

# HELMINTHS IN COMMON FISH (*Cyprinus carpio*) AND RELATIONSHIP WITH ENVIRONMENTAL HEALTH IN A NATURAL LAGOON OF MEXICO

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**Abstract.** Fishery resource is an essential part of food in some Mexico's communities. The objective of this research was to identify helminth morphology in common carp (*Cyprinus carpio*) and to determine if the Helminthes species are zoonotic to humans or represent an environmental health. 30 specimens of *C. carpio* (N=30) were captured in the Laguna de Bustillos in the period of September to November 2011 and analyzed without discriminating species, sex, size and length. The fish were transported alive in a vehicle that was previously fitted with a pump oxygenator. The dissection method began cutting the lid and removing the gills. There were three cuts on the belly of the fish with a knife. The organs were removed by cutting the joined tissue and placed in Petri dishes with a physiological saline solution at 0.85%. The measured parameters were total frequency of parasitisms (FP), and frequency by species and parasitic competitiveness. It was observed a FP of 90%, indicating that in the ecosystem under study has a strong parasitosis. It is important to point out that none of the species might be considered zoonotic at least in the short term. The parasites found in *Cyprinus carpio* were *Gyrodactylus* sp., *Pseudocapillaria acheilognathi* and *Botriocephalus tomentosa*. It is noteworthy that although we found no distinctive diversity of parasites, the parasites were imperishable. Clearly it is impossible to eliminate parasites in fish of Laguna Bustillos since to date there are no cost-effective methods to accomplish this task possibly endless and unnecessary.

Keywords; Helminthes, parasites, human health, aquatic, environment.

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