

length \div length to sinus), and number of bract teeth in a representative group of Bourbons. The position of a representative *hirsutum* is marked, from which it will be seen that the distribution of all the Bourbons is clearly demarcated from *hirsutum*.

SUMMARY

Enough has been said to make it evident that the Bourbon group is distinct from the Upland group on both morphological and genetic grounds. In the writer's view, the assemblage of Bourbons is a good taxonomic species and is as distinct from Upland as, say, *arborescens* is from *herbaceum*. Bourbon should continue to be known as *G. purpurascens* Poir. pending a better name.

LITERATURE CITED

- HARLAND, S. C. *The genetics of Gossypium*. Bibl. Genet. 9: 107-182. 1932.
 ———. *The genetics of cotton*. 193 pp. London, 1939.
 HUTCHINSON, J. B. *The distribution of Gossypium and evolution of the commercial cottons*. Conf. Sci. Res. Workers on Cotton in India. Bombay, 1938.
 ———. *The classification and evolution of cotton*. Trop. Agr. 16: 82-83. 1939.
 ———, and GHOSE, R. L. *The classification of the cottons of Asia and Africa*. Indian Journ. Agr. Sci. 7: 233. 1937.
 LEWTON, F. L. *The cotton of the Hopi Indians: A new species of Gossypium*. Smithsonian Misc. Coll. 60 (6): 1-10. 1912.
 SKOVSTED, A. *Cytological studies in cotton. IV: Chromosome conjugation in interspecific hybrids*. Journ. Genet. 34: 97-134. 1937.
 WATT, G. *The wild and cultivated cotton plants of the world*. London, 1907.
 WEBBER, J. M. *Interspecific hybridization in Gossypium and the meiotic behavior of F_1 plants*. Journ. Agr. Res. 51: 1047-1070. 1935.
 ———. *Cytogenetic notes on cotton and cotton relatives, II*. Science 84: 378. 1936.
 ———. *Relationships in the genus Gossypium as indicated by cytological data*. Journ. Agr. Res. 58: 237-261. 1939.

ENTOMOLOGY.—Some new species of *Syrphidae* (Diptera).¹

FRANK M. HULL, University of Mississippi. (Communicated by E. A. CHAPIN.)

This paper describes some neotropical *Syrphidae*, some of which were collected by the author at Barro Colorado Island and others accumulated. Types are in the author's collection.

Mesogramma lyrata n. sp.

Male.—Length 6 mm. Head: Front and face pale yellow, cheeks black, antennae wholly pale orange, arista black on apical two-thirds. Vertex violet immediately behind the ocelli, brassy brown posteriorly. Thorax: With a median, bluish-gray, linear vitta outside of which it is very broadly brassy brown. Viewed from the rear there is sublaterally, above the complete yellow lateral margin, a light brown and then a dark brown vitta. Scutellum brownish yellow, diffusely darker brown upon the disk, its discal pile pale, its marginal pile black, the posterior part of mesopleurae and the upper part of sternopleurae pale yellow. Abdomen: Brownish orange, marked with

¹ Received June 6, 1940.

dark brown. First segment yellow, with a pair of posterior, slender, black fascia separated in the middle, not reaching the sides. Second segment with a posterior, marginally evanescent, complete brown fascia, a quite evanescent incomplete subbasal fascia which shows traces of connection with the posterior one. Third segment with a slender subapical brown fascia curving up for a short distance along the posterior margin, also reaching the posterior corner and near the midline turning sharply upward to form a pair of outwardly turned, comma-like brown spots. Fourth segment with similar pattern but only the comma-like brown spots apparent. Fifth segment and hypopygium brownish orange. Legs: Pale yellow, the anterior tarsi orange, the posterior tarsi brownish, the hind femora and tibiae with subapical and subbasal blackish annulae respectively. Wings: Clear hyaline, stigma pale yellow.

Holotype.—Male. August 30, 1938, Barro Colorado Island (F. M. Hull collector).

***Mesogramma basilaris* Wd. var. *flavocuneus* n. var.**

Female.—Length 6 mm. Head: Face yellow, a small obscure blackish spot beneath vertex violet; the front flat, smooth, metallic. The sides sharply marked with pale yellow almost to the ocelli. Cheeks black, antennae grayish brown, orange below. Thorax: With a wide, metallic gray, median vitta and a similar sublateral one. Between these vittae are others which are dark, golden-brown or brassy, and in some lights themselves appear to be divided. Scutellum metallic black, the posterior part of the rim narrowly yellow. Humeri, the posterior part of mesopleurae, and the upper part of sternopleurae yellow. Abdomen: Black marked with yellow, the first segment largely black, the anterior corners and a narrow anterior margin yellow, second segment black with a pair of small oval yellow spots, rather widely separated in the middle of the segment and a quite narrow lateral margin reaching nearly to the posterior corners also yellow. Third segment with a pair of widely separated yellow basal spots, which on their median ends are widely produced in a posterior direction to just past the middle of the segment and at the same time slightly curving toward the midline. These posterior ends are rounded and the lateral, basal portion of the spot reaches to the lateral margin of the segment where it is just a little expanded posteriorly. Fourth segment with almost identical pattern. Fifth segment somewhat similar, the lateral portions wider, the median portion about the same but the two spots more closely approximated. Legs: Pale yellow, the anterior tarsi pale brown, the hind tarsi and a prominent subapical annulus on the hind femora black. Hind tibiae with faint brownish black annulae on either side of the middle. Wings: Hyaline, stigma pale brown.

Types.—Holotype and three paratypes: Females. Salada River, near Ceiba, Spanish Honduras, September 2, 1938 (F. M. Hull collector). One additional paratype, female, from Tuxtepec, Mexico, in the U. S. National Museum.

***Baccha flata* n. sp.**

Male.—Length 14 mm. Head: Face, cheeks, and front pale yellow, the front with a rhomboid, blackish spot of some size in the center, confluent with a smaller black spot just before the antennae and on each side of which are brownish triangles touching the eye margins. Pile of front and face erect, thick, and blackish, somewhat paler below. Antennae orange-brown, darker upon the upper part of the third joint, antennal pile black. Thorax: With four, dully shining, brassy black vittae upon a brownish-yellow background;

the sublateral vittae widest, interrupted at the suture; the submedian vittae connected at a spot opposite the suture and giving the impression of a narrow H. Between the several vittae the thorax is golden-pollinose. Thoracic pile thick, erect and dark brown, becoming reddish or yellow along the lateral margins of the mesonotum. Humeri and practically the whole of the pleurae, except for a tiny spot below the base of the wing, light yellow. Scutellum light yellow with a subtranslucent, transverse fascia. Abdomen: Chiefly brownish orange, flattened and spatulate, the first segment pale yellow except for a narrow posterior margin, the second segment with a narrow yellow posterior margin and a pair of prominent, hyaline, rectangular windows in the anterior corners. Third segment wholly orange except for a narrow subapical, narrowly attenuated black fascia, interrupted in the middle and not reaching the sides. Fourth segment similarly colored. Fifth almost wholly orange. Legs: Pale brownish orange, more yellow upon the anterior pair. Hind femora with thick, very long, shaggy, reddish pile and some black pile at its base and on hind trochanters and coxae. Wings: Hyaline, with a sharply marked brown band along the anterior margin.

Holotype.—Male. Petropolis, Brazil, March 1, 1914.

***Salpingogaster halcyon* n. sp.**

Male.—Length 17 mm. Head: Cheeks and face and upper part of front pale yellow. Greater anterior portion of front is black, expanded triangularly to the sides and to the eye margin. Antennae dark brown, first joint nearly black. Thorax: Obscurely shining black with three obscure, dark, reddish-brown vittae on the anterior two-thirds, and viewed from behind a more or less square area covered with pale yellowish-gray pubescence that is rather prominent. Pleurae black. The humeri, propleurae, notopleurae, a wide conspicuous oblique cuneiform stripe upon the posterior part of the mesopleurae, upper sternopleurae, anterior pteropleurae, and a second spot upon the anterior part of the metapleurae all pale yellow. Scutellum pale yellow with a transverse brown fascia not reaching the sides in the middle. Abdomen: Slender, with a prominent median black vittae from base of second segment to apex. First segment pale yellow with a diffuse light brown posterior margin. The anterior corners of the second segment and the narrow sides, as well as the somewhat wider sides of the third segment are pale yellow but diffuse. The apical portion of the sides of the third segment as well as the fourth segment reddish brown. Legs: Light yellow, the posterior tarsi, apical two-thirds of posterior tibiae, base and apical annulus of hind femora obscurely blackish or dark brown. Pile of anterior legs yellow, except on fore tarsi; black on the entire hind legs. Wings: Pale brown, strongly yellow on the basal half anteriorly, the stigmal cell very dark brown, the marginal cell somewhat lighter brown.

Holotype.—Male, Barro Colorado Island, August 28, 1938 (F. M. Hull collector).



1940. "Some new species of Syrphidae." *Journal of the Washington Academy of Sciences* 30, 432–434.

View This Item Online: <https://www.biodiversitylibrary.org/item/122707>

Permalink: <https://www.biodiversitylibrary.org/partpdf/50484>

Holding Institution

Smithsonian Libraries and Archives

Sponsored by

Biodiversity Heritage Library

Copyright & Reuse

Copyright Status: Permission to digitize granted by the rights holder

Rights: <https://www.biodiversitylibrary.org/permissions/>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.