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TWO NEW SPECIES OF MICROCADDISFLIES (TRICHOPTERA:
HYDROPTILIDAE) FROM NORTHERN FLORIDA

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ABSTRACT

Two new species of microcaddisflies, *Hydroptila apalachicola* and *Ochrotrichia apalachicola*, from northern Florida are described and illustrated.

Key Words: Trichoptera, Hydroptilidae, *Hydroptila*, *Ochrotrichia*, microcaddisflies

RESUMEN

Se describen e ilustran dos especies nuevas de microtrícópteros, *Hydroptila apalachicola* y *Ochrotrichia apalachicola*, del norte de Florida.

Northern Florida is notable for the large number of endemic caddisflies, as well as other fauna and flora. The small, cold, spring-fed streams of the region are one of the primary habitats of the endemic fauna of northern Florida. In this paper we describe two new species of microcaddisflies from spring runs within the Nature Conservancy Apalachicola Bluffs and Ravines Preserve in Liberty County. In a recent comprehensive study of the caddisfly fauna of Florida (Pescador et al. 1996), 15 species of the genus *Hydroptila* and 3 species of *Ochrotrichia* were reported in the state. The 2 new species described herein will increase the number to 16 species for *Hydroptila* and 4 species for *Ochrotrichia*. Except for the species *O. tarsalis* which occurs in a wide variety of streams and rivers throughout Florida, the other 3 species of *Ochrotrichia* have only been collected in cold, spring-fed streams of northern and central Florida.

Terminology for the descriptions follows that of Marshall (1979). Specimen length was measured from the tip of the head to the end of the wings and is given as a range when more than one specimen was available. Type specimens are deposited in the National Museum of Natural History, Smithsonian Institution, Washington, DC (NMNH) and the Florida A & M University, Tallahassee, FL (FAMU).

Hydroptila apalachicola, Harris, Pescador and Rasmussen, **new species**
(Figs. 1A-1D)

Diagnosis: *Hydroptila apalachicola* is similar in most respects to *H. recurvata* Harris and Kelley, a species endemic to the Black Warrior system in Alabama. Both species have in common the distinctive inferior appendages of the genitalia which are folded back distally. The new species is distinguished by the structure of the tenth tergum. In *H. recurvata* the tenth tergum ends in a pair of large spines which project posteriorly; in *H. apalachicola*, these spines are small and sharply down-turned.

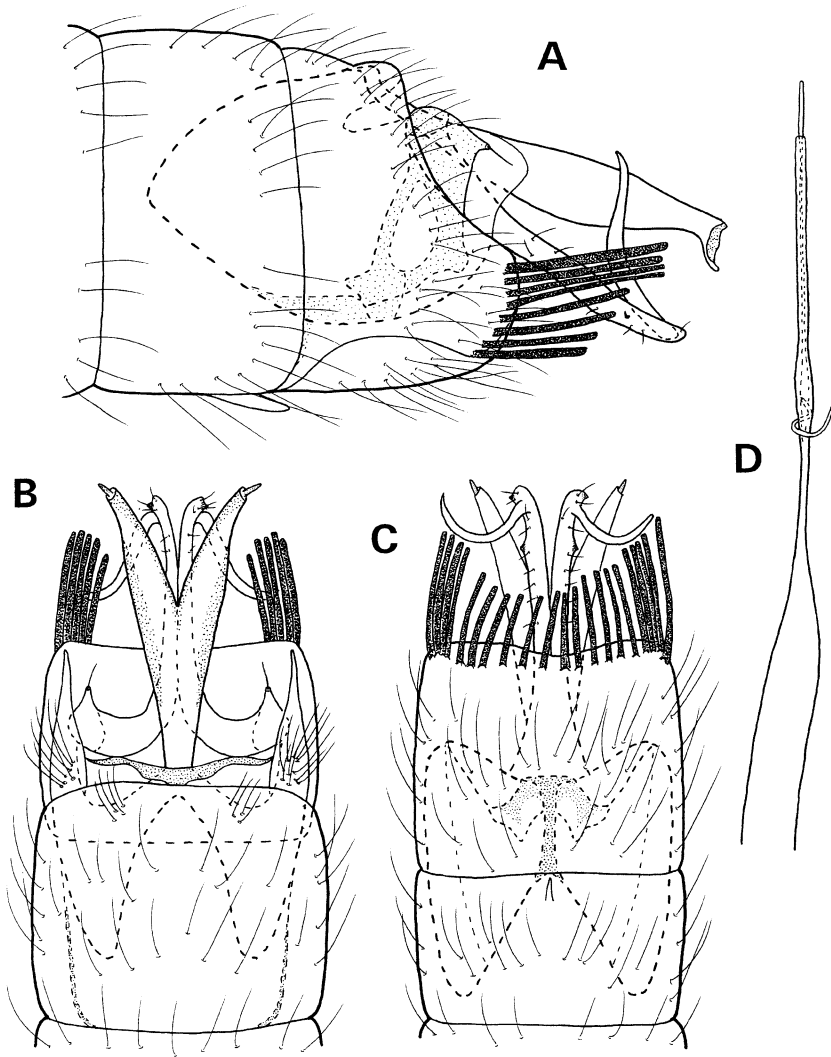


FIG. 1. *Hydroptila apalachicola* n. sp., male genitalia. A. Lateral view; B. Dorsal view; C. Ventral view; D. Phallus, dorsal view.

Description: Male. Length 2.9-3.2 mm. 23 antennal segments. Brown in alcohol. Venter of abdominal segment VII with short apicomeseal process. Segment VIII elongate posteroventrally, bearing numerous heavy spines; in ventral view truncate posteriorly with row of heavy spines along margin; reduced to a narrow band dorsally. Segment IX retracted within segments VII and VIII; in dorsal aspect deeply incised anteriorly, posteriorly with wide truncate incision mesally, elongate laterally. Tenth tergum narrow at attachment to IX, widening distally, forked at midlength with each

bearing a short spine apically; in lateral view widest at midlength, narrowing distally to downturned apex. Inferior appendages thin and elongate in lateral view; in dorsal view, bases widely separated and bearing stout setae, converging mesally and partly fused, diverging distally; in ventral view apices of inferior appendages bearing a thin,

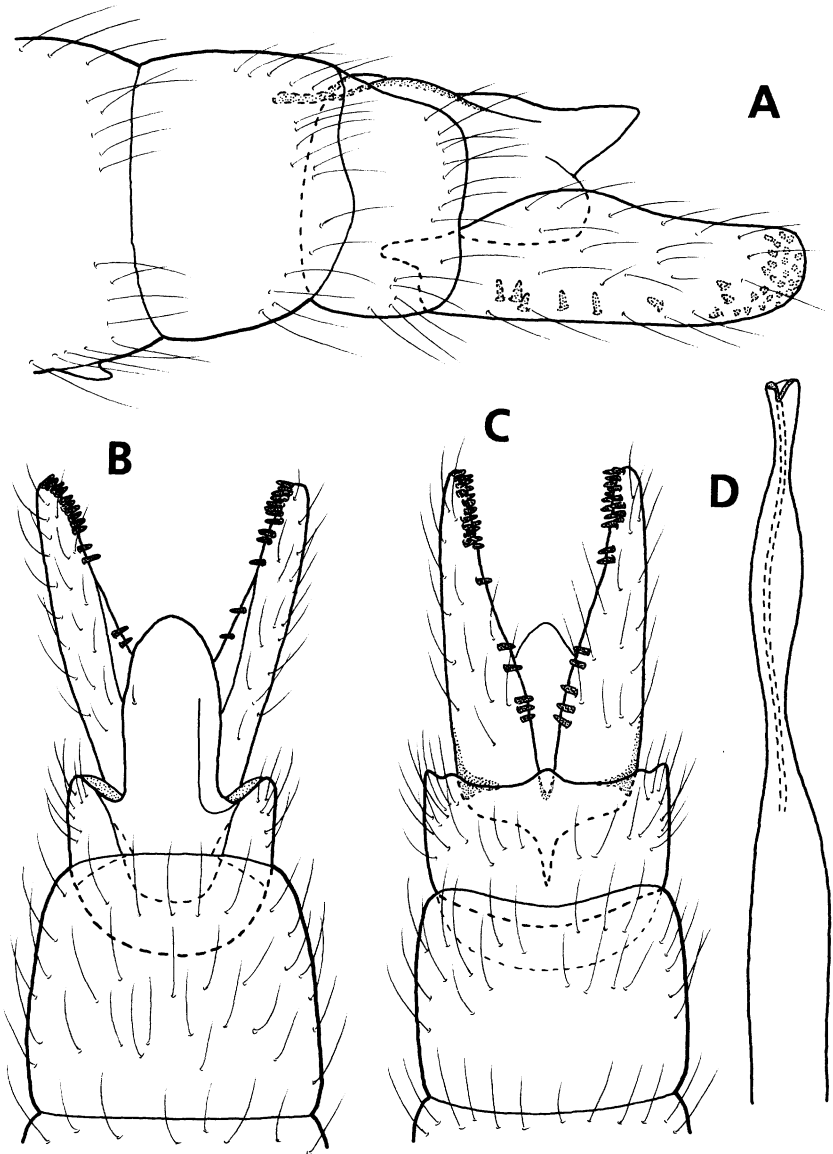


FIG. 2. *Ochrotrichia apalachicola*, n. sp., male genitalia. A. Lateral view; B. Dorsal view; C. Ventral view; D. Phallus, dorsal view.

elongate process from ventrolateral margin, small spine on lateral margin apically and subapically. Phallus wide at base, thin paramere encircling shaft near midlength.

Female and larva: Unknown.

Type Material: Holotype, male. FLORIDA, Liberty County, Nature Conservancy Apalachicola Bluffs and Ravines Preserve, Little Sweetwater Creek, 19-V-1994, M. L. Pescador, A. K. Rasmussen, and S. C. Harris (NMNH). Paratypes, same locality and date as holotype, 2 males (NMNH, FAMU).

Etymology: Named for the type locality within the Apalachicola Bluffs and Ravines Preserve.

Ochrotrichia apalachicola, Harris, Pescador and Rasmussen, **new species**

(Figs. 2A-2D)

Diagnosis: The lack of sclerotized processes from the tenth tergum places *Ochrotrichia apalachicola* with the species group *O. unio* Ross, *O. xena* Ross, *O. elongiralla* Harris, and *O. weoka* Harris. However, in *O. unio*, *O. xena*, and *O. elongiralla* the inferior appendages of the genitalia are thin and elongate. In both *O. weoka* and *O. apalachicola* the inferior appendages are shorter (less than 3× the width), but in *O. weoka* these appendages are only slightly longer than wide and are at least twice as long as wide in *O. apalachicola*.

Description: Male. Length 3.4 mm. 37 antennal segments. Brown in alcohol. Venter of abdominal segment VII with short mesal process. Segment VIII annular. Segment IX generally square in lateral view; in ventral view rectangular, slightly incised posterolaterally; in dorsal view incised laterally, fused mesally with segment X. Tenth tergum ovate, bearing short seta and shallow ridge on lateral margin; in lateral view rounded posteroventrally, narrowing posterodorsally. Inferior appendages narrow, widening slightly near midlength, rounded apically; in dorsal and ventral views triangular bearing peglike spines on mesal margin at apex and base. Phallus sinuate, widening at base and subapically, narrow indentation at apex.

Female and larva: Unknown.

Type material: Holotype, male. FLORIDA, Liberty County, Nature Conservancy Apalachicola Bluffs and Ravines Preserve, Beaver Dam Creek, 19-V-1994, M. L. Pescador and A. K. Rasmussen, and S. C. Harris (NMNH).

Etymology: Named for the type locality in the Apalachicola Bluffs and Ravines Preserve.

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