

NOTES ON THE FAMILY SYRPHIDÆ (DIPTERA) WITH THE DESCRIPTION OF A NEW SPECIES.

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The following notes have been taken from material collected at different times during the past three years. It is hoped that they may be of interest to other workers.

Myiolepta pretiosa, new species.

Female.—Head shining black; ground color obscured by thick whitish pollinose areas to the following extent: a triangular patch on each side of the front, just above the antennæ, with bases upon the orbits; a pollinose band from eye to eye, below the antennæ, the ends descending along the eyes and extending transversely, in their full width, between the cheek and face region to the edge of the mouth. This last portion of the pollinose area is twice as wide in extent as in *M. varipes* Loew. Thus the tubercular area of the face is left shining black. Profile of the face nearly as in *M. varipes*. Antennæ somewhat darker than in that species; third joint ochraceous brown, first and second joints slightly darker; arista similarly colored, blackened apically. Pollen of occiput grayish white; pile long, white. Ocelli white or yellowish.

Dorsum of thorax and scutellum shining black, with a slight metallic brassy cast. Pile short, appressed, white (pile in *varipes* brassy yellowish). Pleuræ shining black (vitreous); pile white, longer and more erect. On the extreme anterior portion of the dorsum of the thorax is found a band, or pollinose region, which (though in some species it may be reduced to spots), is characteristic for all species of *Myiolepta* with which I am acquainted (we might look upon the pollinose bands of *Brachyopa* as an extension of these). In *M. varipes* female, this band is cut off sharply in a line from humerus to humerus, while in the present species these bands proceed posteriorly for nearly a third of the length of the thorax; they are best seen from a slanting angle.

Abdomen entirely shining black, with a slight bluish or brassy tinge, a faint indication of whitish at the junction of the first and second segments on the lateral margins. A slightly opaque spot on the median anterior half of the second segment. Pile of the abdomen white, semi-recumbent, longer on the fourth segment, longest and erect on the lateral margins of the second segment. Venter pale on first and a portion of second segments; remainder dark. Halteres dirty light yellowish.

Legs. Anterior side of front coxæ opaque (shining black, nearly bare, in *M. varipes*) and densely gray pollinose. Trochanters and

femora shining fulvous, the latter becoming black on the distal half; tips of femora fulvous. Tibiæ brownish yellow, darker distally; whole front tarsi black (darker than in *varipes*), last three joints of middle and hind tarsi (last two joints in *varipes*) black, remainder clear, light yellow. Pile of legs, including tibiæ and tarsi, white. Wings as in *M. varipes*.

Length, 7 to 8 mm.

Type and one paratype, both females, taken by the author from flowers of *Spiræa van-houtei* on April 7, 1922, and May 6, 1920, at Mississippi A. and M. College. Types in the collection of the author.

Myiolepta varipes Loew.

Specimens studied in comparison with the above were quite constant. They vary a little in size. In the males the yellow color extends narrowly on to the third segment, and occupied in the females nearly all of the second. Five specimens from the Mississippi A. and M. College, May 6, 12, 1920 and 1921, March 19, 1921, March 6, and April 7, 1922. Taken at flowers of *Spiræa van-houtei*. Additional specimens, Hinckley, Ohio, August 1, 1901, (J. S. Hine), Clemson College, South Carolina, 1920 (M. R. Smith).

Myiolepta nigra Loew.

One specimen. Mississippi A. and M. College, May 12, 1920.

Myiolepta strigilata Loew.

Taken with the preceding species from *Spiræa van-houtei*. Mississippi A. and M. College. May 6, 1920; March 19, April 4, 1921; March 24, 1922. Also from College Station. Texas. April 12, 1915 (H. J. Reinhard).

Microdon scitulus Williston

Found in abundance, on the edge of a cypress swamp, flying over and resting on the leaves of plants close to the ground at Greenville, Mississippi, Sept. 18, 1920, and Sept. 11, 1922. Also taken at Mississippi A. and M. College, May 13, 1921, and Memphis, Tennessee, Sept. 7, 1920. Professor Jas. S. Hine refers to this species as *M. coarctatus* Loew, Ohio Naturalist, XIV, 334.

Microdon baliopterus Loew.

One specimen from Kingsville, Texas, July 6, 1921, and several specimens on foliage at Harlingen, Texas, July 18, 1921, (F. M. Hull). Two were taken at Brownwood, Texas, June 24, 1921, (R. H. Painter).

Microdon pallipennis Snow.

Not recorded since first described. Two specimens were collected by Mr. R. H. Painter, at Austin, Texas, April 10, 1921.

Volucella obesa Fabr.

I have a male and a female of this species taken at Riverton, New Jersey, July 3, 1920, resting on foliage, by Mr. R. H. Painter. A third was observed on leaves of *Clethra alnifolia*, but not upon the flowers. The female is peculiar in that the whole thorax and abdomen as well as the front and face, are a deep metallic reddish bronze color. Practically the only greenish tinge upon it is in the eyes. Otherwise it appears to be the same in detail as typical *obesa*. The male is deep metallic green and shows no variation save that the second abdominal segment has two large moderately shining black spots, separated by a narrow median line of metallic green. This record marks a considerable extension of the range of the species.

Volucella pallens Wied.

One specimen, Austin, Texas, Sept. 30, 1922. (R. H. Painter)

Volucella fraudulenta Williston.

About seven specimens of this species were taken hovering a foot or so above the ground, and making a faint humming sound, at Harlingen, Texas, June 22, and July 24, 1921. They were on the edge of an open field and were observed only about 8 o'clock in the morning and by 9 o'clock they had disappeared. They are somewhat larger (length 10 to 12 mm.) than the typical specimens of Williston, but agree in having the light markings of the abdomen as well as the face tinged with yellowish. Three specimens from San Angelo, Texas, Sept. 13, 1921, (R. H. Painter), differ in lacking this color and having at least the first two abdominal bands nearly clear hyaline. They are eight to ten millimeters in length.

Baccha lineata Macq.

Baccha lineata Macq., *Dipt. Exot., Suppl. 1*, 139.

Baccha livida Schiner, *Novara*, 343.

Baccha tropicalis Town., *Jour. N. Y. Ent. Soc.*, v. 172.

(?) *Baccha flavipennis* Wied., *Auss. Zweifl.*, ii, 123.

Five or six specimens of this beautiful species were taken at Harlingen, Texas, about shrubs and flowers. I believe the above synonymy is correct. Harlingen is fifteen miles from Brownsville, (the type locality of Townsend's species) and my specimens agree in detail with his description, with the exception that he does not mention, in the male, a second pair of brownish lines, enclosing the median longitudinal pair, together with brownish lateral margins, on the third, fourth and fifth abdominal segments. He does describe such lines for the female. However, both the thorax and abdomen are very apt to become peculiarly discolored with brown or black and the linear marking obliterated. When fresh the abdominal coloring is, save for the brown markings, clear amber yellow. Professor Jas. S. Hine, *Ohio Naturalist*, xiv, 336, has already remarked on the relationship of *lineata* Macq. to *livida* Schiner. A comparison of the above mentioned specimens with his material from Guatemala, Honduras, and British Guiana, only confirms this.

Townsend does not mention a light brownish, subapical band on the hind femora. Some, not all, of the specimens have such a band in addition to the similarly infuscated area on the posterior tibiae. The occiput likewise varies from yellow to gray pollinose. The infuscation of the wings seems to be slightly variable, with, in the female, a greater extent of hyaline portion in the apical half of the wing. Nearly the whole insect has a peculiar glassy, or vitreous appearance, as if it had been varnished.

I am led further by a study of the descriptions, and the notes by Williston, *Trans. Amer. Ent. Soc.*, xv, 267-268, in connection with the present material, to doubt the distinction of *Baccha flavipennis* Wied. The lack of Brazilian material forbids a more definite statement.

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