

Comparative study of endo-parasitic infestation in *Channa punctatus* (Bloch, 1793) collected from Hatchery and Sewage lagoon

Md. Jobaer Alam¹, Md. Rakibuzzaman¹, Mehedi Mahmudul Hasan²

¹Department of Fisheries, University of Dhaka, Dhaka-1000, Bangladesh ²Department of Fisheries and Marine Science, Noakhali Science and Technology University, Sonapur, Noakhali- 3802, Bangladesh Email: jobaer_alamdu@yahoo.com, rakib_214@yahoo.com, mehedi_nstu@yahoo.com

Abstract :

Abstract: The study was conducted to collect and identify endoparasites of *Channa punctatus* (Bloch, 1793) from different water bodies of varying water quality in Bangladesh and to determine the prevalence and intensity of infestation brought about by the endoparasites in the hosts. The host fishes were collected from polluted water at sewage treatment lagoon in Narayangong and fresh water at Tongi Hatchery in Gazipur, Bangladesh. The prevalence of endoparasites in the host fish *Channa punctatus* was 91.30% in female and 88.88% in male fishes, among them in polluted water fishes the prevalence was 85.71% in female and 86.66% in male and in fresh water fishes the prevalence was 100% in both the male and female fishes. The intensities of infestation in *Channa punctatus* was 6.78 in female and 6.55 in male fish collected from hatchery; and in sewage water fishes the intensity was 3.50 in females and 1.15 in males respectively. Six parasite species were found from polluted water fishes and seven species of parasites were recorded from fresh water fishes. The parasite groups were trematodes (*Genarchopsis bangladesis*, *Allogomtiotrema attu*, *Phyllodistomum sp.*, *Neopecoelina saharanpuriensis*), nematodes (*Ascaridia sp.*, *Procamallanus sp.*) and Acanthocephalan (*Pallisentis nandai*). Acanthocephalans were found in the fishes collected from sewage lagoon. Liver, stomach, intestine and body cavity of the host fishes were examined for parasites. Females were more infected than the males. The intensity and the prevalence were higher in host fishes collected from hatchery than the sewage water host fishes. The hosts of intermediate length and weight group were found to be more infected than smaller and larger length groups. [Nature and Science 2010;8(5):152- 156]. (ISSN: 1545-0740).

Key Word :

Endoparasite, *Channa punctatu*, Hatchery, Sewage Lagoon

Volume 8, Number 5, May 2010 , ISSN 1545-0740