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The genus *Ochrotrichia* Mosely (Trichoptera: Hydroptilidae) in Costa Rica, with the description of four new species

JOAQUIN BUENO-SORIA¹ & RALPH W. HOLZENTHAL²

¹Instituto de Biología, UNAM, Departamento de Zoología, Apdo. Postal 70-153, México D. F., 04510, México E-mail: bueno@servidor.unam.mx

²Department of Entomology, University of Minnesota, 219 Hodson Hall, 1980 Folwell Ave. St. Paul, MN 55108, U.S.A. E-mail: holze001@umn.edu

Abstract

Four new species of the genus *Ochrotrichia* Mosely, are described from Costa Rica and the male genitalia figured (*Ochrotrichia avicula* new species, *Ochrotrichia conformalis* new species, *Ochrotrichia jolandae* new species, and *Ochrotrichia quasi* new species). Twenty-five species are recorded from Costa Rica, 8 for the first time [*O. aldama* (Mosely), *O. arranca* (Mosely), *O. assita* Bueno-Soria & Holzenthal, *O. caimita* Flint, *O. glabra* Bueno-Soria & Santiago-Fragoso, *O. hondurenia* Bueno-Soria & Santiago-Fragoso, *O. panamensis* Flint, and *O. tagala* Flint] and new distributional records are listed. *Ochrotrichia arranca* (Mosely) is refigured and compared with *O. conformalis*, new species and *O. quasi*, new species.

Key words: Trichoptera, Hydroptilidae, Ochrotrichia, Costa Rica, new species, new records

Introduction

During the last 30 years, many new species of *Ochrotrichia* have been collected in Mexico, Central and South America, and the West Indies in a wide range of habitats, including tropical rain forest and seasonally dry habitats (Botosaneanu 1977, 1995, Bueno-Soria & Santiago-Fragoso 1992, 1997, Bueno-Soria & Holzenthal 1998, Denning & Blickle 1972, Flint 1964, 1972, Flint & Bueno-Soria 1999, Mosely1937). Flint *et al.* (1999) recorded 93 species in the genus for the Neotropics, including 8 species described by Wells & Wichard (1989) in Dominican amber. Bueno-Soria & Holzenthal (2004) recently added 21 additional new species for Mexico and Panama. It is not surprising that Costa Rica also harbors a rich *Ochrotrichia* fauna, composed now of 25 species (Table 1) (Bueno-Soria & Santiago-Fragoso 1997, Bueno-Soria & Holzenthal 1998, 2004, Flint 1972, Mosely 1937). Holzenthal and colleagues discovered this diversity largely in the late 1980s early 1990s during an intensive inventory of the Trichoptera of Costa Rica. In addition to the description of the 4 new species, we here provide new distributional records for the other 21 species from the country, including new country records. Also, the male genitalia of *O. arranca* (Mosely) are refigured and compared with *O. conformalis*, new species, and *O. quasi*, new species, because of the close similarity of these species.

All material will be deposited in the University of Minnesota Insect Collection, St. Paul, MN (UMSP), the National Museum of Natural History, Smithsonian Institution, Washington, D.C. (NMNH), the Instituto Nacional de Biodiversidad, Heredia, Costa Rica, (INBIO), the Colección Nacional de Insectos, Universidad Nacional Autónoma de México, Mexico City (CNIN), and the Carnegie Museum Collection, Pittsburgh, Pennsylvania (CMC), as indicated in the species descriptions and records.