Accumulation of Heavy Metals Ni, V, Cu and Pb in Sediments and Bivalves *Crassostrea gigas* In Bandar Imam Khomeini

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Abstract

Existence of different pollution sources have adverse effects on the ecosystem health of a region. Therefore, the study of their contaminantion level in the a region is an essential need. In this study, the level of nickel, vanadium, copper and lead concentrations in the sediments and Pacific oysters Crassostrea were measured. 3 samples of the sediment and 30 oysters were collected from intertidal zone of 5 different stations in the Imam Khomeini port in february 2010. Samples were digested by metode Yap (2002) after drying. The concentration of nickel, copper and lead were analysed using Atomic Absorbtion Spectrophotometer (GBC model SavantAAΣ) and Vanadium concentration were analysed using Atomic Absorbtion equipped by graphite furnace (Varian AA 240). Concentration of heavy metals in sediment could be arranged in the following sequence: Ni>V>Cu>Pb and in Bivalves showed following sequence: Cu>Pb>Ni>V. Ni concentration in sediments was found to be higher than available standards, but concentration of Pb was lower than available standards. The mean concentration of vanadium was lower than RSA standard and Cu concentration was higher than USEPA standard. Metal Concentration in the soft tissue of studied oyster was found to be higher than FAO and WHO standards.