



## Appraisal of water quality of lentic water body in Hassan District, Karnataka with Respect to Trophic Status

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**ABSTRACT:**

Lentic bodies are very important part of our natural Heritage. They have been widely utilized by mankind over the centuries to the extent that very few, if any are now in a "Natural" condition. Channarayapatna water body was chosen for a water quality study because currently this water body was found to be altered due to anthropogenic and agricultural activity. We have found a general relationship between trophic status of a water body and the aquatic plants present there. We have also found the alteration of water quality due to the presence of various aquatic plants. The present study was carried out to determine the physico-chemical characteristics in water in Channarayapatna water body, Hassan District, Karnataka of India during January to December 2011 and also compared seasonal variations in the water quality. The minimum and maximum values of atmospheric and surface water temperatures (°C), salinity (%), pH and dissolved oxygen (ml/L) were: 26.0-35.0; 25.0-33.5; 8.0-35.0; 7.2-8.2 and 2.8-5.5 respectively. The ranges of nitrate, nitrite, phosphate and silicate were: 5.2-14.3; 0.8-3.2; 0.3-2.20 and 0.2-0.8 respectively.

**Keywords:**

Physico-chemical parameters, Water body, trophic status.