



Diurnal Variation of Phytoplankton in the Kali Estuary, Karwar, West Coast of India

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Abstract: Along with different hydrographic parameters variations in phytoplankton density and photosynthetic pigments were studied at every two hour for 24 hours, at a fixed station in the lower reaches of the Kali estuary. During flood tides, the species diversity and phytoplankton density increased and decreased during ebb tides. Considerable discrepancy (about 12%) was noticed between cell counts of day and night high waters. Oscillation in Chl. a, followed by the cell number. Among the nutrients, silicate and nitrate concentration was increased markedly during ebb tide periods. An inverse relationship was noticed between salinity and nutrients like nitrite, nitrate, phosphate and silicate. Linear relationship was observed between salinity and nitrate and salinity with silicate compared to salinity versus nitrite and phosphate.

Key Words: Phytoplankton, Kali estuary, Chlorophyll
