Bioaccumulation of Arsenic in Blue Swimmer Crab (*Portunus pelagicus*) along the Persian Gulf coasts, Asalouyeh region

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Abstract
Heavy metals are considered as pollutants that can accumulate in the body of organisms and have damaging effects on their health. The present study was conducted to evaluate the concentration of arsenic in blue swimmer crab (*Portunus pelagicus*) in Asalouyeh coasts in Boushehr province as bio-indicator for heavy metals. After identifying different sources of pollution in the region, sampling was carried out at four sampling stations over a three-months winter period in 2014. Arsenic analysis was performed using an atomic spectrophotometer. The results showed that the mean concentration of arsenic in the soft tissue of P.pelagicus in January, February and March was 0.17±0.09, 0.23±0.11 and 0.30±0.15 (mg/kg dry weight), respectively. There was a significant difference between stations and between months (P>0.05). The lowest concentration of arsenic was for station 3 (0.15±0.10) and the highest one was for station 3 (0.35±0.10). Also, the results showed that arsenic concentrations in all stations and months were lower than the reported standard levels.

Keywords: Arsenic, Bioaccumulation, *Portunus pelagicus*, Asalouyeh, Persian Gulf.