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Insects of Porto Rico and the Virgin Islands

Diptera or Two-winged Flies—*C. H. Curran*

118
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Seven specimens: Jayuya, January 6, 1915; Naguabo, March 7-9, 1914; Arecibo, March 1-4, 1914; Corozal, July 2, 1915; Aibonito, July 14-17, 1914.

Agromyza viridula Coquillett

1902. *Agromyza viridula* Coquillett, Journ. N. Y. Ent. Soc., x, p. 190.

A dozen specimens from Porto Rico and the Virgin Islands: Mayagüez, February 15-16, 1914; Manatí, June 27-29, 1915; Arecibo, March 1-4, 1914; San Juan, June 27-29, 1915; Naguabo, March 7-9, 1914; Christiansted, St. Croix Island, June 4, 1911; Charlotte Amalie, St. Thomas Island, June 2, 1911.

Agromyza parvicornis Loew

1869. *Agromyza parvicornis* Loew, Cent. viii, p. 92.

A single specimen from Adjuntas, June 8-13, 1915.

OCHTHIPHILIDÆ

This family is represented by only a single species.

Acrometopia Schiner

Acrometopia maculata Coquillett

1902. *Acrometopia maculata* Coquillett, Journ. New York Ent. Soc., x, p. 185.

Seven specimens from Mona Island, February 21-26, 1914.

MILICHIIDÆ

The genera belonging to this family that are represented in the collection are indicated in the following key.

KEY TO GENERA

1. Eyes with an angular emargination near the middle behind..... 2
Eyes not indented behind..... 3
2. Four dorsocentrals; hair of thorax bristly..... *Eccoptomma* Becker.
One or two dorsocentrals; hair of thorax short, appressed.
Milichiella Giglio-Tos.
3. Wing with an excision as deep as the width of the costal cell immediately before the tip of the first vein..... *Pholeomyia* Billmck.
Wing not deeply incised although the costa is fractured.
Desmometopa Loew.

Eccoptomma Becker

Eccoptomma montanum Becker

1907. *Eccoptomma montanum* Becker, Annales Mus. Nat. Hung., v, p. 541.

One male, Mayagüez, July 24-29, 1914.

Originally described from Peru. As the genus is new to North America, I present a description of the species, which includes also the generic characteristics.

Black; abdomen argenteous except the base and apex. Length, 2.5 mm.

Male. Head opaque, face with a little grayish-brown pollen and seven or eight pairs of bristles; median frontal bristles fairly long; postocellars divergent; excavation of the eyes moderately deep. Antennæ black; arista very long, slender; palpi opaque black.

Mesonotum and scutellum brownish pollinose from anterior view; three pairs of postsutural acrosticals; four pairs of dorsocentrals, one pair situated in front of the suture, the hair rather long and coarse; three sternopleurals.

Legs black; tips of the tibiae and the immediate bases of the tarsal segments, reddish.

Wings cinereous hyaline; fourth vein curved forwards apically. Squamæ with at least the border and fringe brown. Halteres blackish.

First abdominal segment, anterior angles of the second and the apical segment, black, the intermediate segments argenteous; venter wholly black.

Milichiella Giglio-Tos

1913. *Paramatza* Malloch, Proc. U. S. N. M., xlvii, p. 136.

There are three species belonging to this genus in the collection. The males of the North American species are separated in the following table.

KEY TO MALES

1. Only the second abdominal segment with a silvery white spot on either side..... *lucidula* Becker.
Abdomen wholly black or more extensively silvery white..... 2
2. Abdomen largely silvery white..... 3
Abdomen wholly black, the disc dull, the margin shining. *lacteipennis* Loew.
3. Mesonotum shining black or rather thinly brownish pollinose..... 4
Mesonotum cinereous, usually with brownish vittæ.... *cinerea* Coquillett.
4. Mesonotum with scarcely a trace of pollen; third and fourth veins strongly converging..... *arcuata* Loew.
Mesonotum more evidently brownish pollinose; third and fourth veins but little converging..... *Eccoptomma montanum* Becker.

Milichiella lacteipennis Loew

1865. *Lobioptera lacteipennis* Loew, Cent. vi, p. 97.

1900. *Desmometopa halteralis* Coquillett, Proc. U. S. N. M., xxii, p. 267.

Eleven specimens of both sexes: San Juan, July 9-12, 1914; Adjuntas, June 8-13, 1915; Manatí, March 5, 1914; Mayagüez, February 15-16, 1914; Guayanilla, July 22, 1914; one from Mona Island, February 2-12, 1914; three from Desecheo Island, February 18-20, 1914.

Some of the specimens agree perfectly with Coquillett's description of *halteralis*. The costal incision is not always greatly pronounced.

Curran, 1928

Milichiella cinerea Coquillett

1899. *Ophthalmomyia cinerea* Coquillett, Proc. U. S. N. M., xxii, p. 288.

Not represented in the collection, but originally described from Porto Rico.

Milichiella arcuata Loew

1876. *Lobioptera arcuata* Loew, Zeitschr. Ges. Naturw., p. 339.

A single male, Desecheo Island, February 18-20, 1914.

Desmometopa Loew

The two species are separated in the table that follows.

KEY TO SPECIES

Palpi deep black; tarsi largely yellow..... *tarsalis* Loew.
Palpi pale yellow with brown apices; tarsi black..... *M-nigrum* Zetterstedt.

Desmometopa tarsalis Loew

1865. *Desmometopa tarsalis* Loew, Cent. vi, p. 96.

One specimen, Desecheo Island, February 18-20, 1914.

Desmometopa M-nigrum Zetterstedt

1848. *Agromyza M-nigrum* Zetterstedt, Dipt. Scand., vii, p. 2743.

One specimen, Jayuya, February 6, 1915.

Pholeomyia Billmek*Pholeomyia indecora* Loew

1869. *Lobioptera indecora* Loew, Cent. viii, p. 94.

A female from Mayagüez, February 15-16, 1914, and another from Mona Island, February 21-26, 1914.

BORBORIDÆ

All the representatives of this family belong to the genus *Leptocera* Olivier and two of them are apparently common in the region.

Leptocera Olivier

KEY TO SPECIES

1. Third vein not angulated apically, curving into the costa..... 2
Third vein almost rectangular at the apex, without appendage, surrounded by a blackish spot; thorax opaque blackish with whitish or cinereous spots..... *angulata* Thomson.

2. No distinct presutural acrosticals..... 3
A pair of well developed presutural acrosticals..... *pumila* Williston.
3. Disc of the scutellum with numerous appressed short, bristly hairs;
thorax and scutellum dull reddish..... *illota* Williston.
Scutellum with only marginal hairs; blackish..... *discalis* Malloch.

Leptocera angulata Thomson

1868. *Borborus angulata* Thomson, Eugenes Resa, v, p. 602.

1878. *Borborus vernalicus* Osten Sacken, Cat. Dipt., p. 203.

There are numerous specimens of this widespread tropical species: Adjuntas, June 8-13, 1915; Aibonito, June 1-3, 1915; Arecibo, March 1-4, 1914, June 24-26, 1915; Barros, June 4, 1915; Cayey, May 30-31, 1915; Ensenada, June 14-19, 1915; Luquillo National Forest, March 17, 1925; Mayagüez, February 15-16, 1914; Naguabo, March 7-9, 1914; San Juan, February 11-14, 1914.

Leptocera pumila Williston

1896. *Limostina pumila* Williston, Trans. Ent. Soc. London, p. 432.

Two specimens from Aibonito, July 14-17, 1914, and Naguabo, March 7-9, 1914.

Leptocera illota Williston

1896. *Borborus illota* Williston, Trans. Ent. Soc. London, p. 434.

A single specimen from Charlotte Amalie, St. Thomas Island, June 3, 1911.

Leptocera discalis Malloch

1912. *Limostina discalis* Malloch, Smiths. Misc. Coll., lxi, p. 8.

There are representatives from the following localities: Aibonito, June 1-3, 1915; Arecibo, March 1-4, 1914; Cayey, May 30-31, 1915; Coamo Springs, July 17-19, 1914, June 5-7, 1915; Naguabo, March 7-9, 1914; Christiansted, St. Croix Island, June 4, 1911; St. Croix Island, March 2, 1925.

TRYPANEIDÆ

While there are many representatives of this family in the collection, most of them belong to two species. The five genera in the collection may be separated as follows:

KEY TO GENERA

1. Proboscis short, not geniculate..... 2
Proboscis long, geniculate at or near the middle; head longer than high *Enstina* Desvoidy.