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Investigation of the Effect of Monsoon on Diversity and Density of Macrobenthos in Iranian Coast of Makran Sea (Oman Sea)

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Abstract

Sediment sampling for investigation of the effect of environmental factors on abundance and diversity of benthic community was carried out in Makran (Oman Sea) coast in pre and post monsoon with a $0.1m^2$ Van Veen Grab and CTD in 2007 and 2009. Polychaeta, Crustacea, Gastropoda and Bivalvia were the dominant groups of benthic community respectively either in pre or post monsoon. There was a significant difference between abundance in pre and post-monsoon ($P<0.05$). Pearson correlation was significantly different between abundance with depth ($P<0.01$) and DO and temperature ($P<0.05$). Shanoon and margalof indices changed increasingly from west to east of Makran (Oman Sea) coast but there was no significant correlation between diversity indices and environmental factors. The results showed that abundance of macrobenthos community in post-monsoon was more than pre-monsoon because of the Monsoon Sea current and the increase of chlorophyll-a in post-monsoon.

Keywords: *Macrobenthos, Chlorophyll-a, Diversity, Makran Sea,.*