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Benthic Foraminifera Abundance of Sedimentary Sequence in Gorgan Bay, North Iran

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Abstract

The abundance of the benthic foraminifera has been studied along a 1.36m sediment core sample, taken from 3.8m depth of water in the Gorgan bay, south of the Caspian Sea using sedimentological and paleonotological proxies. Sedimentological studies show that the sediments are largely composed of silty sand that rarely changes along the core. The average Total Organic Matter (TOM) and carbonate content are 6.7% and 24.5%, respectively. Totally, six species of foraminifera were distinguished in the sedimentary column, including *Ammonia beccarii*, *Elphidium littoralle capsicum*, *Elphidiella brotzkajae*, *Elphidium shochinae*, *Discorbis aguajoi*, *Cornuspira* sp. which entirely belong to euryhalines. Although, the abundance is high, the results show poor diversity of the species. The abundance and distribution of the benthic foraminifera in the Gorgan Bay could be related to salinity changes, availability of nutrients as well as sea level fluctuation.

Keywords: *Benthic foraminifera, Abundance, Diversity, Gorgan Bay.*