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LEPTODEUTEROCOPUS NEALES: A NEW RECORD FOR FLORIDA AND THE UNITED STATES (LEPIDOPTERA: PTEROPHORIDAE: DEUTEROCOPINAE)

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The genus *Leptodeutercopus* Fletcher consists of 9 species worldwide, one species from Indonesia, the rest Neotropical in distribution (Gielis 2003). *Leptodeutercopus neales* (Walsingham) is distributed widely in the Neotropics. Previously published records are from Mexico and Ecuador. Walsingham's (1915) description of *Oxyptilus neales* is based on 2 specimens from Mexico. The type, listed by Walsingham as "♀ (67135, Teapa) Mus. Wlsm. (Godm-Salv. Coll.) BM," is from Teapa, Tabasco. The other specimen is from Atoyac, Vera Cruz. These specimens were collected in March and April respectively by H. H. Smith. The day and year is not specified in the description.

Two specimens have been identified from Florida. The first is a male collected at UV blacklight by J. B. Heppner, 29 April 1978, Dade Co.: Chekika State Recreation Area (Grossman Hammock) [FSCA] (Fig. 1). We have compared the male genitalia of this specimen (Slide DM 334) (Fig. 2) with a male from Mexico: Vera Cruz: Atoyac IV.18?? H. H. Smith, Slide CG 5059 [BMNH] as basis for the determination. The second specimen was retrieved from a CO₂ mosquito trap by R. A. Belmont, 10-25 June 1992, Collier Co.: Naples [DMC]. The second specimen is missing the lower abdominal segments but is recognizable by wing maculation. On first examination, specimens of *L. neales* may be mistaken for a common South Florida species, *Sphenarches anisodactylus*



Fig. 2. Male genitalia of *Leptodeutercopus neales*; (same data as Fig. 1), slide DM 334. Scale line = 0.1 mm.

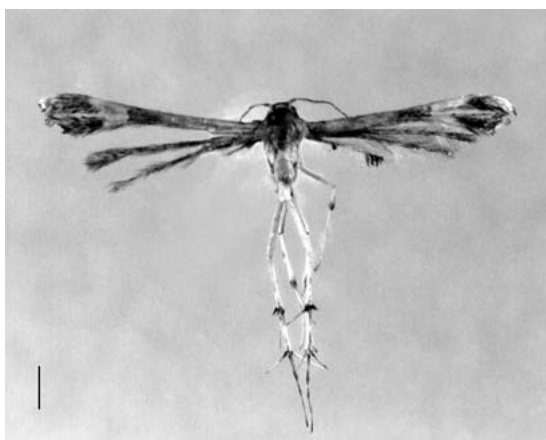


Fig. 1. *Leptodeutercopus neales*, male; Florida, Dade Co., Chekika State Rec. Area (Grossman Hammock), 29 Apr 1978 J.B. Heppner. Scale line = 1 mm.

(Walker). The wingspan of *S. anisodactylus* is 12.0-18.0 mm (Matthews 1989), while that of *L. neales* is about 9.0-11.0 mm. The forewing of *L. neales* has a distinct pale band across the basal third of each lobe, contrasting the coppery base color. In *S. anisodactylus*, this pale band is narrower and does not extend to the cleft base. Unlike the type species, *Leptodeutercopus citrogaster* Fletcher, there is no second cleft apparent on the second forewing lobe of *L. neales*.

The life history of *L. neales* is unknown. The subfamily Deutercopinae includes 27 species worldwide. Of the 4 genera, *Leptodeutercopus*, *Hexadactilia*, *Heptaloba*, and *Deutercopus*, larval hosts are only known for 6 species of *Deutercopus*, all feeding on species of Vitaceae. The localities for both Florida specimens are well within the subtropical zone. The location of the first specimen, Chekika State Recreation Area (Grossman Hammock), is now part of Everglades National Park. This hammock is situated on a slightly elevated rocky ridge in an area known as "rocky glades" or "East Everglades" (Snyder et al. 1990). The second specimen was from a mosquito control monitoring trap set up next to a mangrove swamp in Naples.

We thank Dr. John B. Heppner and Robert A. Belmont for making the specimens available for study. Material examined is from the British Museum of Natural History (BMNH), Florida State Collection of Arthropods (FSCA), and the first author's collection.

SUMMARY

Leptodeutero copus neales is reported from Florida and the United States for the first time. Florida Experiment Station Journal Series No. R-10481.

REFERENCES CITED

- GIELIS, C. 2003. Pterophoridae & Alucitoidea. *In* World Catalogue of Insects 4: 1-198.
- MATTHEWS, D. L. 1989. The Plume Moths of Florida (Lepidoptera: Pterophoridae). MS Thesis, University of Florida, Gainesville. 346 pp.
- SNYDER, J. R., A. HERNDON, AND W. B. ROBERTSON, JR. 1990. South Florida Rockland, pp. 230-277 *In* R. L. Myers & J. J. Ewel [eds.], Ecosystems of Florida. University of Central Florida Press, Orlando.
- WALSINGHAM, M. A. 1915. Insecta. Lepidoptera-Heterocera. IV. Tineina, Pterophorina, Orneodina, and Pyralidina and Hepialina (part). *Biologia Centrali-Americana* 4: 1-482.