

THREE NEW SPECIES OF *OCHROTRICHIA*
(*METRICHIA*) FROM CHIAPAS, MEXICO
(TRICHOPTERA: HYDROPTILIDAE)

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Abstract.—Three new species of *Ochrotrichia* (*Metrichia*) (Trichoptera: Hydroptilidae), are described and figured: *Ochrotrichia* (*M.*) *lacuna* *Ochrotrichia* (*M.*) *riva* and *Ochrotrichia* (*M.*) *avon*. All species were discovered to occur around a waterfall named "Cascada de Misolha" in Chiapas, Mexico.

In a recent collecting trip in Mexico, I found several undescribed species of *Ochrotrichia* (*M.*) from a waterfall named "Cascada de Misolha," located at 20 km southeast from Palenque, Chiapas, on the road to Ocosingo.

Banks (1907), described *Orthotrichia nigrutta* from Texas, which was made the type of the genus *Metrichia* by Ross (1938). The genus was reduced to the status of subgenus by Flint (1968), and been revised by Flint (1972), Denning and Blickle (1972), and Marshall (1979). Heretofore only five species of *Ochrotrichia* (*Metrichia*) have been known from Mexico: *Ochrotrichia* (*M.*) *aberrans* Flint, *Ochrotrichia* (*M.*) *nigrutta* (Banks), *Ochrotrichia* (*M.*) *quadrata* Flint, *Ochrotrichia* (*M.*) *trigonella* Flint, and *Ochrotrichia* (*M.*) *trispinosa* Bueno. In this paper three new species are described.

Ochrotrichia (*M.*) *lacuna*, new species

Figs. 1-3

This species appears to be related to *Ochrotrichia* (*M.*) *biungulata* Flint, particularly in the shape of the claspers, but differs rather strongly in the structure of the aedeagus. The two, unequal, subapical hooks and internal tubule and lateral spine arising just basad of them are distinctive.

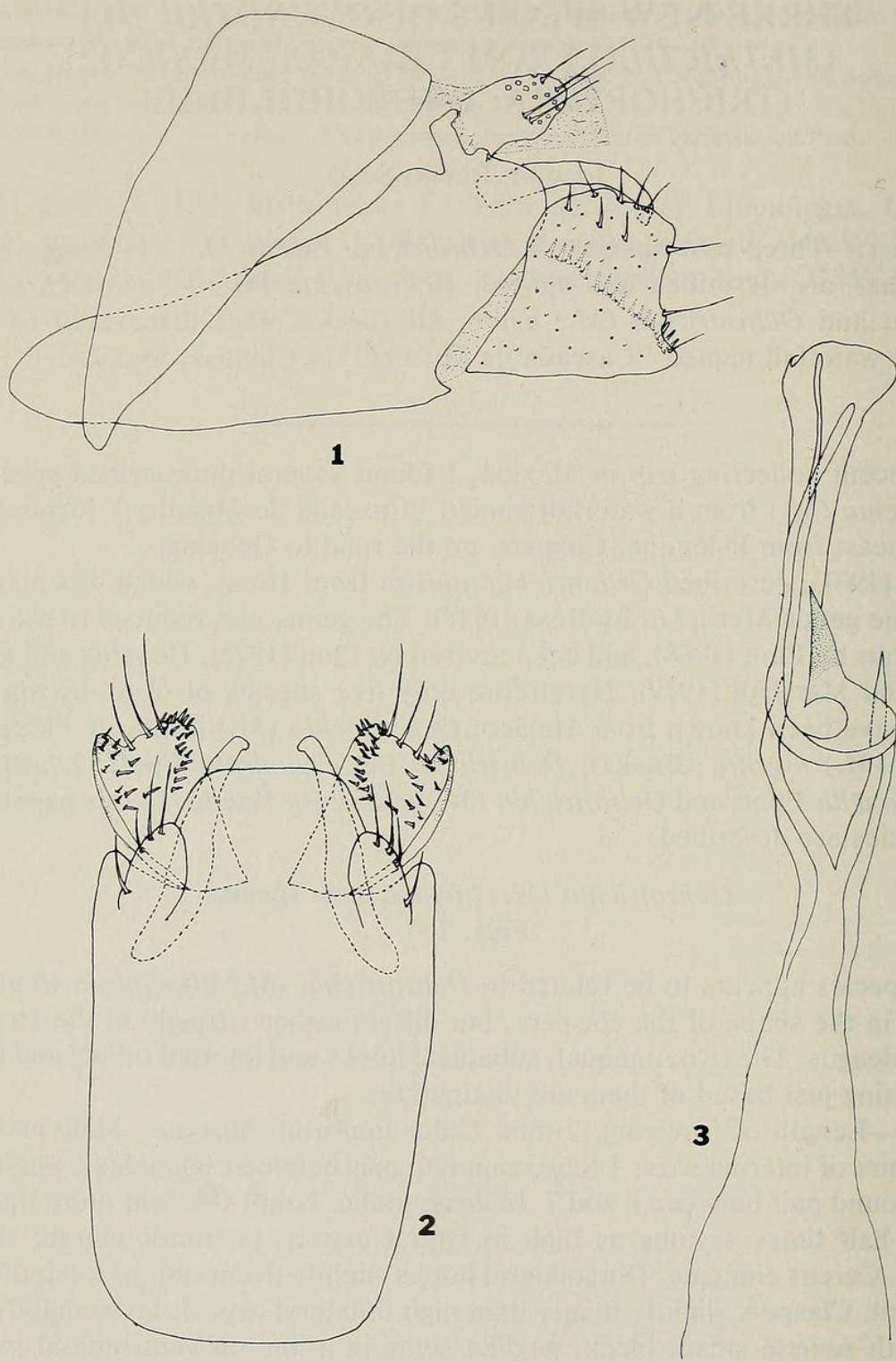
Adult.—Length of forewing, 2 mm. Color uniformly fuscous. Male abdomen with 2 pairs of internal sacs: 1 long, annulate pair between segments 5 and 6, and a small round pair between 6 and 7. Male genitalia: Ninth segment more than one and one-half times as long as high in lateral aspect, posterior margin slightly angulate. Cercus elongate. Dorsolateral hooks slightly decurved, basolateral scale very small. Claspers slightly longer than high in lateral aspect, apex slightly concave, with several small, black, peglike setae in a line on ventromesal margin. Aedeagus with two hooks arising subapically, one much longer than other, with an internal tubule and lateral process arising just basad of hooks.

Material.—Holotype, male. MEXICO: Chiapas, "Cascada de Misolha," 20 km SE from Palenque, 18 May 1981, J. Bueno and H. Velasco. Deposited in Instituto de Biología UNAM (IBUNAM).

Ochrotrichia (*M.*) *riva*, new species

Figs. 4-6

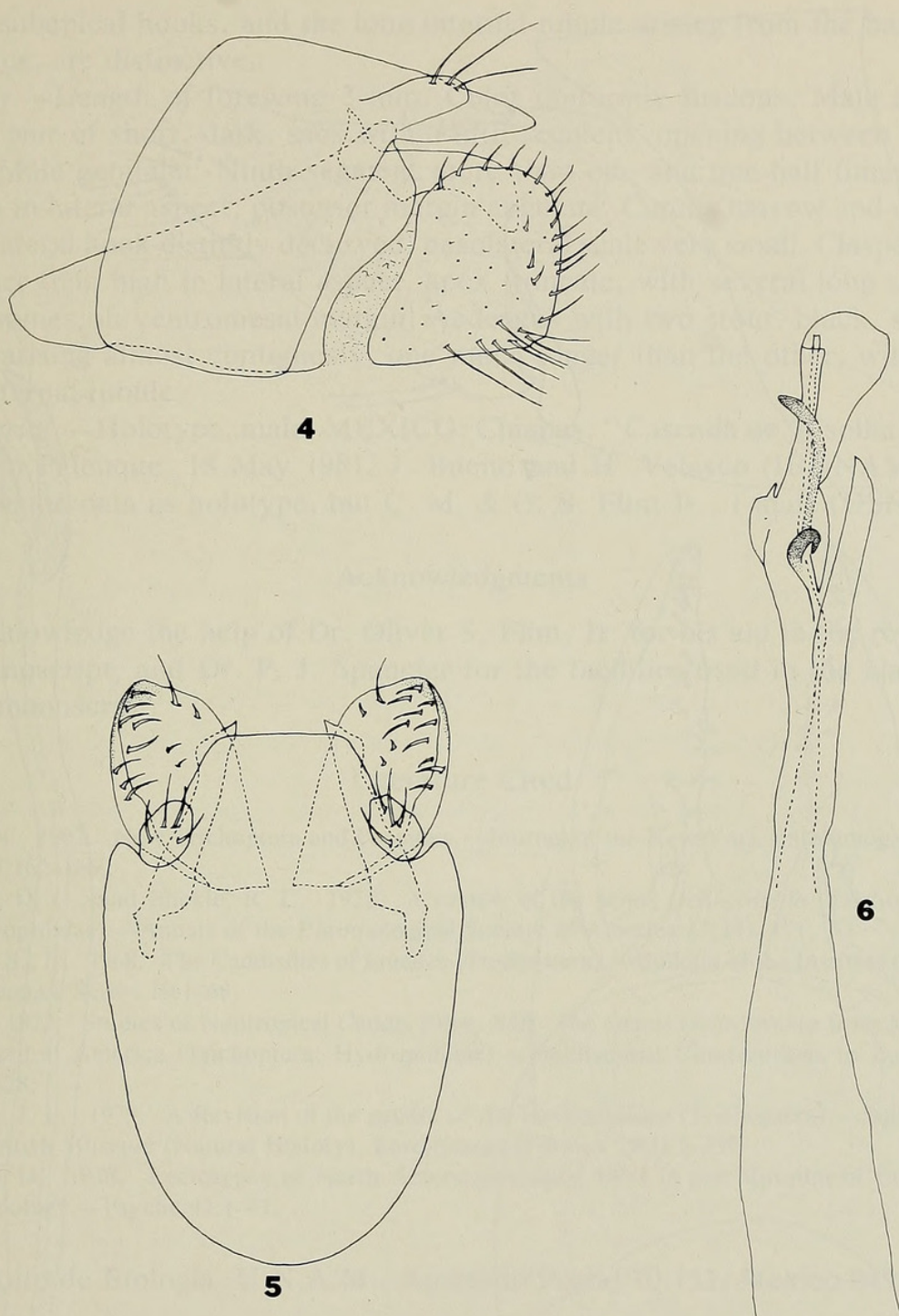
Although abundantly distinct, this species is related to *Ochrotrichia* (*M.*) *quadrata* Flint by the shape in lateral view of the clasper and the hooks on the ae-



Figs. 1-3. *Ochrotrichia* (M.) *lacuna*, new species. 1, Male genitalia lateral. 2, Tenth terga and claspers in dorsal view. 3, Aedeagus in dorsal view.

deagus. However, the small rectangular claspers, with a few spines at the apex, and the long process of the aedeagus are distinctive.

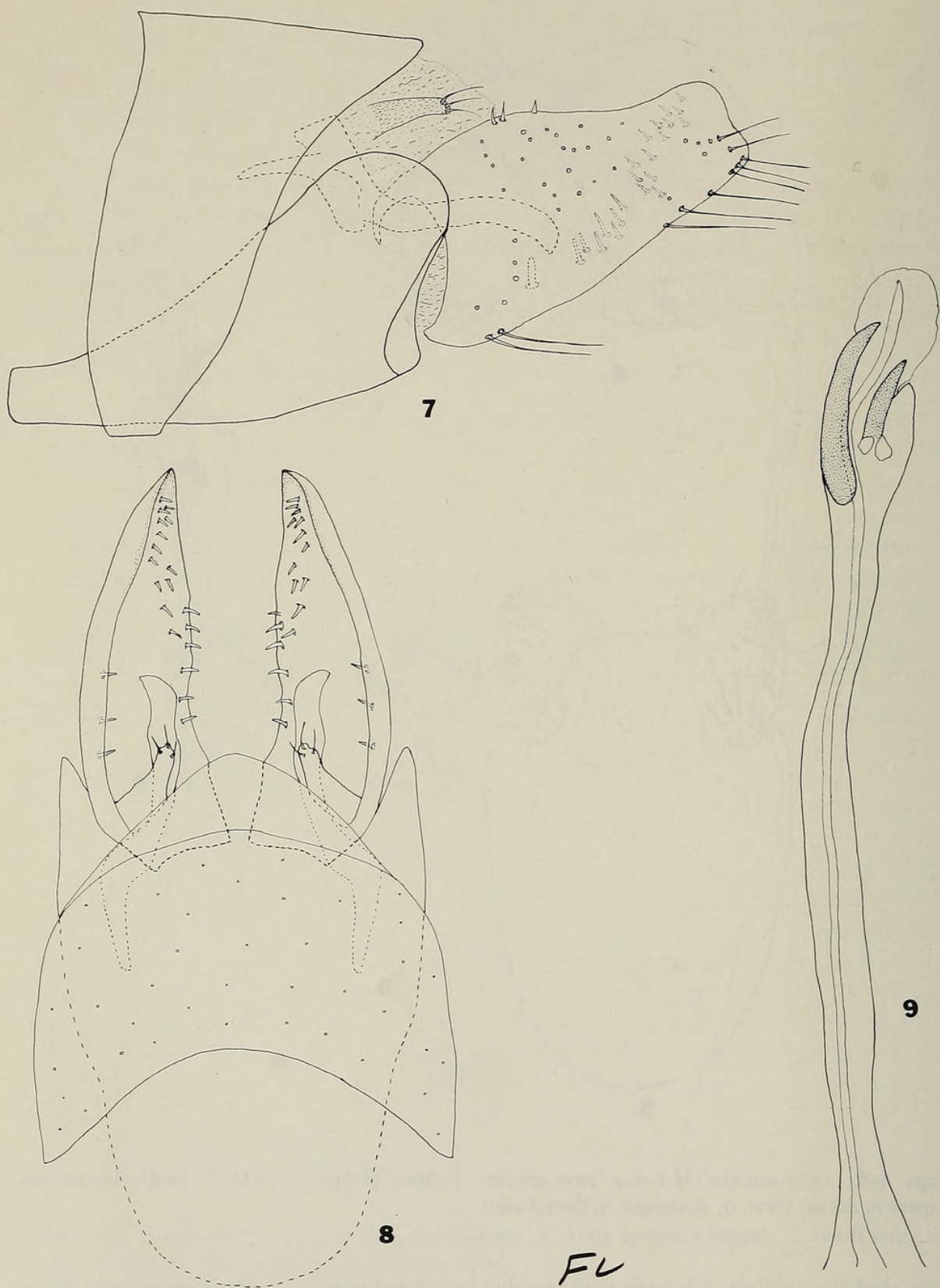
Adult.—Length of forewing, 3 mm. Color dark-brown in alcohol. Male abdomen without any sacs between the segments. Male genitalia: Ninth segment almost twice as long as high in lateral aspect, posterior margin nearly vertical. Cercus rounded. Dorsolateral hooks long, wide, somewhat curved, basolateral



Figs. 4–6. *Ochrotrichia* (*M.*) *riva*, new species. 4, Male genitalia lateral. 5, Tenth tergum and claspers in dorsal view. 6, Aedeagus in dorsal view.

scale slightly curved. Clasper rectangular in lateral aspect, posterior margin truncate and bearing a few long spines. Aedeagus with two hooks arising subapically, one short and very dark, other much longer and paler, with a long lateral process arising basad of hooks.

Material.—Holotype, male. MEXICO: Chiapas, "Cascada de Misolha," 20 km SE from Palenque, 18 May 1981, J. Bueno and H. Velasco (IBUNAM). Paratypes, same data as holotype, 17 males (IBUNAM); same, but C. M. & O. S. Flint Jr., 2 males. Deposited in the United States National Museum (USNM).



Figs. 7-9. *Ochrotrichia* (M.) *avon*, new species. 7, Male genitalia lateral. 8, Tenth tergum and claspers in dorsal view. 9, Aedeagus in dorsal view.

Ochrotrichia (M.) *avon*, new species

Figs. 7-9

This species appears to be quite different from the two preceding species, differing rather strongly in the shape of the aedeagus. The paired slightly sepa-

rated, subapical hooks, and the long internal tubule arising from the base of the aedeagus, are distinctive.

Adult.—Length of forewing 2 mm. Color uniformly fuscous. Male abdomen with a pair of short, dark, sacs within fifth segment, opening between fifth and sixth. Male genitalia: Ninth segment more than one and one-half times as long as high in lateral aspect, posterior margin angulate. Cercus narrow and elongate. Dorsolateral hook distinctly decurved, basolateral scale very small. Claspers clearly longer than high in lateral aspect, apex truncate, with several long setae and black spines on ventromesal margin. Aedeagus with two stout, black, subapical hooks arising almost contiguously, one much longer than the other, with a very long internal tubule.

Material.—Holotype, male. MEXICO: Chiapas, "Cascada de Misolha". 20 km SE from Palenque, 18 May 1981, J. Bueno and H. Velasco (IBUNAM). Paratypes, same data as holotype, but C. M. & O. S. Flint Jr., 1 male (USNM).

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