## Abstract

In this study, the sublethal toxicity of Deltamethrin pesticide contaminating aquatic ecosystems as a pollutant on blood serum enzymes and histopathological changes of Common carp (*Cyprinus carpio*) was done in 4 treatments (0, 0.001, 0.0025 and 0.005  $\mu$ g/L). In order to, 96 common carp with mean weight of 40 ±1 g collected from Zahak Hatchery Center, and transported to laboratory of Hamoon international wetland research institute. The doses of Deltamethrin was made and the experiment were carried out for 8 weeks. The histopathological effects on the tissue of gills, kidney and liver of *Cyprinus carpio* were investigated by light microscope .The pathological changes of tissue were hyperemia and edema, hyperemia gill arch, fussion of lamella and hyperplasia in gills, nephritis, hemorrhage, hyaline casts, cell swelling in kidney and fat degeneration in liver. The results including of blood serum enzymes indicus Alkaline phosphatase, Aspartate amino transferase and Alanine amino transferase showed that significant increase (*p*<0.05) in all biochemical parameters compared with the control group.

Keywords: Cyprinus carpio, Histology, Blood indices, Deltamethrin.



University of Zabol Graduate school Faculty of Natural Resourses Department of Fisheries

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Effect of Deltamethrin insecticide on the blood serum enzymes and its histopathological on Common carp (*Cyprinus carpio*)

## **Supervisors:**

Dr. J. Mirdar Harijani Dr. A. Gharaei

## Advisor:

Dr. A. Jamshidian

By:

R. Bampoori January 2016