





Investigation of density and biomass of macrobenthos communities in Tyab estuary - Hormozgan province

Aghajari Khazaei Sh.¹*; Akbarzadeh Gh. A.¹; Momeni M.¹; Sadeghi M. R.¹; Darvishi M.¹; Saraji F.¹; Behzady S.¹

1- Persian Gulf and Oman sea Ecological Research Institute, Ghadir Bld., Bandar Abbas, Hormozgan, Iran.

*Corresponding autor's Email: saghagary@yahoo.com

Abstract

Wetlands play an important role in environmental protection, biodiversity, hunting and fishing, supply of wood and fodder, flood control and drinking water supply and can play an important role in the production of biological materials and medicinal plants. Hormozgan province as a coastal province in the south of Iran has several wetlands that in this study to identify and determine the density of benthoses of the international wetlands of the estuary of Shoor, Shirin and Minab. Sampling was performed for one year (2016) in Tyab estuary and seasonally. So that 3 stations with three repetitions were considered. For this purpose, sampling of sediments was performed by Van Veen grab with a cross-sectional area of 0.04 m². The different groups of macrobenthos identified during the study period were Annelida, Mollusca, Arthropoda, and other macrobenthos (Nemertean). In Tyab estuary, a total of 23 families of Polychaeta, 5 families of Bivalvia, 6 families of Gastropoda, 7 families of Arthropods, 2 families of Foraminifera and 1 family of Sipuncula were also identified, as well as 37 genera and 9 species of different families. Among them, the most abundance belonged to the foraminifera and also the Polychaeta had a considerable density. Macrobenthos in Tyab estuary had an average frequency of 9427±4376 units per square meter. The wet weight of macrobenthos during the study period in Tyab estuary showed that spring with a rate of 0.60 ± 0.15 and autumn with a rate of 0.03 ± 0.01 g/m² had the highest and lowest values, respectively. The total wet weight during the study period in Tyab estuary with an average of 0.27±0/05 g/m² was estimated.

Keywords: Hormozgan province, Density, Biomass, Tyab estuary, Macrobenthos