Distribution, abundance and diversity of Polychaetes in the Intertidal Zone of Konarak crab Island

Arash Shakouri[1*]
Elham Agheli[2]

1. Department of Biology, Faculty of Marine Science, Maritime University, Chabahar, Iran
2. M.Sc. student of Marine Biology, Department of Biology, Faculty of Marin Science, Maritime University, Chabahar, Iran

[*]**Corresponding author:**
aarash220@yahoo.com

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Abstract
Since Konarak crab island is a landfill of Chabhar and Konarak cities, study on the effect of pollutions on animals of this region is high important. This study was conducted to identification and introduction species that attend at intertide areas & identification different groups Polychaeta, appointment distribution and density of intertidal polychaetes in Konarak Crab Island. In this study, we examined Population Structure of the Polychaete worms in Konarak Crab Island. Sampled during four seasons (June to March) in 2013 and took three stations along the coast, At each station, three areas of high, medium and low tide samples were taken.Three samples of sediment from each region for the isolation and examin Polychaeta and an sample of sediments were taken for grain size and TOM analysis by quadrat 50×50 cm. One of the study stations is Landfall of the Chabahar and Konarak rubbish and three station has been Wastewater Discharge Konarak Industrial Estate therefore influence of pollution on organisms in this area to have high importance .however at recent years on Polychaeta little research has been done in this area. In total, 40 species of polychaetes belonging to 28 genera and 24 families were recorded. Statistical analysis by two-way ANOVA indicated significant differences between the abundance of polychaetes in sampling terms ($p<0.05$) and sampling stations ($p<0.01$). To intention studing polychaetes diversity situation was calculated. Shannon, Simpson, Margalof indices at each station. Highest and lowest diversity indicated in the second station (testimonial station) and the first station (pollution station), respectively. December and June are allocated maximum & minimum diversity that can attribute to fluctuations due monsoon situation. Sampling periods can indicate dominance of polychaetes in the polluted area.

Keywords: Diversity, Polychaetes, Intertidal, Konarak.