THE MEGALOPTERA OF DOMINICA

OLIVER S. FLINT, JR., *Department of Entomology, Smithsonian Institution, Washington, D. C. 20560*

ABSTRACT—*Chloronia* **antilliensis**, n. sp., from Dominica, West Indies, is described and illustrated; brief biological notes are given.

Heretofore the Megaloptera, a very distinctive suborder of the Neuroptera, have been known from the West Indies only by the Cuban sialid, *Protosialis bifasciata* (Hag.). The family Corydalidae was completely unknown from these islands in spite of considerable collecting, and its reputed absence was given a certain zoogeographic significance. I was therefore, considerably surprised when I first collected a species of this family on my second visit to the Lesser Antillean island of Dominica. Subsequently Mr. J. Bonfils has informed me that apparently the same species occurs on the adjacent island of Guadeloupe.

These records pertain to a species, herein described, of the genus *Chloronia*, a distinctive genus of the subfamily Corydalinae. This genus is limited to the Neotropical Region, occurring from northeastern Mexico at least as far south as Paraguay. *Chloronia antilliensis*, n. sp. seems to be most similar to *C. corripens* (Walk.) known from eastern Brazil. The structure of the male genitalia in the two species is very similar, especially the shape of the aedeagus and ninth sternite. However, the males of *corripens* possess a pair of large, lateral, pouches between the eighth and ninth segments, which are lacking in *antilliensis*. There are also other small differences in the male genitalia, for instance, the aedeagus in *corripens* has a more broadly sclerotized anterior margin with less prominent processes.

Chloronia antilliensis, n. sp.
(Figs. 1–5)

Adult.—Length of forewing, male 28–34 mm. (ave. 8 males, 30.9 mm.), females 31–43 mm. (ave. 23 females, 37.9 mm.). General color lemon yellow when alive, becoming orangish after death: apical half of mandibles, eyes, ocellar triangle, and a linear, generally angular posterolateral mark on head, fuscus; apical 5–6 segments of antennae, fuscus; pronotum with two pairs of elongate marks, mesonotum with two pairs of rounded anterior spots, fuscus; fore- and hindlegs with a spot at apex of tibia and ultimate tarsal segments, fuscus; midlegs with an additional spot at base of tibia, fuscus; forewings with light fuscus spots in most cells, most veins pale, except crossveins between R_1 and R_s, basal crossveins, and costal crossveins at both ends, fuscus (rarely with some apical crossveins fuscus), hindwing wholly pale. No pouches between eighth and ninth segments. Male genitalia: Ninth tergite trianguloid, produced postero-

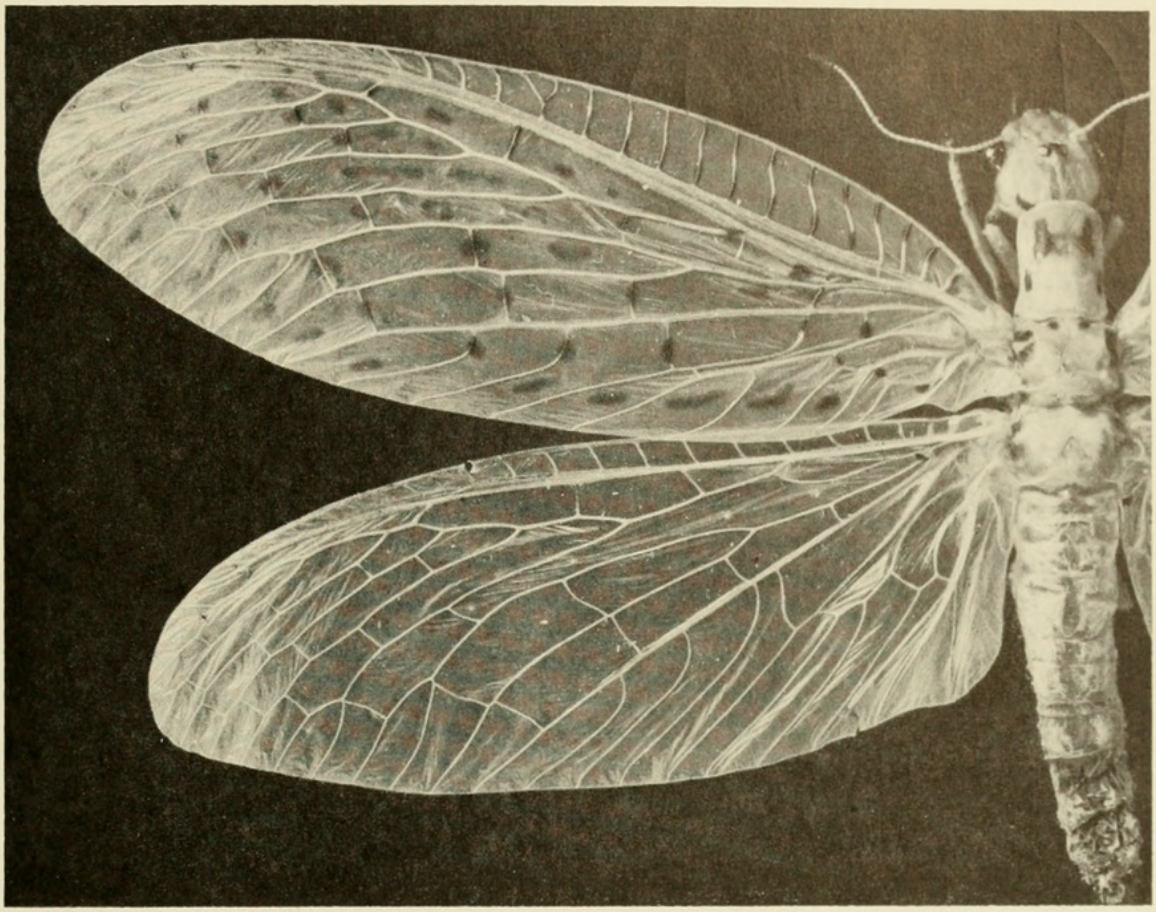
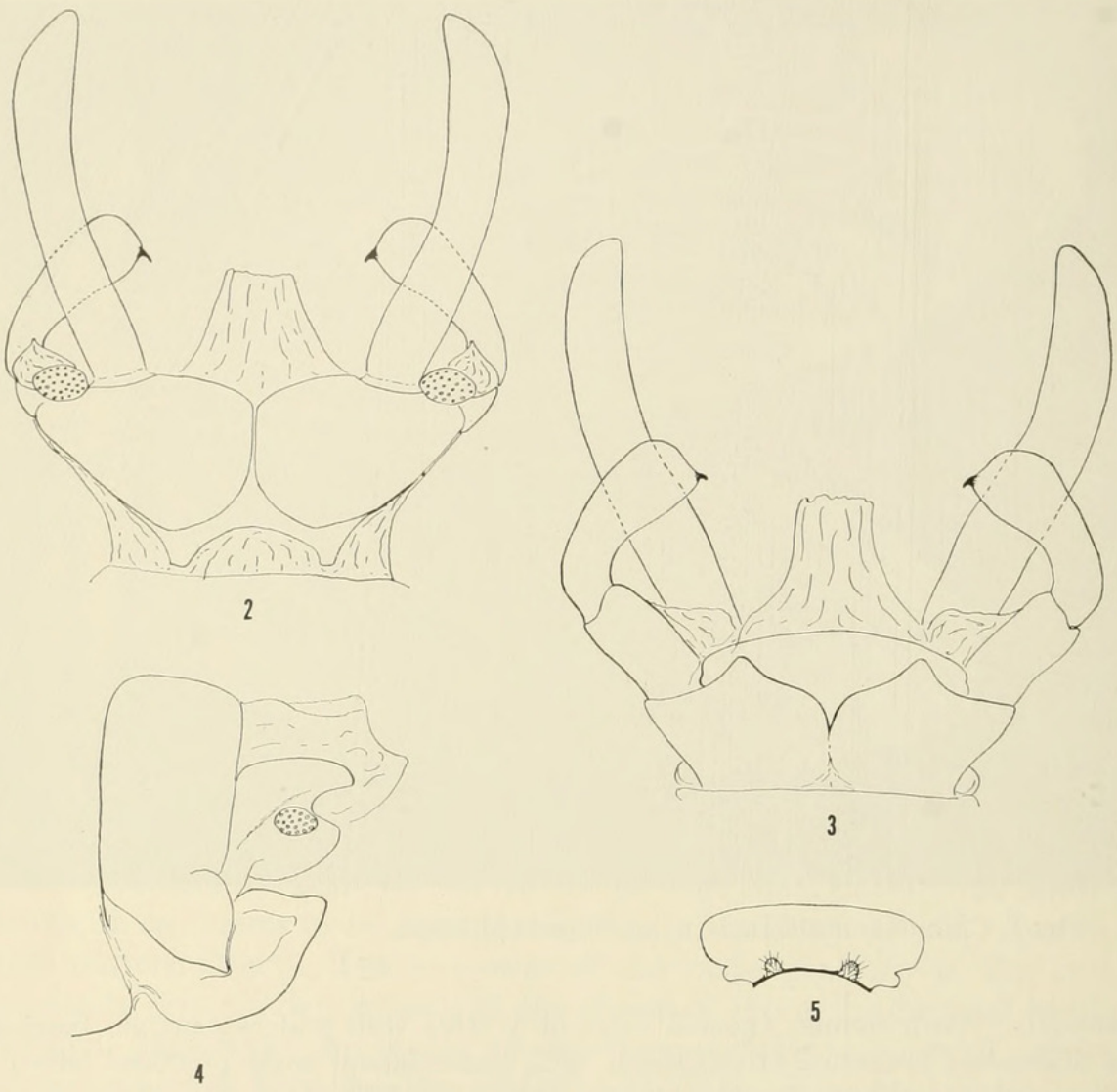


Fig. 1, *Chloronia antilliensis*, n. sp., female allotype.

laterally. Ninth sternite (genital valve of Weele) with posterior margin bearing a trianguloid projection at midlength, with posterolateral angle produced laterad. Superior appendages elongate, slightly curved, slightly more than six times as long as broad. Inferior appendages two-segmented: basal segment membranous ventrally, apical segment directed mesad, slightly inflated, apex with a sharp point. A rounded cercal lobe from posterior margin of ninth tergite between superior and inferior appendages. Aedeagus a broad, indistinct, flat plate, with anterior margin heavily sclerotized and bearing a pair of submesal hirsute lobes as long as broad. Anal tube membranous, either everted or withdrawn. Female genitalia: A large rectangular pouch beneath sixth sternum, opening between sixth and seventh sterna. Ninth tergum erect, developed into a sharp ventral point. Gonapophysis lateralis mostly membranous, short and broad, no papillae. Anal plate with a dorsal lobe and a broader ventral lobe; wart small, centrally located. Anal tube membranous, when inverted generally folding ventral lobe of anal plate inward.

Holotype, male.—Dominica, Pont Casse, 1.3 miles east, 27 April 1964, O. S. Flint, Jr. USNM type 70572. Allotype, female.—Dominica, Pont Casse, .4 miles east, 27 April 1964, O. S. Flint, Jr. Paratypes (all Dominica).—Pont Casse, 2.2 miles east, 14 April 1964, O. S. Flint, Jr., 1♀; same, but 1 May 1964, 4♀; same, but 2 May 1964, 4♂ 8♀; same,



Figs. 2–5, *Chloronia antilliensis*, n. sp.: 2, male genitalia, dorsal; 3, male genitalia, ventral; 4, female genitalia, lateral; 5, aedeagus, ventral.

but 7 May 1964, 2♀. Pont Casse, 1.3 miles east, 29 April 1964, O. S. Flint, Jr., 1♀; same, but 12 May 1964, 1♀; same, but 11 June 1964, 1♀. Pont Casse, .4 miles east, O. S. Flint, Jr., 27 April 1964, 1♂; same, but 6 May 1964, 1♂; same, but 16 May 1964, 1♀; same, but 15 June 1964, 1♀. Pont Casse, .5 miles south, 11 April 1964, O. S. Flint, Jr., 1♂. Central Forest Reserve, 2 May 1965, D. R. Davis, 1♀. Trafalgar, 19 May 1965, D. R. Davis, 1♀.

Biology.—All specimens have been taken near small, fast-flowing streams at higher elevations from early April until mid-June (the driest season). Although streams adjacent to adult collection sites were searched for larvae, none was found. Probably this is due to low population density and secretive habits. However, it is possible that the life-cycle occupies only one year, and that all specimens were either adults or pupae away from the streams during these months.