The Turkish Journal of Occupational / Environmental Medicine and Safety

Vol:2, No:1 (1), 2017 Web: http://www.turjoem.com ISSN : 2149-4711

P32. SOME ENZYMATIC AND HEMATOLOGIC PARAMETERS OF NILE FISH *(OREOCHROMIS NILOTICUS)* IN ZINC (Zn) AND ZINC+OLEUOROPEIN (Zn+OE) EXPOSURE

Ahmet Turan ALADAĞ

Department of Biology, Faculty of Science and Letters, Cukurova University, 01330 Adana, Turkey

Nile fish, Oreochromis niloticus, were exposed to sublethal concentrations of zinc (Zn) and oleuropein (OE), olive leaf extracts, mixtures. Hematological parameters RBC and Hb, also serum AST and ALT enzymatic activities were investigated. Fish were exposed to 2.0 mg/L of ZnCl2 (0.25 of Zn LC50) and Zn+OE mixture (2.0 mg/L Zn+2.0 mg/L OE) for 7 days. Enzymatic parameters of fish blood were determined by spectrophotometric method. Hematological results (RBC and HB) were significantly increased with Zn exposure ($p<0.05$). However, Zn+OE mix was significantly decreased. The Zn exposure to O. niloticus increased enzymatic parameters (ALT and AST). But, the mixture of Zn+OE caused an reduce for the toxic effect of Zn on enzymatic parameters. The results of our study showed that OE has a protective effect against toxicity induced by Zn. All hematological and enzymatic parameters were found to be statistically significant ($p<0.05$) in Zn+OE concentrations.

*ahmetaladag@hotmail.com