Determination of lethal concentration (LC_{50}) of Cadmium in Yellowfin Seabream, *Acanthopagrus latus*

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Abstract
Different pollutants as well as heavy metals have undesirable effects on aqutic organisms and potentially may affect humans as a final consumer in food chains. Cadmium is one of the elements in most industrial effluents and so study on the effects of this dangerous element on aquatic animals is very important and necessary. In this study, acute toxicity of Cadmium on the Yellowfin Seabream, *Acanthopagrus latus* under laboratory conditions were examined. All experiments were according the standard methods for 96 hours exposure. Concentrations of 0.1, 1, 10 and 100 mg/lit Cadmium chloride were used to determine the Range Finding Test. Therafter fish were divided into 8 groups of 12 individuals with 3 replicates (100-120 g) One group was considered as the control and other groups were exposed to 15, 25, 35, 45, 55 , 65 and 95 mg/lit Cadmium chloride respectively. Important environmental parameters such as pH, dissolved Oxygen and temprature were measured and recorded. Data were analyzed using SPSS program and Probit statistical method. According to the results, lethal concentration (LC50), maximum acceptable toxicant concentration (MATC), lowest observed effect concentration (LOEC) and no observed effect concentration (NOEC) of Cadmium chloride for Yellowfin Seabream were 34.97, 3.497, 35 and 25 mg/lit respectively.

Keywords: Heavy metal, Range Finding Test, Acute toxicity, Ecotoxicology