Body Size Relationship with the Accumulation of Lead in Mudskipper *Periophthalmus waltoni* in Northern Persian Gulf

Kooseg, Naser[1*]; Rahmani, Abdolvahed[2]; Kamrani, Ehsan[3]; Taherizadeh, Mohammad Reza[4]; Alinia, Mandana[5]

1- Department of Fisheries, Faculty of Natural Resources, University of Hormozgan, Bandar Abbas, Iran. Email: naserkooseg@yahoo.com

2-Department of Chemistry, Hormozgan University, Bandar Abbas, Iran. Email: rahmaniabdolvahed@yahoo.com

3- Department of Fisheries, Faculty of Natural Resources, University of Hormozgan, Bandar Abbas, Iran. Email: ezas47@yahoo.com

4- Department of Biology, Hormozgan University, Bandar Abbas, Iran. Email: taheri.1965@gmail.com

5- School teacher, Bandar Abbas, Iran. Email: mandana.alinia@yahoo.com

Received Date: May 07, 2012 **Corresponding Author* *Accepted Date: August 17, 2013*

Abstract

In this study, the relationship between fish (Mudskipper *Periophthalmus waltoni*) body size and accumulation of lead was investigated in the regions of Khamir Port, Dargahan and Golshahr (Persian Gulf). 180 fish were randomly collected (30 fishes per station per seasons) during summer and winter 2011.

Fish muscle tissue was separated after biometry. The tissue was disgusted and analyzed using Atomic Absorption Spectrometry (AAS). The results showed that there was significant positive correlation between the concentration of lead and fish size ($p<0.05$). We found a significant difference between the concentration of lead in different stations ($p<0.05$). In both summer and winter, accumulation of lead in the muscle of Mudskipper waltoni was higher than other sampling areas. However, the lead level in the fish tissue was lower than global standards (FAO/WHO 2.14 μg/g). Petroleum industrial and municipal activities in these areas may be the source of pollution in the selected sampling areas.

Keywords: *Mudskipper waltoni, Persian Gulf, Contamination lead, Atomic absorption.*