

Investigation of common parasites in leaping mullet (*Chelon saliens*) in the southwest of the Caspian Sea

Javad Daghigh Roohi^{1*}, Mehrdad Asgharnia², Mohades Ghasemi¹, Monireh Faeed³,
Fakhreddin Mirhasheminasab¹ and Abolfazl Sepahdari⁴

¹ Assistant Professor, Department of Fish Health and Disease, Inland Waters Aquaculture Research Center, Iranian Fisheries Science Research Institute, Agricultural Research, Education and Extension Organization (AREEO), Bandar Anzali, Iran

² Expert, Department of Fish Health and Disease, Inland Waters Aquaculture Research Center, Iranian Fisheries Science Research Institute, Agricultural Research, Education and Extension Organization (AREEO), Bandar Anzali, Iran

³ PhD Graduated in Microbiology, Inland Waters Aquaculture Research Center, Iranian Fisheries Science Research Institute, Agricultural Research, Education and Extension Organization (AREEO), Bandar Anzali, Iran

⁴ Associate Professor, Department of Fish Health and Disease, Iranian Fisheries Science Research Institute, Agricultural Research, Education and Extension Organization (AREEO), Tehran, Iran

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Abstract

leaping mullet is one of the valuable and economic species that accounts for a significant part of the bony fish catch in the Caspian Sea every year. In this study, prevalence and intensity of parasitic infections were investigated as one of the possible reasons for the decrease in stocks and the amount of catch of this fish. A hundred and fifty nine leaping mullets were sampled from Feb 2021 to April 2022 on the southwestern coasts of the Caspian Sea. Wet mounts were prepared from gills, skin and fins and monogenean parasites were fixed by glyceirn gelly. In order to investigate the digestive parasites, the contents of digestive tract after dilution were examined with a light microscope. Identification of parasites was done after photographing, drawing and measuring different organs and comparing with identification keys. In all, 6 species of parasites, including two monogenean species, *Ligophorus szidati* and *Solostamenides mugilis*, three species of terematodes, *Saccocoelium obesum*, *Saccocoelium tensum* and *Diplostomum spathaceum*, and one protozoan species, *Trichodina* sp. were isolated and identified. Based on the results, *S.obesum* with 51.29% prevalence index was the most dominant parasite in the intestines of these fish. In this study, two monogenean species, *Solostamenides mugilis* and *Ligophorus szidati*, were reported for the first time from leaping mullet in the Caspian Sea. In general, the parasitological examination of mullet fish showed that the prevalence and intensity of parasitic infections in them is very limited. Therefore, the current situation of parasitic infections is not considered a threat to leaping mullet fish health.

Key words: Leaping, Mullet, Parasite, Caspian Sea, Monogenea

* **Corresponding Author:** Javad Daghigh Roohi, Assistant Professor, Department of Fish Health and Disease, Inland Waters Aquaculture Research Center, Iranian Fisheries Science Research Institute, Agricultural Research, Education and Extension Organization (AREEO), Bandar Anzali, Iran
E-mail: javad_daghigh@yahoo.com



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