

Determination of Heavy Metals (Cd, Pb, Hg, Cu, Fe, Mn, Al, As, Ni and Zn) in 6 Important Commercial Fish Species in North of Hormoz Strait

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Abstract : The concentrations of 10 heavy metals (Cd, Pb, Hg, Cu, Fe, Mn, Al, As, Ni, Zn) were measured in muscle, gill and liver of 6 species from Hormoz Strait in north coast of Persian Gulf in 12 months (April 2009 - March 2010). All samples were analyzed three times for Cd, Pb, Cu, Fe, Mn, Al, As, Ni, Zn by inductively coupled plasma-atomic emission spectrometry (ICP-AES) and for Hg by LECO AMA254 Advanced Mercury Analyzer. Results of this study showed that iron had the highest concentration (total mean concentration) in all species, followed by Zn, Cu, Ni, Al, Pb, Mn, Cd, Hg and lowest concentration in three tissues was As. In addition, the accumulation of metals was species-dependent, and was higher in *Scomberomorus commerson* and *Scomberomorus guttatus* ($p < 0.05$) and the lowest concentration was record in *Pampus argenteus* ($p < 0.05$).

Keywords : Persian Gulf, heavy metals, Hormoz strait, *Scomberomorus guttatus*, *Scomberomorus commerson*, *Pampus argenteus*

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