



# Histological Changes in Selected Organs of *Oreochromis niloticus* Exposed to Doses of Lead Acetate

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## Abstract:

This study is carried out to investigate the effects of doubled sublethal concentration of lead acetate on some selected organs of tilapia. 30 Fish were randomly chosen and divided into 3 groups. The first one served as control, the second and third groups were exposed for 3 weeks to 0.4 and 0.7 mg lead acetate/ liter of water respectively. The results of this work clearly indicate that lead has adverse effects on the gills, ovaries, liver and hepatopancreas of tilapia. The severity of lesions caused by lead acetate was positively correlated with the concentration. The gill damage includes hyperplasia of epithelial cells of gill filaments and severe hemorrhage in gill lamellae. Also, lead induces significant atresia in ovaries. The liver showed vacuolar degeneration of hepatocytes and dilatation in hepatic sinusoids. The hepatopancreas showed loss of contact between hepatocytes and pancreaocytes and appearance of apoptotic nuclei.

## Keywords:

Lead Acetate, Liver, Gills, Liver, *O. niloticus*, Histopathology

## Published In:

Journal of Life Science and Biomedicine , 3 (3) , 256-263