

A NEW SPECIES OF *NESOPSILOPA* FROM FLORIDA
(DIPTERA: EPHYDRIDAE)

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ABSTRACT

Two species of the genus *Nesopsilopa* are known to occur in subtropical Florida, but only 1, *N. umbrosa* (Loew), has been named. The 2nd, known as "species A," is described and named as *N. wirthi* n. sp. Figures of the male terminalia and a key to the species in Florida are included.

Mathis and Wirth (1977) proposed the genus *Nesopsilopa* for a group of 5 closely related psilopine shore flies that occur in the Greater Antilles and subtropical Florida. One species, then designated as "species A", was left unnamed because the only available specimen was badly damaged, although its male genitalia were compared with those of *N. umbrosa*. The finding of a 2nd specimen of "species A" is reported here, and the species is named. The descriptive format of Mathis and Wirth (1977) is followed. Their study provided further information concerning the genus, other included species, and the generic relationships of *Nesopsilopa*.

Key to Florida species of *Nesopsilopa*

1. Frons and mesonotum densely pollinose, dull, whitish gray; face wider, head-width to face-width ratio 1 : 0.40 *umbrosa* (Loew)
- 1'. Frons and mesonotum sparsely pollinose, subshiny, bronzyish brown; face narrower, head-width to face-width ratio 1 : 0.29
..... *wirthi* n. sp.

Nesopsilopa wirthi Mathis and Freidberg, NEW SPECIES
(Fig. 1-2)

Nesopsilopa species A of Mathis and Wirth, 1977: 69.

DIAGNOSIS AND DESCRIPTION: *N. wirthi* is similar to *N. umbrosa* (Loew) but is distinguished from it and other congeners by the following combination of character states: Moderately small shore flies, length 2.65 to 3.00 mm.

HEAD: Frons uniformly and thinly pollinose, bronzyish brown, contrasting distinctly with whitish gray facial coloration; reclinate fronto-orbital bristle about equidistant between anterior proclinate fronto-orbital bristle and proclinate ocellar bristle; 3rd antennal segment conspicuously longer than wide, mostly yellowish, with apicodorsal surface becoming blackish; arista with 6-7 short branching dorsal rays, these becoming shorter apically; face narrow; head-width to face-width ratio averaging 1 : 0.29; facial setae 3, porrect to slightly upcurved, dorsalmost inserted slightly below midfacial prominence and separated from middle seta by more than twice distance be-

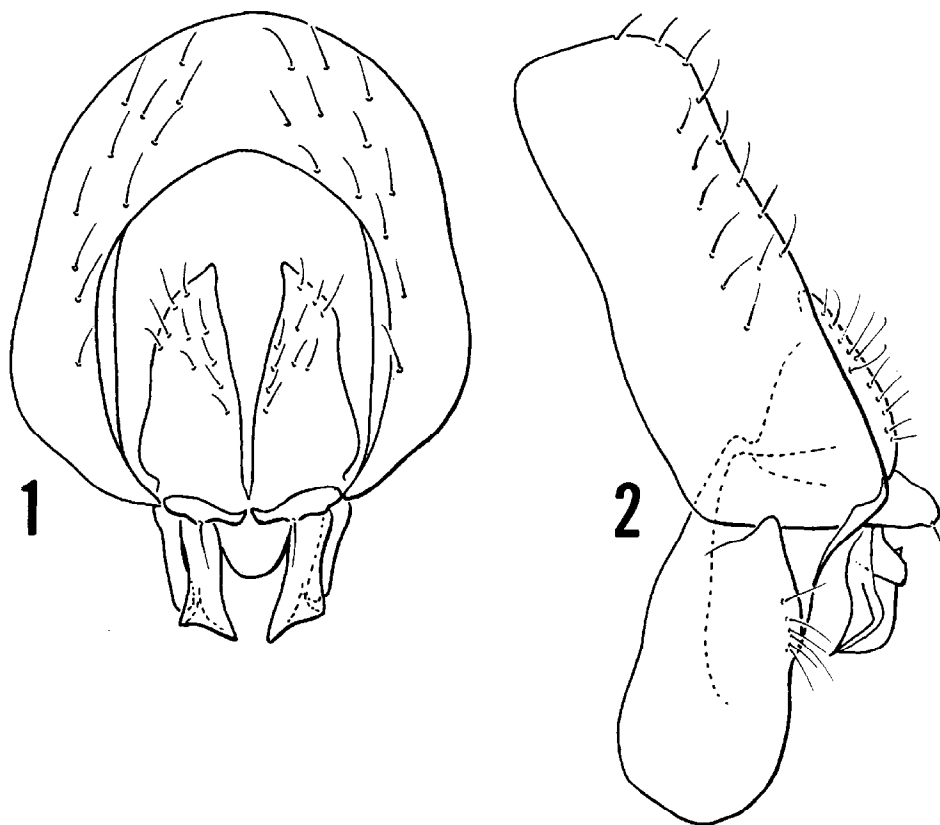


Fig. 1-2. *Nesopsilopa wirthi* n. sp.: 1) male genitalia, posterior view (lacking hypandrium); 2) same, lateral view.

tween the middle and ventral setae, lacking smaller facial setae laterad of larger setae; maxillary palp mostly yellowish, becoming dark, brownish, dorsoapically; proboscis elongate, length greater than height of head when extended, geniculate when folded into oral cavity.

THORAX: Mesonotum thinly pollinose, grayish brown to bronzish brown, not contrasting as distinctly with pleural coloration; wing with infusate anterior margin occupying most of cells R_1 and R_3 , extending slightly into cell R_2 , especially apically, thereafter becoming mostly hyaline; costal vein index averaging 1 : 0.51; M_{1+2} vein index averaging 1 : 0.64.

ABDOMEN: Dorsum mostly shiny, brownish black. Male terminalia (Fig. 1-2) as follows: Epandrial setae more or less uniform in size, lacking row of obviously larger setae extending dorsally from lateral margins of cercal cavity; cercal cavity high, greater than 1/2 epandrial height in posterior view; cerci longer than surstyli, the latter not more than twice as long as wide.

TYPE AND TYPE-LOCALITY: Holotype male is labeled "FLORIDA: Dade Co. Everglades 17-VI-1979 A. Freidberg/HOLOTYPE *Nesopsilopa wirthi* Mathis and Freidberg (handwritten; red)." One male paratype from Florida, Key West, 20-VII-1939, R. H. Beamer. The holotype and paratype are in the Smithsonian Institution, USNM type number 76360. The holotype specimen is double mounted (minute nadel in polyporus block) and is in good

condition (the terminalia have been removed, dissected, and placed in an attached microvial).

ETYMOLOGY: The species epithet, *wirthi*, is a genitive patronym to honor Dr. Willis W. Wirth, whose contributions to our knowledge of Ephydriidae, encouragement, and friendship are gratefully acknowledged.

ZOOGEOGRAPHIC DISTRIBUTION: This species apparently is to be found in most of subtropical Florida, where marshes occur.

REMARKS: Mathis and Wirth (1977) diagnosed this species but purposely did not name it then, as explained earlier. Their deferment was justified, as the 2nd specimen has allowed detection of several new characters not noted previously.

ACKNOWLEDGMENTS

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LITERATURE CITED

- MATHIS, W. N., AND W. W. WIRTH. 1977. A new genus of psilopine flies (Diptera: Ephydriidae) with notes on its relationships. Proc. Ent. Soc. Wash. 79(1): 63-74.

BICYRTEs LEPELETIER (HYMENOPTERA: SPHECIDAE) IN THE LOWER RIO GRANDE VALLEY OF TEXAS AND IN NORTHEAST MEXICO¹

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ABSTRACT

Bicyrtes is represented in the Lower Río Grande Valley and adjacent México by 5 species: *B. capnoptera* (Handlirsch), *B. fodiens* (Handlirsch), *B. variegata* Olivier, *B. ventralis* (Say), and *B. viduata* (Handlirsch). Adults fly between March and September but vary greatly in abundance from year to year. *Bicyrtes* nests in sand, often along rivers. It visits flowers, especially of *Baccharis*, *Pluchea*, and *Ratibida*. The genus seems of Neotropic origin, but its south Texas fauna includes Neotropic, Sonoran, and Nearctic elements.

Since 1973, I have been surveying Hymenoptera in the Lower Río Grande Valley of Texas, with occasional work in nearby México. I have published

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