

OCCURRENCE OF *EUSTRONGYLIDES* (HELMINTH: NEMATODA) LARVAE IN FRESHWATER FOOD FISH IN NORTH-CENTRAL PROVINCE

S.G.P.B. SAMARASINGHE, G.S.P. de S. GUNAWARDENA, R.P.V.J. RAJAPAKSE,
B.G.S.J. ABEYRATHNE AND W.R. JAYAWEERA

*Department of Veterinary Pathobiology, Faculty of Veterinary Medicine and Animal Science,
University of Peradeniya*

Fish parasites play an important role, sometimes causing disease and production losses leading to economic losses in inland fisheries. This study was carried out with the aim of investigating into the occurrence of nematode parasites in freshwater food fish species in the Polonnaruwa and Anuradhapura districts where fishing industry is a major source of income to many people living in close proximity to freshwater reservoirs.

Total of 1455 fish belonging to 15 fish species were collected from the littoral region of freshwater reservoirs, namely, Kala Wewa, Mahamankadawala Wewa, Minneriya Wewa, Parakrama Samudraya, and Giritale Wewa during the period between August 2004 and July 2005. The fish were subjected to detailed pathological studies in which the external and internal organs were examined for the presence of parasites.

It was found that three popular freshwater food fish species, viz., *Channa striata* (Loolia), *Glossogobius giuris* (Weligouva), and *Mastacembelus armatus* (Gan theliya/Zig zag eel) were infected with larvae belonging to the nematode genus *Eustrongyloides*. The parasite was found in 43.6 % of these fish species examined. The parasite was a red colour round worm measuring 3-8 cm in length and 1-2 mm in diameter. They were often found freely moving in the abdominal cavity. Some of the worms were, however, found encysted in the adipose and connective tissues around abdominal viscera and muscles. Prevalence of the parasite varied widely among the fish species and the water reservoirs. The parasite was more prevalent in *Mastacembelus armatus* of the Giritale Wewa. In contrast, none of *Channa striata* and *Glossogobius giuris* of the Mahamankadawala Wewa was infected with the parasite.

The parasite found in this study is a large worm visible to the naked eye and often remains active for several hours after death of the fish. So the infected fish appear unsuitable for human consumption and thus, fetch a low price at the market. This study shows that larvae of *Eustrongyloides* species are internal parasites found commonly in freshwater food fishes in the Polonnaruwa and Anuradhapura districts. Further studies are however, needed to study their life cycle in order to control the parasite.

Financial assistance by the Sri Lanka Council for Agricultural Research Policy for the research grant (CARP 12/536/407) is acknowledged.