tarsi light

brown. *Wings*: hyaline, veins pale brown. There is a sharp, acute bend in the third vein, somewhat less than a right angle; it is without spur and all of the remainder of the submarginal cell, after the completion of the bend, together with most of the marginal cell above it is light brown in color.

Holotype: one male. Rikatla, LOURENCO MARQUEZ (H. Junod) April 1915. In the Cornell University collection.

***Mallota separata* n. sp.**

Flies with the male eyes separated narrowly; abdomen black pilose beyond the second segment; related to *posticata* Fabr.

Male. Length 15 mm. *Head*: vertex protuberant, shining black and apparently quite bare. There is no evidence that pile has been denuded for there is yellow pile on the posterior part of this prominence and extensive, long, sulphur-yellow pile on the posterior part of the occiput. There is also a single row of long black hairs, widespread, nearer the eye margins and upon the occiput. The lateral half of the front is sparsely white pubescent with a few long white hairs and more black ones. The triangular, middle, anterior area of the front is polished, bare, black and with a linear, median crease on the upper half and a transverse crease across the lower middle. The eyes are definitely separated by from two to three times the width of the anterior ocellus. The face and cheeks are shining black, silver pubescent with silvery pile. The antennae are dark brown, the arista pale yellow, black apically, white at apex. *Thorax*: shining brownish on the sides and anteriorly, due to pollen, the mesonotum is broadly black, except on the anterior margin. The pile of the mesonotum is light sulphur-yellow with only a few black hairs in the center. The scutellum is light brown with narrow blackish base, the pile is entirely sulphur-yellow; there is similar pile upon the post calli and widely over the mesopleura, pteropleura and sternopleura. *Abdomen*: shining blackish with light yellow pile upon the first segment except its anterior corners; the yellow pile is continued upon the base of the second segment, triangularly, and upon the basal half of the sides. The remaining pile of the abdomen is thick, long and

entirely jet-black including that upon the hypopygium. *Legs*: all of the femora shining black, the tibiae very dark brown, the tarsi light reddish-brown. The pile of the hind femora, except a few inner basal hairs and their tibiae and tarsi, is entirely black. The femora are considerably thickened and arcuate, their ventral surface concave with a subapical, ventral protuberance and black, bristly, tufted pile. The hind tibiae are flattened and somewhat arcuate, but without the thick, abundant black pile found in the middle of the ventral surface in *posticata* Fabricius. *Wings*: hyaline with a faint, small brown cloud near the origin of the second and third veins.

Holotype: a male. Oxford, MISSISSIPPI, May, 1942, (F. M. Hull).

Mesogramma arethusa n. sp.

I cannot distinguish this from boscii - all stages between

A small fly, the abdomen shining light orange brown, the third and fourth segments with four black vittae. Related to *boscii* Macquart.

Male. Length 5.5 mm. Face and front yellow, the cheeks blackish behind, the vertex coppery red, shading into brassy, the vertical triangle metallic black. The upper pile of the vertex is entirely black and the very sparse pile of the front whitish. The first two antennal segments are pale brown, the third wholly light orange, the arista brown and rather thickened at the immediate base. The middle indentation of the occiput marked; the occiput is bluish black with silvery pubescence and pile of which there are several rows. *Thorax*: blackish and brassy brown before the scutellum and with some evidence of similar vittae but the mesonotum is however discolored. The humeri are dark brown, linearly yellowish behind; the mesonotal margin between the humeri and the transverse suture is wholly black but dull yellowish brown behind the suture and over the post calli and again upon the margin of the scutellum; disc of scutellum greenish black. The upper sternopleura and the posterior half of the mesopleura is yellow, only the former white pubescent; propleura black. *Abdomen*: narrowly oval

with nearly parallel sides; shining black. The extreme anterior corners of the first segment and a median, medially sub-interrupted and sublaterally subinterrupted fasciae are orange in color. Third and fourth segments are shining orange brown; down the middle run two slender, linear, narrowly separated, anteriorly divergent vittae reaching the base of the segments. The posterior corners of these segments are black and from the medial, anterior angle of this black area a wider vitta reaches forward the full length of the segment and from the outer anterior angle of this same black there runs along the margin of the segment a diminishing extension of the black ending rather sharply at about one-third of the distance from the base of the segment. The fifth segment has a slender medial vitta and a wider sublateral one on either side. The hypopygium is orange brown with a prominent, sharply delineated, shining black spot to the right. *Legs*: pale brownish yellow, the hind femora with a wide, distinct, black band occupying most of the posterior half except the apex. The hind tibiae are blackish except the extreme apex and the narrow base, their tarsi dark brown, the second and third segments barely lighter. *Wings*: hyaline, stigmal cell dilute brown.

Female. The front is metallic bluish black, minutely wrinkled but not striate; vertex similar to male; frontal pile blackish, the margins of the front linearly yellow, face yellowish with a divergent, obscure brownish stripe beginning just below the antennae; third antennal segment dark brown on at least the upper half. *Thorax*: mesonotum and scutellum and pleura similar to male. *Abdomen*: wider, more oval, the fascia of the middle of the second segment scarcely interrupted sublaterally and not at all medially. Medial vittae of third and fourth segments rather more extensively produced upon the lateral anterior ends of these vittae. The whole anterior portion of these vittae is somewhat larger and the lateral margin of all of the segments is black throughout, least so upon the second segment at the ends of the yellow fascia. The yellow of the abdomen is less of an orange color, has a rather extensive opaque pattern

which comprises most of the vittae except their narrow posterior apices. *Legs and wings*: similar to the male, the stigmal cell almost hyaline.

Holotype: a male, from Englewood, FLORIDA (J. G. Needham). *Allotype*: one female, Englewood, Florida.

The pattern of the female suggests *boscii* Macquart but besides the lateral and sublateral vittae posteriorly, it also differs in the divergent stripe of the face and the hind tibiae which are blackish almost throughout. Furthermore, the notopleura are black, and in *boscii* are yellow vittate. The male of *arethusa* differs even more from the male of *boscii* Macq.

(*To be continued*)

Additional Notes on *Papilio Aristodemus Ponceana* Schaus (Lepidoptera: Papilionidae)

By W. F. HENDERSON, Chicago, Illinois

The article in the February (1945) issue of ENTOMOLOGICAL NEWS brought in several memoranda concerning *ponceana*. One of these was in the form of a correction concerning specimen No. 24 in the published table, but the other memoranda brought information in regard to additional specimens. All suggestions have been followed up and in so far as replies have been received, the following notes bring the data concerning *ponceana* up to date:

No. 24. A correction should be made in the table as published in February: Locality: Key Largo, Florida; Date: August, 1943; Present Possessor: R. Chermock, Coral Gables, Florida.

Additional specimens:

No. 25. ♂. Miami, Florida; May 21, —, Wm. Schaus. Specimen now in the collection at Cornell University, Ithaca, New York. This specimen bears an authentic label indicating its possession by Jacob Doll, but Dr. W. T. M. Forbes is of the opinion that it is another one of the original Schaus specimens.