

Monsoon Effects on Polychaetes Biodiversity Patterns in Chabahar Bay (Makran Sea) Subtidal Area

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Abstract

The aim of this paper was to study monsoon effects on polychaetes population structure in subtidal area based on some biodiversity indices. Sediments sampling was carried out by grab van-veen from 12 subtidal stations in three time periods (pre-monsoon, monsoon and post-monsoon). The physical and chemical parameters were also recorded. Mean density of polychaetes were recorded 1101.2 ± 614.3 ind/m² (pre-monsoon), 428.9 ± 316.2 ind/m² (monsoon) and 588.8 ± 313.3 ind/m² (post-monsoon). Shannon diversity indices were 2.08, 1.63, 1.83 respectively. The Hill indices was reversed and showed highest number in monsoon season and minimum number in pre-monsoon. These results represented non-uniform polychaetes distribution during pre-monsoon. Cluster analysis of each season showed that deep stations were in separate disturbances. During the summer monsoon, variations in environmental factors and bottom distractions affected the density and diversity of polychaetes and as a stressor reduced the diversity and density during the monsoon.

Keywords: *Polychaetes, Monsoon, Subtidal, Biodiversity, Chabahar bay, Makran Sea.*
