



The Mesoamerican *Mesorhaga* (Diptera: Dolichopodidae), with a taxonomic conspectus of the New World fauna

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Abstract

The Mesoamerican *Mesorhaga* Schiner are revised, illustrated and keyed, and include twelve species, ten of them newly described: *Mesorhaga lacrymans* Parent (Costa Rica and Panama), *M. cocori* n. sp., *M. hule* n. sp., *M. sarukhani* n. sp., *M. baadsvicki* n. sp., *M. villanuevi* n. sp. (all Costa Rica), *M. isthmia* n. sp. (Costa Rica, Panama, Nicaragua, El Salvador, and Mexico), *M. adunca* (Van Duzee) (Guatemala), *M. mexicana* n. sp., *M. falcicornis* n. sp., *M. minatitlan* n. sp., and *M. nayaritensis* n. sp. (all Mexico). A checklist of the New World *Mesorhaga* fauna is provided along with notes on selected species. *M. funebris* Parent from the tropical Andes is redescribed and the male postabdomen of *M. caudata* Van Duzee from Georgia, U.S.A. is illustrated.

Key words: Diptera, Dolichopodidae, Sciapodinae, *Mesorhaga*, Mesoamerica, Nearctic, Neotropical

Introduction

This is the second part of a planned revision of the dolichopodid subfamily Sciapodinae in Mesoamerica (also see Bickel 2002). The genus *Mesorhaga* is nearly cosmopolitan in distribution (absent in New Zealand and Pacific islands east of New Guinea), and is defined by a number of strong synapomorphies. The genus maintains a conservative facies throughout the world, although some species groups based on derived characters can be delimited (also see Bickel 1994).

Mesoamerica is part of the Neotropical Region, and comprises Central America and southern neotropical Mexico. Since *Mesorhaga* is inadequately described and poorly known in both the Neotropical and Nearctic regions, I have produced a conspectus of all species as a combined New World fauna. This provides a comparative background for the Mesoamerican fauna, which is now the best known in the Western Hemisphere.

Materials and Methods

Material cited in this work is housed at the following institutions: (AMNH)— American Museum of Natural History, New York; (BPBM) – Bishop Museum, Honolulu; (CAS)— California Academy of Sciences, San Francisco; (CNC)— Biosystematics Research Institute, Agriculture and Agri-Food Canada, Ottawa; (CUIC)— Cornell University, Ithaca, New York; (EMUS) — Entomological Museum, Utah State University, Logan; (INBIO) — Instituto Nacional de Biodiversidad, Santo Domingo de Heredia, Costa Rica; (INHS) – Illinois Natural History Survey, Urbana, Illinois; (INPA) — Instituto Nacional de Pesquisas da Amazônia, Manaus; (MLUH)— Martin Luther Universität, Halle an der Saale; (MCZ)— Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts; (NHMV)— Naturhistorisches Museum, Vienna;