Study on Gastropoda population in subtidal area from the eastern coasts of the Chabahar bay

Abstract
In the present study, population structure of gastropoda was investigated from subtidal zone of the eastern coasts of Chabahar bay with sampling of sediments in 4 stations including: Chabahar, Ramin, Lipar and Kochu using Van Veen Grab Sampler during one year. According to the results, the number of 8292 number /m² belonged to the 31 family were identified. The spatial and seasonal mean abundance (number/m²) of gastropoda were: Chabahr: 546±351 (spring: 308±215; summer: 517±299; Autumn: 241±163; winter: 987±621), Ramin: 121±117 (spring: 127±101; summer: 42±38; Autumn: 103±50; winter: 200±191), Lipar: 138±128 (spring: 79±81; summer: 281±170; Autumn: 36±7; winter: 134±127), Kochu: 133±93 (spring: 143±103; summer: 101±65; Autumn: 149±102; winter: 179±79). There were no significant differences between almost sampling stations in terms of seasonal (except Lipar station) and depth-dependent abundance of gastropoda (P>0.05). However, the abundance of gastropoda were significantly higher in depth 15 m than in 5 and 10 m in Kochu station (P<0.05). The richness index increased significantly from spring towards winter (P<0.05). In contrast, Shannon diversity index was higher in autumn and winter than in spring and summer (P<0.05). Also, the richness and Shannon indices increased from Chabahar station towards Kochu station (P<0.05). There were significant correlations between abundance of some gastropod families with sediment and water parameters as follow: Calyptridae vs. pH, Columbellidae vs. pH, Marginellidae vs. O₂, Cyclostomatidae vs. O₂, Pyramidellidae vs. pH, Acteonidae vs. pH, Columbellises vs. O₂, Marginillises vs. pH, Pyramidellides vs. O₂, Fasciolaridae vs. S, Retusidae vs. Silt.

Keywords: Gastropoda, Chabahar bay, population structure, subtidal.