

1. *Helophilus latifrons*.

Helophilus latifrons, Loew, Centur. iv. no. 73, in Berl. ent. Zeitschr. 1863, p. 313¹; Osten Sacken, Western Dipt., in Bull. U.S. Geol. & Geogr. Survey, iii. p. 337²; Willist. Synopsis N.-Am. Syrphidæ, p. 188³.

Hab. NORTH AMERICA, Red River, Washington³, Wyoming³, Oregon³, Montana³, Nebraska¹, Massachusetts³, Connecticut³, Western Kansas³, California².—MEXICO, Amula in Guerrero 6000 feet (*H. H. Smith*).

Five specimens, which present no noteworthy differences from those of the United States.

2. *Helophilus mexicanus*.

Helophilus mexicanus, Macq. Dipt. Exot. ii. 2, p. 64, t. 11. f. 2¹; Osten Sacken, Cat. Dipt. 2nd ed. pp. 134, 267²; Willist. Synopsis N.-Am. Syrphidæ, p. 186, t. 8. f. 7³.

Helophilus polygrammus, Loew, Centur. x. no. 55, in Berl. ent. Zeitschr. 1872, p. 85⁴; Osten Sacken, Western Dipt., in Bull. U.S. Geol. & Geogr. Survey, iii. p. 338⁵.

Aemosyrphus bicolor, Bigot, Ann. Soc. Ent. Fr. 1883, p. 350⁶.

Aemosyrphus oculiferus, Bigot, loc. cit. p. 350⁷.

Aemosyrphus flavicaudatus, Bigot, loc. cit. p. 351⁸.

Aemosyrphus nigroscutatus, Bigot, loc. cit. p. 351⁹.

Hab. UNITED STATES, Washington³, California^{3 4 5 7}.—MEXICO^{1 2 6 7 8}, Omilteme 8000 feet, Chilpancingo 4600 feet, Xucumanatlan 7000 feet, Tepetlapa 3000 feet, all in Guerrero (*H. H. Smith*), Jalisco (*Schumann*), Mexico city (*F. D. Godman*), Orizaba (*H. H. Smith and F. D. Godman*).

Thirty-seven specimens. These show colorational variations, and it is hard to say whether the differences are of varietal or specific value. In length they vary from seven to nearly twelve millim. In the shape and colour of the head there are no appreciable differences.

Seven specimens, including both sexes, from Mexico city and Jalisco, have the mesonotum of a distinctly olivaceous-greenish appearance, with a metallic lustre, and the pile wholly yellow. The remainder, from Mexico city, Jalisco, and the other places mentioned, have the mesonotum opaque cinereous, without apparent metallic or greenish lustre; in all, the oblique line on the outer posterior part may be wanting. The three males of the first-mentioned variety have the abdomen red, with the first segment, and a triangular spot on the second, black, the fourth segment with a lunule; these specimens must be very similar to those described by Bigot under the name of *Aemosyrphus bicolor*. The remaining males, eleven, with opaque mesonotum, are all nearly uniform in length (about seven millim.), and agree in having the second abdominal segment opaque black, with two grey lunules; the third segment with the posterior and lateral margins broadly red, leaving an oval, opaque, black portion, upon which partly rest two much curved grey lunules; the fourth segment with two small