Abstract No: 140 ***Life Sciences***

SMALL-SCALE ORNAMENTAL FISH FARMERS' KNOWLEDGE ON DISEASE OCCURRENCE AND TREATMENTS IN ANURADHAPURA DISTRICT, SRI LANKA

D.U. Warshavithana, W.W.G.S.H. Wehigalage, H.M.S.M. Herath, H.M.P.N.W. Halangoda and B.D.M. Mihiran*

Department of Aquaculture and Aquatic Resources Management, University College of Anuradhapura, University of Vocational Technology, Sri Lanka
**madusankamihiran164@gmail.com*

Lack of proper knowledge of disease identification and treatment is one of the leading causes of disease outbreaks in the ornamental fish industry. The study aimed to assess the small-scale fish farmers' knowledge of disease identification, treatment preparation, and application in ornamental fish farms in Anuradhapura District, Sri Lanka. Sixty ornamental fish farmers of the Anuradhapura District were interviewed using a structured questionnaire from March to May 2024. The experience of fish farmers varied between 2 - 30 years, and the majority had three (21.6%), five (18.3%), and ten (16.7%) years of experience. Groundwater was the primary water source (62.2%) for the fish farms. Koi (*Cyprinus carpio*) was the commonly cultivated species (15.9%), followed by goldfish (*Carassius auratus*) (14.3%), guppy (*Poecilia reticulata*) (13.9%), and molly (*Poecilia sphenops*) (10.6%). Anchor worm (*Lernaea* sp.) infection (22.4%) was the most reported disease followed by *Argulus* sp. (20.6%), white spot (*Ichthyophthirius multifiliis*) (18.8%), bacterial fin rot (15.8%), "abdominal" dropsy (8.5%), bacterial gill infection (6.1%), sleepy koi disease (3.6%), bacterial skin infection (1.2%), *Trichodina* sp. (1.2%), monogenean infection (1.2%), and scale disease (0.6%). The present study revealed the use of methylene blue and Trichlorfon (*Neguvon*) by fish farmers for most diseases without considering the pathogen. However, the majority (91.4%) did not use proper measurements or recommended treatments for a particular disease, though they had a basic knowledge of disease diagnostics. This study highlights the importance of obtaining proper training on management practices, disease detection, and treatment by small-scale ornamental fish farmers in the Anuradhapura District.

Keywords: Disease outbreak, Disease treatments, Fish farmer's knowledge, Fish parasites, Ornamental fish