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Histopathological study of gill and fish treatment in Ichthyophthiriasis of white skirt tetra (*Gymnocorymbus ternetzi*)

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Abstract

In November 2019 five samples of diseased tetra fish from a fish propagation center were referred to the faculty laboratory. Diseased fish exhibited irritation, flashing, anorexia, respiratory distress (gasping) and some fresh sore on body surface, especially head region. In this study, the classic sign of Ichthyophthiriasis (i.e., white spots) was not seen on fish skin, but pathological changes and a significant number of the parasite was seen on the gills and operculum region. The density of infestation was greater in gills and in fins and skin the intensity of the parasite was lower. The tissue scraping was examined by photomicroscope and large (50 to 1000 μm) trophonts were seen in wet and Giemsa stained dry smears. In histopathologic sections, the parasites have elicited moderate gill cellular reactions, hyperplasia and shortening of the secondary lamella. Theront or early trophont stage was seen attached to the basal layer, under the epithelium of the gill. The fish stock was successfully treated by changing the water salinity, elevating the water temperature and Lateux-**Meyer** mixture bath.

Key words: Histopathology, Gill, Ichthyophthiriasis, White Tetra, Aquarium

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