

SODIUM FLUORIDE INDUCED HISTOPATHOLOGICAL CHANGES IN OESOPHAGUS AND INTESTINE OF FRESHWATER FISH, *TILAPIA MOSSAMBICA* (*OREOCHROMIS MOSSAMBICUS*)

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ABSTRACT – Fluoride is considered to be a pollutant if it exceeds beyond the normal permissible limits. It occurs naturally in all forms of the life including the aquatic ecosystem. This study was performed to investigate the toxicity effect of sodium fluoride on freshwater fish, *Tilapia (Oreochromis) mossambicus*. Acute toxicity for 24, 48, 72 and 96 hrs exposure of LC₀ value was 30.0 ppm and LC₅₀ value was 54.0 ppm for 96 hrs. The oesophagus and intestine revealed significant morphological alterations such as atrophy in the submucosa, flattening of the intestinal villi and swelling in the submucosa. The physiological and histological changes indicate sodium fluoride is very hazardous pollutant the fish.

Key Words : Sodium fluoride, oesophagus, Intestine, *Tilapia mossambica*, histopathology.