**Abstract**

The Gulf of Mannar Biosphere Reserve (GoMBR) considered to be one of the world's richest marine biological resources, has 21 islands with fringing coral reefs that support diverse flora and fauna, including benthic foraminifera. One such island, UpputhanniTheevu (UTT) was, therefore, chosen for the present study. From the foraminifera separated from 18 surface sediment samples collected at depths varying between 1.0 m and 12.1 m, 109 benthic foraminiferal species belonging to 46 genera were identified. The foraminiferal assemblage was dominated by Miliolids and Rotaliids. Lagenids were poorly represented. In general, living populations constituted <5% of the total populations of benthic foraminifera in the study area which was in contrast to reports that living foraminiferal populations in coral reef areas were usually on the higher side. During July 2009, the following decreasing order of species abundance was recorded: C. spengleri> P. calcar> C. calcar> P. nipponica> T. tricarinata> S. communis> H. depressa> S. arietina. In the subsequent February collection, it was C. calcar> P. calcar> C. spengleri> P. nipponica> T. tricarinata> S. communis> H. depressa = S. arietina (Keywords: Benthic foraminifera, Gulf of Mannar Biosphere Reserve, coral island, ecology, biodiversity index).