



## LATITUDINAL VARIATIONS IN THE ABUNDANCE OF PLANKTIC FORAMINIFERA ALONG THE INDIAN OCEAN SECTOR OF THE SOUTHERN OCEAN

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### ABSTRACT

During the 199C and 200<sup>th</sup> (also known as Pilot expedition to Southern Ocean) cruises of ORV Sagar Kanya between 9.69° N and 55.01° S latitude and 80° E and 40° E longitude, nineteen surface sediment samples were considered for present study, for which we simultaneously collected salinity data at near surface, 50 m and 100 m depths, using CTD. The planktic population is dominated by species such as *Globigerina bulloides*, *Globigerinoides ruber*, *G. sacculifer*, *G. conglobatus*, *Orbulina universa*, *Neogloboquadrina pachyderma*, *Globorotalia menardii*, etc. However, for the present purpose, the total planktic foraminiferal population was estimated in one gram dry sediments to assess the changes in their abundance along the north-south transect in the Indian Ocean Sector of Southern Ocean. Attempts are made to establish inter-relationship of planktic foraminiferal population vis-à-vis salinity and other allied factors such as nutrient (phosphate) content of the ambient water masses.

**Keywords:** Planktic foraminifera, abundance, latitudinal variations, Indian ocean