

Study of arsenic concentration in muscle and liver of economic species (*Cyprinus carpio*, *Hypophthalmichthys molitrix*, *Ctenopharyngodon idella*, *Aristichthys nobilis*, *Oncorhynchus mykiss*) In Ahvaz and Shahrekord

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Abstract

Arsenic is a toxic and important element because of it is toxic, mutagenic, and carcinogenic metal. In this study, the concentration of As in the muscle and liver of five species of economic species was measured in 2011. For this study, number of 60 samples of fishes was collected from Azadegan culture collection in Ahvaz and cultural of rainbow trout in Dimeh spring in Shah-e-kord. Dry digestion method was used to preparing samples and metal concentration measured by Atomic Absorption Spectrophotometer. As concentration in muscle and liver of *Oncorhynchus mykiss*, *Aristichthys nobilis* and *Ctenopharyngodon idella* showed the significant difference ($P < 0.05$), but the concentration of this element in muscle and liver of *Cyprinus carpio* and *Hypophthalmichthys molitrix* showed no significant difference ($P > 0.05$). The highest concentration of As showed in the liver of *Aristichthys nobilis* (0.310 ± 0.048 mg/Kg/ww) and the lowest concentration of this element was determined in the muscle of *Hypophthalmichthys molitrix* 0.177 ± 0.023 mg/Kg/ww.

Keywords: Farmed fishes, Muscle, liver, Arsenic, Toxic.