Investigation of Relationship Between Ecogeomorphology and Granulometry of Bed Sediments Case Study: Bahmanshir River

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Abstract

Precise study of geophysical and ecological characteristics of benthic habitats is very important, because the seabed type of these habitats has close relationship with presence or absence of particular benthic species as well as with their distribution in the benthic communities. The aim of this study was Investigation of Relationship between Ecogeomorphology and Granulometry of Bed Sediments and evaluates the ecological macrobenthos stations sampled, study of environmental factors temperature, electrical conductivity, salinity, acidity (pH) and dissolved oxygen (DO) in River Bahmanshir respectively. This project was during two seasons in the winter of 2011 and summer of 2011 and in the three parts elementary, middle and end of Bahmanshir River. Samples were transported to the environmental laboratory in Khorramshahr University of Marine Science and Technology. After the laboratory tests, the results were analyzed using the SPSS statistical software. Overall in this study, six species belonging to the class Polychaeta (*Nephtys sp. Nereis sp.Capitellacapitata*), crustaceans (*Sphaeroma sp*.), Gastropod (*Triphora sp*.) And nematodes (*Nematode sp.)* were observed. Fine- grained sediments in the study area forming particles (mμ063 / 0>). With increasing depth (200 meters) grading scale is finer and more organic substrate. study also suggests that the aggregation of clay-silt particles were deposited. The results also show that the percentage of coarse particles of silt and clay in the summer has increased, which can cause it to flow from the river in the summer Bahmanshir.

Keywords: Bahmanshir River, Ecogeomorphology, Environmental Factors, Granulometry, Macrobenthos.