

Ecology of Benthic Ostracoda From Off Rameswaram, Southeast Coast of India

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ABSTRACT. Ostracoda are bivalve crustacean that live in marine through brackish environment. The study area is off Rameswaram in the Palk Bay. The latitude and longitude are N 9°17' and from E 79°19' to 79°25'. As Rameswaram and its environ experiences four types of seasons in a year, namely, Winter (January - March), Summer (April - June), Southwest monsoon (July - September) and Northeast monsoon (October - December), ten sediment and bottom water samples were collected during every season, totaling to forty in a year. The Depth, Temperature, pH, Salinity, Dissolved oxygen and Nutrients regarding water samples and CaCO₃ and Organic matter in sediments were determined apart from the type of sediment. A portion of the sediment sample from each location during every season were preserved in the field using 10% formalin and latter processed in the laboratory for determining and counting of living and total population of benthic Ostracoda. Individual species of Ostracoda were identified and their living and total population were determined from every samples for all seasons. Based on the size of the population, widespread and abundantly occurring nature, the ecology of six species were computed. The six species are 1) *Loxoconcha lilljeborgii* Brady, 2) *Mutilus pentoekensis* (Kingma), 3) *Neocytheretta murilineata* Zhao and Whatley, 4) *Neomonoceratina iniqua* Brady, 5) *Tanella gracilis* Kingma, and 6) *Xestoleberis variegata* Brady. The population size of all these six species exceeds 62% of the total population size during all the seasons.

Key words: Ecology ,Ostracoda.

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