**Abstract**

Coral reef ecosystems have high biological diversity with the greatest number of species than any other marine ecosystem. The Gulf of Mannar Biosphere Reserve (GoMBR) is a globally significant, ecologically sensitive marine ecosystem, and considered to be one of the world’s richest marine biological resources. It contains 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 and 12.1 m during two seasons, 109 benthic foraminiferal species belonging 46 genera were identified. It was observed that living foraminiferal populations are low ( 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. A comparison of the species diversity index and species equitability percentage (SEP) shows that both are much higher in the study area than in the four atolls of the Laccadives.