

PARASITIC SURVEY OF ORNAMENTAL CARP (*Cyprinus carpio*) COLLECTED FROM THREE COMMERCIAL AQUARIA SITUATED IN THE GREATER COLOMBO REGION

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Spreading diseases through ornamental fish industry is faster due to frequent transportation. Current knowledge on common parasites of popular candidates employed in Sri Lankan ornamental fish industry would be useful in developing quarantine, mitigatory and control measures and as base line data for future studies. Therefore, a parasitic survey of Ornamental carp (koi carp) was carried out with the fish obtained from three commercial aquaria, with different infrastructure and management levels and situated within the Greater Colombo region. Attempts were made to relate the intensity and prevalence of parasites to the microhabitat chosen in the body of fish, to water quality and to the level of management of aquaria.

Nine genera of parasites, *Trichodina* sp., *Piscinoodinium* sp., *Ichthyophtherius multifiliis*, *Chilodonella* sp., *Dactylogyrus* sp., *Gyrodactylus* sp., metacercaria of a trematode, *Camallanus* sp. and an *Argulus* sp. were found. Except *Camallanus* sp., others were external parasites. Fish harboured a similar parasitic fauna regardless of the body size and of the site from which the fish were obtained. Intensity of *Trichodina*, *Piscinoodinium* and *Gyrodactylus* were significantly higher on fins ($p < 0.05$) on the skin while that of *I. multifiliis* was significantly higher on fins ($p < 0.05$). Significantly higher number of *Dactylogyrus* was recorded on gills ($p < 0.05$). When compare the prevalence and intensity values of all parasites, those recorded for *Chilodonella*, *Camallanus* and *Argulus* were significantly low on koi carp.

There were positive significant relationships between intensity of parasites (pooled data) and high temperature, pH and dissolved oxygen levels in water of aquaria ($p < 0.05$). Prevalence and intensity of parasites recorded for large scale aquarium and small scale aquarium were significantly higher than that of medium scale aquarium ($p < 0.05$). Incompatibility between production capacity and skilled manpower at large scale aquarium and collecting all available fish and maintaining them with minimum facilities at small scale aquarium could be the reasons for this observation.