

## Identification and distribution of benthic Ostracoda in coastal waters of Bushehr Province (Persian Gulf)

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### Abstract

Ostracoda were studied to identify and determine species diversity in coastal sediments of Bushehr province (Persian Gulf) in four stations in summer and winter of 2017. Sedimentary specimens were collected by a corer down to the depth of 5cm and by the diver down to the depths of 3, 5 and 10m at every station and transferred to the laboratory after being fixed (by 5% formalin solution). In this study, 10 species belonging to 8 genera and 5 families were identified. The highest abundance of the species is related to family Rotaliidae *Alocopocythere reticulate* was dominant species in the region. The environmental factors including depth, temperature, dissolved oxygen, salinity, water pH, electrical conductivity and total dissolved solid using CTD and total organic matter concentration and sediment particle diameter were measured by method MOOPAM. The results of PCA test in the studied areas showed that temperature, salinity and dissolved oxygen are among the environmental factors affecting ostracoda species' density. Also the study results showed that sediment particles (sand / silt + clay, sand / silt, sand, calcium carbonate) are also among the environmental factors affecting ostracoda species' density.

**Keywords:** Ostracoda, Identification, Bushehr province, Persian Gulf.