

# Study of Parasitic Diversity in Ornamental Fish Collected from Different Zones

## Abstract

Aquarium keeping is amongst the most popular of hobbies with millions of enthusiasts worldwide and Sri Lanka has developed a good reputation in the international market for exporting high quality fish species. Mortality is a key factor to ensure exporting of healthy fish. Parasite is one of the biggest problems which can cause fish mortality. In the present study parasite diversity was identified in different locations for export. Seylon Aquatic (Pvt) Ltd exporting company was selected for this purpose and a total of 177 ornamental fish of nine species from 17 export farms in Sri Lanka were collected between April to July of 2013 and examined for parasites. Seven of common external parasites were identified through parasitological technique. Data were collected through examination of fish species from different regions. Results recovered seven of genera of parasites. *Gyrodactylus*, *Dactylogyrus*, *Trichodina* and *Ichthyophthirius sp* was the common, and the occurrence of parasites in ornamental fish export farms was wide spread. Further *Gyrodactylus* and *Dactylogyrus* were common in different zones. The variation of parasites among, different fish species, different regions and different zones were not significance ( $p>0.05$ ). To overcome this parasite issue, eco friendly treatment suggested and applied successfully and it has a good effect on treating ecto parasitic protozoa *Trichodina* at 90 mg/L and it improves the water quality for aquaculture operation with absence of undesirable side effect in comparison to other chemicals used in this industry.

Keywords: Parasite, ornamental fish, diversity, chemicals, parasitological technique