

SEASONAL SURVEY ON THE ALGAL DIVERSITY OF THE KADALUNDY ESTUARY-KOZHICODE DT., KERALA, INDIA.

VIDYA PADMAKUMAR AND SHINE P JOSEPH

Abstract: A research work carried out during the period of January 2018 to December 2018 on the diversity of algae and their seasonal variations in the estuarine area of Kadalundy Bird Sanctuary, Kozhikode, Kerala, is reported here. Air and surface water temperatures varied from 26 to 30°C and 24 to 28°C respectively. The salinity values in ‰ varied between 5 and 35 with pH between 7.9 and 9.1. The dissolved oxygen content measured ranged 4.08 to 7.2 mg/l. The quantities of organic nutrients in µM viz., nitrate, nitrite, phosphate, silicate and ammonia were noted in ranges 1.3-6.7; 0.05-1.5; 0.04-4.7; 18.01-200.74 and 0.001-0.08 respectively. In this study, presently 4 species of macro-algae were identified- Ulva, Sargassum, Enteromorpha and Chaetomorpha: 112 species of micro algae were recorded from the families- Bacillariophyceae (59), Dinophyceae (23), Cyanophyceae (9) and Chlorophyceae (21). The maximum density of algae during stable hydrological conditions was during summer as well as pre monsoon seasons due to direct correlation to the salinity of the region. Comparatively less density of algae was found during the winter as well as monsoon seasons also with significant lower salinity during monsoon. The occurrence and density can hence be assessed as directly dependent on the seasonal patterns and species-specific environmental factors in the estuarine areas.

Vidya Padmakumar, Shine P Joseph
Dept. of Studies and Research in Biosciences, Mangalore University,
Mangalagangothri, Mangaluru, Dakshina Kannada, Karnataka, India