

3rd International Conference on **Hydrology & Meteorology**

September 15-16, 2014 Hyderabad International Convention Centre, India

Seasonal variation and diversity of phytoplankton in Arekurahatti lake of Navalgund, Dharwad district in Karnataka-India

Ratna V Airsang and H C Lakshman
Karnataka University, India

The present paper deals with the seasonal study of Phytoplankton belonging to four different classes of algae in Arekurahatti lake. Physico-chemical characteristics of this Lake were analyzed from May 2012 to April 2013. The variable physicochemical parameters like Temperature, pH, Turbidity, Alkalinity, Total hardness, Dissolved oxygen, Nitrates, Phosphates, Chemical oxygen demand etc. were played an important role in the diversity of Phytoplankton. During summer, Cyanophyceae and Bacillariophyceae members were found dominant over Chlorophyceae and Euglenophyceae. Interestingly, during rainy season the population of Euglenophyceae, Bacillariophyceae and Cyanophyceae members were documented more compared to chlorophyceae members. But during winter, Chlorophyceae, Cyanophyceae, Bacillariophyceae members were found more or less in equal population and Euglenophyceae members were found to be least in number. Ecological significance of the Arekurahatti Lake and distribution of phytoplankton population has been discussed.