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Checklist of helminth parasites of freshwater fishes from Mexico

GUILLERMO SALGADO-MALDONADO



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GUILLERMO SALGADO-MALDONADO

*Universidad Nacional Autónoma de México, Instituto de Biología, Apartado Postal 70-153 CP 04510, México
D. F. Mexico, e-mail: gsalgado@mail.ibiologia.unam.mx*

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Abstracts

Using published records and original data derived from my research, a checklist was generated of the helminth parasite fauna in 194 native and 18 introduced freshwater fish species from 30 families from Mexico. The checklist contains 262 nominal species, from 152 genera and 59 families of helminth parasites. It includes 37 species of adult trematodes, 52 metacercariae, 49 monogeneans, 15 adult cestodes, 22 metacestodes, 7 adult acanthocephalans, 5 cystacanths, 56 adult nematodes and 19 larval nematodes. Most of these species (150, 57%) are Neotropical, 35 (13%) are Nearctic, and 28 (11%) are either anthropogenically introduced into Mexico (21 of them), or are world-wide in their distribution (7 species). Insufficient data preclude the determination of the status of the rest of the species. Only 18 of these species are tentatively pointed out as endemic to Mexico, although 55 species are recognized as being endemic to Mesoamerica. The data demonstrate that the helminth fauna of freshwater fish in Mexico is divided into Neotropical and Nearctic components with no apparent transition zone between them. The Nearctic fauna mainly consists of allogenic generalist species capable of invading Neotropical hosts and environments, but the Neotropical fauna, mostly autogenic and consisting of specialists to certain host families, is limited to Neotropical environments and hosts. This Neotropical fauna forms part of a Mesoamerican zone that extends from southeast Mexico along the Gulf of Mexico slope and into Central America. Fish families have typical groups of helminth species which allows the spatial distribution of helminths to follow that of