



Measurement the level of heavy metal (lead) in muscle tissue of *Acanthopagrus Cuvieri* from Asaluyeh Port

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Abstract:

The present research was carried out with the aim of measuring the level of the heavy metal of lead in the muscle tissues of the *Acanthopagrus Cuvieri* in Asaluyeh port in Bushehr Province. To this end, 20 *A. Cuvieri* with an average weight of 1157.66 ± 10.12 and 1003.30 ± 19.68 gr were hunted in winter and spring of 2016, respectively. Then, 1 gr of the powdered tissue sample was isolated and the acid digestion of the samples was carried out by 10 ml of concentrated nitric acid using the Moopam method. To measure the levels of the lead a (PG AA500) atomic absorption spectrophotometer was employed. The results of measuring the concentrations of the heavy metal in the muscle tissues of the *A. Cuvieri* suggested that the mean and standard deviation value of lead during winter and spring were (87.46 ± 0.43 , 49.74 ± 0.48) $\mu\text{g/kg}$ dry weight respectively. These figures show a significant difference between the results of winter and spring ($P < 0.05$). The result of measuring heavy metals in the study area were lower than the international WHO, FAO, NHMRC, and UK (MAFF) standards and therefore these concentrations pose no threat to consumers.

Keywords: lead, Asaluyeh port, *Acanthopagrus Cuvieri*