

Seasonal variation of heavy metal pollution (Pb, Cd, Ni) from *Pinctada radiata* in Persian Gulf, Iran

ABSTRACT

Seasonal variations of three heavy metals (Pb, Cd, Ni) in *Pinctada radiata* have been conducted in Hendorabi and Lavan Island from March 2011 to March 2013, edible oysters are best pollution indicator organism in aquatic environment. The soft tissue of *Pinctada radiata* and sediment was analyzed to detect some potentially toxic metals as Pb, Cd, Ni with a flame AAS and statistical analyses were performed with SPSS 18.0 for Windows. Dissolved and particulate heavy metals in soft tissue of *Pinctada radiata* have recorded the highest concentration for Cd in Hendorabi, and all measured metals followed this trend (Pb > Cd > Ni), while in *Pinctada radiata*, heavy metals showed no fluctuation with season. Even though the species had concentration values below the WHO's legal limit, but we still keep an eye on the risk when we eat it. We also suggest that we can do further study to establish the bio monitoring Lavan and Hendorabi Island in pollution monitoring program.

Keyword: *Pinctada radiata*; Seasonal variation; Heavy metal