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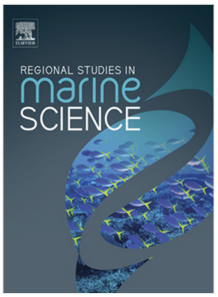

Distribution, diversity and carbon content of the tintinnids from the coastal waters of Port Blair, South Andaman

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Distribution, diversity and carbon content of the tintinnids from the Coastal waters of Port Blair, South Andaman

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Abstract

The interaction between the environment and tintinnids inhabiting coastal waters of south Andaman was studied based on year round collections made during September 2012-August 2013 in the bay, eastern and western region of south Andaman. Tintinnids showed a positive correlation with salinity, pH and a weak correlation with chlorophyll *a.* Tintnnids were the most abundant group of organisms, which contributed maximum (avg. 43.8±7.9%) to the microzooplankton community. Dominance of tintinnids in the microzooplankton community may be due to their euryhaline and eurythermal nature. A total of 48 species belonged to 20 genera of Tintinnids were identified during the study period. Tintinnopsis was the most dominant genera among the loricate ciliates (avg. 57%) in this study area and the abundance gradually decreased as they move away from the shore which can be recognized as indicator species of different water masses due to their hard loricae. There was a gradual decline in the carbon content of Tintinnids from the bay region (0.054 µg. L^{-1}) to the open ocean. (0.026 µg. L^{-1}) could be due to the increasing pH (avg.8.0) which decrease the cellular content of Carbon and Nitrogen in the cells.

Key words: Tintinnids; Lorica volume; Coastal waters; South Andaman.