ZSA-19 SS 74 (1999)

The parasite of Puntius species in Nilwala basin.

K.H.M. Ashoka Deepananda

Supervisor - Dr. N. Nilakarawasam, Dept. of Zoology, Univ. of Ruhuna

The parasite fauna of the genus *Puntius* which has highest number of species, wide distribution and some ornamental value was investigated with their parasite infection levels. The study was carried out at the Akuressa area of the Nilwala basin. *Puntius* species were collected from three localities of the area representing different habitats. Live fish were caught using gape nets and gill nets and the external and internal parasites of the fish were investigated, described and the population levels were compared in order to find out the possible threatening species on the survival of fish.

Eight *Puntius* species of the ten species available in the Nilwala basin could be sampled. Parasites of wide variety of groupings, four species of monogeneans, one species of digeneans, one cestodes species, two species of adult nematodes, one species of crustaceans as well as the seven metacercarian species and two cestode larval species were found in the survey. Due to the lack of parasite surveys in Sri Lanka, most of the parasites found were new records to Sri Lanka. The four monogeneans, *Euclinostomum* metacercaria, adult digenea, *Bothriocephalus* sp., *Camallanus fotedari*, *Rhabdochona sarana* and the *Ergasilus* sp. seemed to be new record to Sri Lanka.

Of the parasites found, most were infecting more than one host species. Metacercarians, larval cestodes, adult nematodes and the Ergasilus sp. were not strictly host specific. Interestingly one monogenean species had loose specificity infecting four host species. The two monogenean species, Dactylogyrus crucitrabus and Dactylogyroides tripathii, Centrocestus metacercaria, Diplostomid metacercaria A & B, cestode larva Paradilepis scolecina and the nematode Rhabdochona sarana are the parasite species more abundant in the Puntius species of the area. The number of parasite species present on the host specific varied from 1 – 6. P. filamentosus is the fish which was having highest number of parasite species and densely populated by them. Puntius sarana was affected by gill monogeneans. Puntius chola and Puntius amphibious were mostly affected by Dactylogyroides tripathii and Paradilepis scolecina. Puntius nigrofasciatus was affected by Diplostomid metacercaria B the only parasite it is inhabiting. The other fish species were not harboring high populations of the parasites.