Ecological Assessment of mollusc communities in the rocky shores of Bushehr Province

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Abstract

Present study was carried out to evaluate ecological status of mollusc communities in the rocky shores of Bushehr province. Sampling was performed during three seasons, from winter 2009 to summer 2010. A total of, four stations including rocky shores of Deylam-Genaveh, Bushehr, Dayyer-Kangan and Nayband were selected for sampling. Specimens were collected using 50*50 cm quadrate and metal scraper. The specimens were identified in laboratory using identification key books. In total, 300 sediment samples were collected from mentioned stations. 41 species belonging to three classes of gastropoda (65%), bivalvia (31%) and polyplacphora (chitons) with 4% were identified. The Planaxis sulcatus showed the most abundance among molluscs in the cold season in Deylam – Genaveh region. In the Nayband region, Conus flavidus, Thais savignyi and Chama pacifica were the least abundant species during summer, winter and spring, respectively. Diversity investigation showed that, Nayband in moderate season comprised the most species diversity (3.344). In contrast, Deylam- Genaveh region showed the least diversity (0.617). The results revealed that rocky shores of Deylam to Kangan had moderate to high pollution levels. Due to high levels of tension, low level of stability was observed for mollusc communities of these regions. Nayband, with high level of species diversity, had no pollution and its benthic communities showed high level of stability.

Keywords: Intertidal zone, Diversity, Dominance, Pollution, Bushehr province, Persian Gulf.