



Seasonal Variations in Physico Chemical Characteristics of Dal Lake, Kashmir

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Abstract: The present paper deals with the assessment of different physico chemical parameters of Dal lake, Kashmir during December 2011–November 2013. Transparency varied from 0.2 m to 1.5m and was maximum in summer after the melting of snow. Conductivity varied from 100 to 592 μ S/cm and was maximum in spring and minimum in summer in both the years. pH values varied from 7.2 to 9.5 and it showed an increase with increasing water temperature indicating a positive correlation with the latter. Dissolved oxygen was recorded higher in spring and lower in summer. High alkalinity indicated productive nature of lake. Total hardness was due to the source of Ca^{++} and Mg^{++} owing to its origin to the lacustrine deposits in the valley. The lake is calcium rich water. Ammonical and nitrate nitrogen was maximum in winter due to slower metabolic processes. On the basis of phosphorus range Hazaratbal basin and Brarinumbal basin of Dal lake fall under hyper eutrophic category. Results indicated that Brarinumbal basin differ from other basins of the Dal Lake tremendously in nature as it is undergoing fast eutrophication due to pollution caused by domestic sewage, organic wastes and agricultural run off which has enriched the lake water.

Keywords: Conductivity, Calcium, Dissolved oxygen, hyper eutrophic, Phosphorus
