Anales del Instituto de Biología Universidad Nacional Autónoma de México, Serie Zoología 70(1): 29-33.1999

Studies in aquatic insects, XVII: new species of Metrichia (Trichoptera: Hydroptilidae) from Mexico

JOAQUÍN BUENO-SORIA * RAFAEL BARBA-ÁLVAREZ *

Resumen. Se describen e ilustran dos especies del género *Metrichia* Ross (Trichoptera: Hydroptilidae) de México.

Palabras clave: Trichoptera, Hydroptilidae, Metrichia, especies nuevas, México.

Abstract. Two species of the genus *Metrichia* Ross (Trichoptera:Hydroptilidae) from México are described and illustrated.

Key words: Trichoptera, Hydroptilidae, Metrichia, new species, México

Introduction

The genus *Metrichia* has a wide distribution in Central and South America, as has been demonstrated by Denning & Blickle (1972) and by Flint (1972, 1983, 1991). Although the genus is generally widespread and common in Mexico, the adults may in occasions be only rarely encountered. Such a situation occurred in a year long study of a small stream in the mountains of Guerrero, Mexico, where only the four specimens of the two new species here described were encountered.

The terminology here utilized follows that of Marshall (1979). The holotypes will be deposited in the National Insect Collection, Instituto de Biología, UNAM (CNIN).

*Departamento de Zoología, Instituto de Biología, UNAM, Apartado postal 70-153, México 04510, D. F. e-mail:bueno@servidor.unam.mx

J. BUENO-SORIA Y R BARBA-ÁLVAREZ

Metrichia temascalapensis sp. nov. (Figs. 1-4)

Diagnosis. This species belongs in the *Nigritta* group, proposed by Flint (1972), due to the presence of internal sacs arising between the fifth and sixth segments, and the phallus bearing two large hooks at nearly the midlength of the apical section. The new species seems to be related to *M. riva* Bueno, described from Chiapas, Mexico, by the presence of two spine-like processes at the same level of the aedeagus and by the long left lateral process. *M. temascalapensis* can be separated from it, by the presence of a very large hook on the phallus, the slightly acute posterior border of the inferior appendages in lateral view and by the presence of two clusters of black peg-like seta, one on the ventromesal face and the other on the mesodorsal lobe.

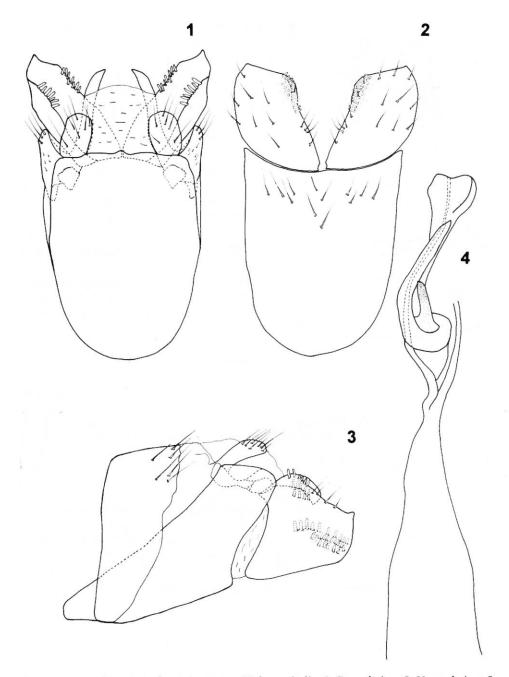
Description. Adult. Fore wing length: 2 mm. Color (in 80% alcohol): fuscous. Male abdomen with two pairs of internal sacs: one large pair between segments five and six and a small, rounded pair between segments six and seven; segments seven and eight bear long setae, more conspicuous in lateral view. Male genitalia. Ninth segment almost twice as long as high in lateral aspect, with posterior margin slightly oblique. Cercus in lateral aspect ovate, with long apical seta. Dorso-lateral hook distinctly decurved, baso-lateral scale very small. Inferior appendages in lateral aspect barely longer than high; apex produced into a small, blunt tooth; with two clusters of black peg-like spines, one ventro-mesal and one dorso-mesal. Phallus in dorsal view, with a pair of curved spines arising at the same level, well beyond the origin of the internal tubule, one short, strong, dark, and one long, wider spine, directed slightly to the left.

Holotype male. MÉXICO. Guerrero. Taxco. Teucisapan, río Temascalapa, 12 km NW Ahuehuepan, Rd. 51, 18° 25.56' N: 99° 42.5' W, 1052 m, 23.I.995, R. Barba & A. Rojas (CNIN). Two male paratypes with the same data as the holotype (CNIN).

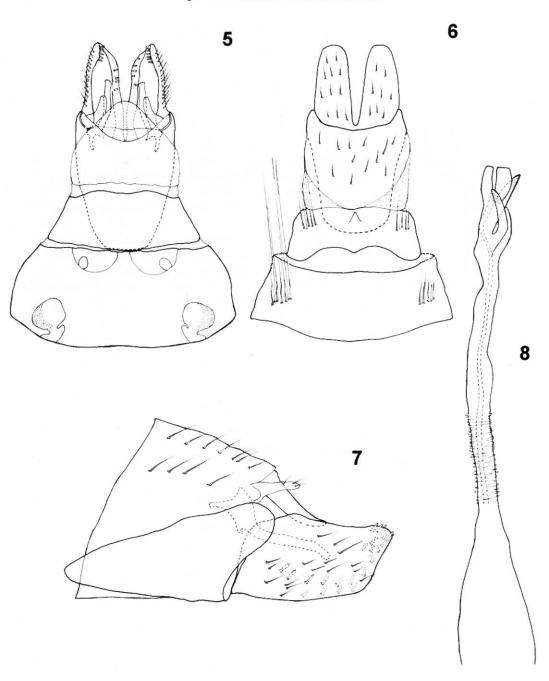
Etymology. The specific name refers to the the river where the specimens were collected.

Metrichia extragna sp. nov. (Figs. 5-8)

Diagnosis. This species seems to belong in the *Penicillata* group proposed by Flint (1972), and is related to *M. trigonella*, due to the presence of internal sacs between the fifth and sixth segments, by the presence of ventro-lateral, long hair brushes on the sixth segment, and by the phallus bearing two large hooks at the preapical section. *M. extragna* can be recognized by the rectangular shape of the inferior appendages and by the size and disposition of the preapical spines of the phallus, as well as by other phallic features.



Figs. 1-4. Metrichia temascalapensis sp. nov. Male genitalia. 1. Dorsal view. 2. Ventral view. 3. Lateral view. 4. Phallus in dorsal view.



Figs. 5-8. *Metrichia extragna* sp. nov. Male genitalia. 5. Dorsal view. 6. Ventral view. 7. lateral view. 8. Phallus in dorsal view.

Description. Adult. Fore wing length: 2 mm. Color (in 80% alcohol): fuscous. Male abdomen with a pair of external sacs between the fifth and sixth segments; a pair of dense tufts of long, straw colored hair on the antero-lateral border of the sixth segment, covering most of the segments posteriad. Male genitalia. Ninth segment twice as long as high in lateral aspect, with posterior margin slightly oblique. Cercus in lateral view, as a short, finger-like process. Dorso-lateral hook distinctly decurved, baso-lateral scale very small. Inferior appendages in lateral view, rectangular, posterior margin slightly produced in a small, dorso-lateral lobe; black peglike setae around apex and a few along midbasal ridge. Phallus with two well developed, subapical spines, arising at the same level, the longest almost reaching the apex.

Holotype male. MÉXICO. Guerrero. Taxco. Totoapan, río Temascalapa, 8 km NW Ahuehuepan, Rd. 51, 18° 22.70' N: 99° 39.77' W, 900 m, 10.IV.1995, R. Barba & D. Ocaña (CNIN).

Etymology. The specific name is derived from the feminine for strange in Spanish.

Acknowledgments. To Juan Morales Malacara (Facultad de Ciencias, UNAM) and to two anonymous reviewers, for their comments and suggestions, that improved the original manuscript.

Literature cited

- DENNING, D. G. & R. L. BLICKLE. 1972. A review of the genus Ochrotrichia (Trichoptera: Hydroptilidae). Annals of the Entomological Society of America 65(1):141-151.
- FLINT, O. S. Jr. 1972. Studies of Neotropical caddisflies, XIII: the genus Ochrotrichia from Mexico and Central America (Trichoptera:Hydroptilidae). Smithsonian Contributions to Zoology 118:1-28.
- FLINT, O. S. Jr. 1983. Studies of Neotropical caddisflies, XXXIII: new species from Austral South America (Trichoptera). *Smithsonian Contributions to Zoology* 377: 1-100.
- FLINT, O. S. Jr. 1991. Studies of Neotropical caddisflies, XLV: the taxonomy, phenology, and faunistics of the Trichoptera of Antioquia, Colombia. Smithsonian Contributions to Zoology 520: 1-113.
- MARSHALL, J. E. 1979. A review of the genera of the Hydroptilidae (Trichoptera). Bulletin of the British Museum (Natural History) Entomology Series 39(3):1-239.