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A PRELIMINARY SURVEY ON DISEASES OF WILD FISH IN A FEW SELECTED STREAMS IN THE KANDY DISTRICT, SRI LANKA

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In Sri Lanka, on the status of diseases and infections of wild fish and the extent of damage caused by them were sparsely studied. Infections or diseases on wild fish fauna are important from fish conservation and fisheries perspectives. A survey of diseases of wild fish was carried out from April (2001) to February (2002) in a few selected tributaries of Nanu Oya namely, Udawela, Danture, Balana, Biliweva which flows to Mahaweli Ganga at Panideniya. Samplings were done using a net and, sick and fish with external symptoms were collected by hand picking. Percentages of diseases were calculated for total catch and as well as per fish species. During the survey eight types of diseases including protozoan, two bacterial, a fungal disease and three disease conditions without pathogens were recorded from ten species of fish. The recorded diseases were fin rot, white spot, bacterial infection, Saprolegniasis, whirling, tumors, lesions and scoliosis. Of these eight diseases, scoliosis has not reported prior to this study from Sri Lanka.

Diseases were identified using external signs and symptoms. Of the eight diseases recorded white spot disease was the most common (17.16%) whilst tumors were the least common (2.04%). Of ten species *Puntius bimaculatus* was highly susceptible for white spot disease (32.65%) while *Puntius filamentosus* was the least susceptible for it (3.19%). Bacterial infections (2.88%) were more common among *Oreochromis mossambicus* (17.39%) whereas it was not found on *Poecilia reticulata, Garra ceylonensis, Tor khudree longispinis, Mastacembelus armatus* and *Lepidocephalichthys thermalis*. Fin rot disease (2.65%) was more common among *P. bimaculatus* (20.65%) and it was also common among *P. reticulata* (8.33%), *Danio malabaricus* (3.7%) and *Rasbora daniconius* (3.85%). *P. bimaculatus* (12.08%) was the most susceptible for saprolegniasis (4.87%). Scoliosis (3.82%) which was recorded for the first time in Sri lanka was found only on *R. daniconius* (7.96%) and *D. malabaricus* (5.1%) while whirling disease (2.72%) was found on *D. malabaricus* (4.2%), *P. reticulata* (2.22%) and *P. bimaculatus* (1.65%). Lesions (10.33%) were found only on *P. bimaculatus* (9.42%), *D. malabaricus* (1.85%) and *O. mossambicus* (18.7%). The least common disease, tumors (2.04%) were found only on *P. bimaculatus* (0.417%).

Of the ten species of fish *G. ceylonensis* haboured only white spot disease (17.24%) while *M. armatus, L. thermalis* and *T. khudree longispinis* were devoid of diseases. *P. bimaculatus* showed the highest susceptibility for diseases (81.63%) and it suffered with all the types of diseases except from scoliosis. Of the 563 specimens, collected from the streams 69.34% suffered with diseases. This preliminary survey indicates that a considerable damage is done by the diseases to wild fish fauna in these streams.