

7<sup>th</sup> Euro-Global Summit on

# Toxicology & Applied Pharmacology

October 24-26, 2016 Rome, Italy

## Acute toxicity test of dichromate potassium ( $K_2Cr_2O_7$ ) in grey mullet (*Mugil cephalus*)

Abdolreza Jahanbakhshi<sup>1</sup> and Elnaz Erfanifar<sup>2</sup><sup>1</sup>Gorgan University of Agricultural Sciences and Natural Resource, Iran<sup>2</sup>Offshore Fisheries Research Center Chabahar, Iran

The main aim of the present study was to examine the sensibility of marine fish *Mugil cephalus* to dichromate potassium ( $K_2Cr_2O_7$ ) in the toxicity test programs. All fishes were exposed to ( $K_2Cr_2O_7$ ) at various chosen concentrations 0, 5, 10, 20, 30, 40, 50, 55 ppm (range finding test). Then, fish were exposed to 6 concentrations of ( $K_2Cr_2O_7$ ) (control, 60, 70, 80, 90, 100 ppm). Number of mortality was registered after 24, 48, 72 and 96 h.  $LC_{50}$  values were determined with probite analysis. The 96 hour  $LC_{50}$  value of ( $K_2Cr_2O_7$ ) to the fish was found to be 83.07 ppm. By comparing the sensitivity of this metal to common reference toxicants, we conclude that grey mullet can be used as a suitable model for toxicity determinations in ecotoxicological studies. Further studies should examine other contaminants of this species to assess their suitability for detecting toxicity, as well as complex mixtures of pollutants, in order to develop aquatic ecosystem monitoring programs.

jahanbakhshi@gau.ac.ir

Notes: