Distribution of Subtidal Benthic Invertebrates in Chabahar Bay and Surrounding Waters with Emphasis on the Effects of Environmental Factors

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Abstract

To study the distribution of subtidal benthic invertebrates in Chabahar Bay and surrounding waters, samplings were undertaken on April and December 2012. Nine stations were sampled from Pozm to Ramin by using Van Veen grab (250 cm²). Samples mostly belonged to 7 classes (Bivalvia, Gastropoda, Scaphopoda, Malacostraca, Polychaeta, Echinoidea and Ophiuroidea). Ramin (R1) showed the least number of mentioned classes in both sampling periods. P1 in Pozm and K1 in Konarak showed the most abundant sites in first and second sampling periods, respectively. K1 in Konarak had the highest Shanon (1.55) and Simpson (1) indices of diversity, while in second sampling T2 in Tiss and R1 showed the highest Shanon (1.64) and Simpson (1.04) indices, respectively. Although, Kruskal-Wallis test yielded no significant differences in benthos abundance among different sites and different sampling occasions (P>0.05), the results of nMDS and cluster analysis separated T1 and R1 from other sites in first sampling and R1 from other sites in second one. Based on CCA analysis, sediment type had the most effect on benthos distribution.

Keywords: Subtidal, Benthos, Biodiversity, Environmental factors, Chabahar Bay, Gulf of Oman (Makran).