



## **An Ecological Assessment on Macrobenthos Communities in the Estuaries next to Fishery Grounds in West of Hormozgan province**

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### **Abstract**

In order to investigate the ecological situation of estuaries in western Hormozgan, sampling of sediments in four stations in each estuary was carried out seasonally from spring to winter 2016. In this study, 110 species of polychaeta, 54 species of crustacea, 23 species of bivalves and 21 species of gastropoda were introduced. The average population density of macrobenthos in the eastern part of the province showed that station 2 in Laft estuary with  $1522 \text{ indm}^{-2}$  and station one in Bandar-e-Khamir estuary with an average of  $3397 \text{ indm}^{-2}$  had the highest density.

In Laft, Margalef index, with the values of 7.44 in station 2, Shannon with 2.68 in Station 3, Pielo-Evenes with 0.77 in station 3, Simpson index with 0.43 in station 4 and w-Statistic with a value of 0.3 at station 3, In Khooran Margalef index with a value of 43.4 at station 2, Shannon with a value of 2.78 at station 2, pielo-Evenes with a value of 0.66 at station 2, Simpson index with a value of 0.61 at station 1 and index w -statistic with a value of 0.1 at station two were the highest. Overall, these quantitative and qualitative indicators based on weight (ABC) for Laft and Khoran estuaries indicated relatively contaminated conditions due to the proximity of Western estuaries to the Persian Gulf, low depth and limited water exchanges consequently accumulation of pollutants in these estuaries and their effect on Benthic communities.

**Keywords:** Ecological Assessment, macrobenthos communities, fishery, Hormozgan province