

**EFFECT OF SUBLETHAL CONCENTRATIONS OF CADMIUM CHLORIDE  
ON LIVER HISTOLOGY OF *XENOPUS LAEVIS* (DAUDIN, 1802)**

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**ABSTRACT**

The toxic nature of cadmium metal has negative impact on the environment. The decrease in amphibian population on the global scale has been attributed to pollution of aquatic environment with heavy metal and causes serious ecological imbalances. The study aimed at assessing the effects of long term exposure of *Xenopus laevis* Linnaeus tadpoles liver histology to Cadmium chloride. *Xenopus laevis* tadpoles were obtained by inducing sexually matured (males and female) for egg laying and sperm production using 750 and 300 international units (i.u.) respectively. This was possible through laboratory breeding of *Xenopus*. *Xenopus* larvae were fed with fish feed prior to the exposure. Some water chemistry such as temperature, pH, electrical conductivity, total dissolved solids, dissolved oxygen and calcium trioxocarbonate were monitored during the study. *Xenopus laevis* at Gosner stage 51 were exposed to different concentrations (0.50, 1.00 and 1.5mg/L) of Cadmium chloride for 8weeks. At week 8, all samples of *X. laevis* were examined for histological changes in the liver. Histological alteration observed include a severe dilation of sinusoids as well as disruption of the hepatic cells in the liver. In conclusion, cadmium chloride has effects (toxic) on the histology of *X. laevis*.

**Keywords:** Histology, Lethal concentrations, liver, toxicity

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