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Diversity and Distribution of Macrobenthoses of the Nearshore Coastal Zone of Bahrekan (Persian Gulf)

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Abstract

During summer and winter 2014, forty sediment samples were taken from Bahrekan Bay region using VanVeen grab (0.025 m^2 area). According to the results, 59 species and 52 Genus were identified. There were a positive correlation between %TOM, %Silt and Clay fractions and macrofaunal assemblages. The dominant species in all studied stations were *Cerithium* sp., *Cerithidea cingulata*, *Pseudonoba* sp.2, *Tornatina persiana* and *Paraprionospio pinnata*. Grain size analysis showed that the substrate of study area was muddy. The highest %TOM ranged from 6±0.15 to 20.76±0.33 in winter. The results showed that the positive correlation between %TOM and %Silt and Clay were r=0.79 in the summer and r=0.48 in the winter. The highest and lowest number of individuals of macrofauna were counted in summer (2038 ind. / 0.025 m^2) and winter (1722 ind. / 0.025 m^2) respectively. During this study, Bivalves were the dominant group (%39.14) followed by Gastropoda (%38.47), Polychaeta (%19.23), Crustacea (%2.92), Scaphopoda (%0.17), Echinodermata (%0.07) and Soft Corals (%0.04). The comparison of H′ values with Welch model showed that study area is in the moderate level of this model with low species diversity.

Keywords: *Macrobenthos, Biodiversity indices, Species diversity, Bahrakan Bay, Persian Gulf.*