## **Studies on Biodiversity of Andaman Sea**

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During Andaman Voyage, the physical, chemical and biological characteristics have been studied at eight stations in the Andaman Sea onboard research vessel ROV Sagar Manjhusha during September 2008. The islands are of volcanic origin. Most of these islands are surrounded by fringing reef on their eastern side and barrier reef on their western side. It harbours a rich population of corals, mollusks and is surrounded by thick mangrove vegetation. The physical and chemical parameters are determined in the present study and qualitative and quantitative analysis for phytoplankton and zooplankton were carried during the cruise. The salinity of surface sea water varied between 32 ppt to 34 ppt eastern part of Andaman Sea. The sea water temperature was drastically reduced to 14.7° C at 250m depth near Norcondam island and 12.3° C at 500m depth near Barren island from their surface sea water temperature of above 28° C. The values of pH showed 8.11 as minimum at station 2 and maximum as 8.4 at both stations 7 and 8. The higher nutrient values have been recorded in deeper waters when compared with surface waters at many stations. The phytoplanktons a total of 102 species have been identified. The total phytoplankton density of these stations was observed to be in the range between 614 to 19825 nos/l. Among the recorded species Nitzchia seriata, Nitzchia closterium and Skeletonema costatum were dominating in all stations. A total of 96 species of zooplankton belong to 19 groups and 74 genera were recorded during the study. Copepods were the dominant group at all the stations and their composition of occurrence ranged from 30.39% to 44.3%. The species diversity of zooplankton during the present study was ranged from 2.18 to 3.45. The diversity of copepod found dominant as it represented by 37 species followed by foraminiferans with 19 species. The results obtained from the study revealed that the species diversity of zooplankton in Andaman Sea are comparatively higher in order. Sea weed Sargassam sp sources are richer at Andaman sea and coastal Andaman island. Two species of flying fishes such as Cypseturus oligolepis and Cheilopogon furcatus were recorded. The bottlenose dolpin Tursiops trunctus was sighted along the fringe of Narcondam Island. Most of the Andaman sea floor is rocky and coral.