

## Recent Benthic Foraminifera from Coastal Sediments of Neendakara and Varkala Areas, Southern Kerala

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### Abstract

Foraminifera are known for their spectacular fossils record, variety and abundance in modern marine environments. The objective of present study was to identify and illustrate the foraminifera (calcareous micro fauna), occurring in between Neendakara and Varkala beaches and to infer the environmental conditions using foraminifera and ecological parameters such as sand-silt-clay, calcium carbonate and organic matter. During the present study, total 19 sediment samples were collected along these beaches and 45 foraminifera taxa belonging to 27 genera, 16 families and 03 suborders have been identified. The species namely *Assilina ammonoides*, *Ammonia beccarri*, *A. tepida*, *Amphistegina radiata*, *Elphidium crispum*, *Neorotalia calcar* and *Quinqueloculina seminulum* were abundant and widely distributed all along the beaches in the study area. From the distribution of micro fauna, it is inferred that the most favourable sediment type for the population abundance is sand. Few coloured tests with pyritisation were found in the beach samples at Kollam. Broken reworked species were found in the study area due to high tidal agitation. The calcium carbonate content ranges from 0.5 to 30.5%. The stations Neendakara 1, 2 and 3 received more number of carbonates due to huge amount of broken shell debris in the samples. The organic matter content in the study area ranges from 0.1 to 1.7%. The maximum content of organic matter found in the stations Neendakara and Pollikara *i.e.* 1.3% and 1.7%.

**Keywords:** Foraminifera distribution, Environment and ecology, Neendakara and Varkala, Kerala coast