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P152. INVESTIGATION OF HISTOPATHOLOGICAL EFFECTS OF ZINC PYRITHIONE ON OREOCHROMIS NILOTICUS (L., 1758)

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Zinc pyrithione (2-mercapto pyridine-N-oxide zinc salt), which has been used in cosmetic consumer products including anti-dandruff shampoos in many countries for years, and more recently incorporated in antifouling paints for large boats and ships due to the ban on tributyltin. However, the toxicity of Zinc Pyrithione (ZnPT) remains uncertain. In this study, tilapia (Oreochromis niloticus L., 1758) fingerlings exposed to 1/24 (2.5 μ g/L) and 1/12 (5 μ g/L) of the 96 hour LC50 value of ZnPT effects were investigated histopatologically. Results of histological examination, showed no histopatological findings in the gonad, heart, kidney, muscle, spleen and intestine tissues after subletal ZnPT exposure, however epithelial lifting, edema, telangiectasia and hyperplasia in gill tisue; passive hyperemia, hydropic degeneration, lymphocyte infiltration and fatty degeneration in liver; hyperemia in skin tissues and excessive bile accumulation in gall bladder were determined. These histopathological findings have been shown to increase depending on the concentration of the ZnPT.

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