THE AMERICAN SPECIES OF ADELPHOMYIA BERGROTH (TIPULIDÆ DIPT.)

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The small size of the crane-flies constituting the genus Adelphomyia Bergr.1 entitles them to the name of Micro-limnophilini, the majority of the described forms being much smaller than members of allied genera.

Some confusion has arisen recently, regarding the identity of the most common of the three known American species and the purpose of the present article is to straighten out this imbroglio. The first mention of an American representative was in an article by the author2 in which a new species (minuta) was described and a second species referred, provisionally, to the widely-distributed European form, senilis Hal. This latter species was again mentioned, and its venation figured in a second article3 and here, also, was referred to senilis. There has always been a question in my mind regarding the specific identity of the American and European forms and I have taken the opportunity to send specimens to Mr. F. W. Edwards, who kindly compared the American species with European specimens of senilis in the British Museum collection and reports that the two forms are distinct. I give a key to the known American species and describe two new forms.

American Species of Adelphomyia

Wings with cell M1 absent.

cayuga sp. n.

Wings with cell M1 present.

Pubescence in cells of wings lacking or sparse; eross-vein r not evident; cross-vein m short or obliterated; general color of body pale yellow. minuta Alex.2

Pubescence in cells of wings conspicuous; cross-veins r and mdistinct; body color more brownish. americana sp. n.

Adelphomyia americana sp. n.

Adelphomyia senilis Alexander. Can. Ent.

Adelphomyia senilis Alexander. Ent. News.

Small species (length, 9, 3.8-4 mm.); radial cross-vein present; cell M1 resent; pluræ almost unicolorous, dull yellow.

& Length, 3.2-3.5 mm.; wing, 4.3-4.6 mm.

Foreleg, femur, 3.7 mm.; tibia, 4.1 mm.; tarsus, 3.8 mm.

Middle leg. femur, 3.9 mm.

2 Length, 3.8-4 mm.; wing, 5-5.3 mm.

Contribution from the Entomological Laboratory, Cornell University. Bergroth: Mittheil. Naturi. Gesell. Bern; p. 134; 1891. 2 Alexander; Canad. Entom.; Aug. 1911. 3 Alexander; Entomol. News; Oct. 1911.

Rostrum and palpi light brownish-yellow; antennæ light brown. Front vertex and occiput light brownish-vellow, with a sparse greyish bloom.

Thoracic præscutum dull yellow, rather shining, without apparent stripes. scutum, scutellum and postnatum similarly colored. Pleuræ uniform dull yellow. Halteres pale, uniform throughout. Legs-Coxæ and trochanters dull brownishyellow; femora similar, slightly darkened apically; tibiæ and tarsi uniform brownish-yellow. Wings almost hyaline, veins light brown. Venation (Figure 260, A, cr Ent. News, l. c.)—Sc1 very long, Sc2 far removed from its tip; ercss-vein r present, inserted on R2 about its own length beyond the form of R2+3; M1 much shorter than M1+2 beyond cross-vein m. Short hairs in most of the distal cells of the wing.

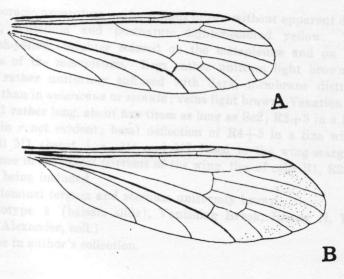


Figure 260

Abdominal tergum brown with a narrow, darker, median line and a narrow pleural band of the same color; sternum pale yellow, almost concolorous with the thoracic pleuræ.

Holotype, &. Woodworth's Lake, Fulton Co., N. Y.; alt. 1650 ft.; Aug. 22, 1910. (Alexander, coll.)

Allotype, 9, with the type.

Paratypes, 30. & 2. Sport Is., Sacandaga R., June 28, 1911; Woodworth's Lake, Gloversville and Johnstown, Fulton Co., N. Y.; Ithaca, Tompkins Co., N. Y.; September, 1911.

Types in Author's Collection

Paratypes in British Museum of Natural History, U. S. Nat. Mus., Cornell University and in author's collection.

I am indebted to Mr. Edwards for the following comparison of americana with the European senilis:

- "1. The pleuræ in A. americana are unicolorous ochreous; in A. senilis they are reddish-brown above and below, more ochreous in the middle.
- 2. The marginal cross-vein is present in A. americana, absent in A. senilis.
- 3. The genitalia are different in the two species but as we have only one male, I do not want to dissect it, without which I cannot properly make out the structure."

Adelphomyia cayuga sp. n.

Large species (length, 9, 5 mm.); radial cross-vein indistinct; cell M1 absent.

9, length 5 mm.; wing 5.1 mm.

Rostrum, palpi and antennæ light brown. Front, vertex and occiput brown.

Thoracic præscutum uniform light brown without apparent dorsal stripes; scutum, scutellum and postnatum lighter-colored yellow. Pleuræ light brownish-yellow, brighter colored on the metapleuræ and on the posterior portions of the mesopleuræ. Legs rather uniform light brown throughout. Wings rather uniformly suffused with dark, membrane distinctly darker colored than in americana or minuta; veins light brown. Venation (Figure 260, B)—Sc1 rather long, about five times as long as Sc2; R2+3 in a line with R2; cross-vein r not evident; basal deflection of R4+5 in a line with cross-vein r-m; cell M1 absent, i. e., M1 and M2 fused to the wing-margin. A short pubescence in the apical portions of the wing, tips of cells R1, R2, R3, R5, M2 and M3 being included.

Abdominal tergum and sternum uniformly brown.

rgroth: Minhell, Naturi, Gesell, Bern; p. 134; 1891. Randuri, Causal, Europa : Aug. 1911.

Holotype 9 (balsam slide), Vanishing Brook, Ithaca, N. Y.: Aug. 16, 1912. (Alexander, coll.)

Type in author's collection.