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## SEASONAL VARIATION IN PHYSICO-CHEMICAL PARAMETERS OF TEKEZE RESERVOIR, NORTHERN ETHIOPIA

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### ABSTRACT

*Tekeze reservoir is situated in the northern part of Ethiopia. Physico-chemical parameters of reservoir water such as temperature, dissolved oxygen (DO), pH, transparency, electric conductivity, total dissolved solids (TDS), alkalinity, total hardness, phosphate and sulphate levels was carried out from August 2013 to July 2014 from three sampling stations to access the water quality. The water temperature ranged between 24.19 – 27.30°C, dissolved oxygen ranged between 4.51 – 6.76 mg/l. The pH, transparency, conductivity and TDS were 7.14 – 8.64, 46.67 – 305.33 cm, 233.30 – 452.00 µs/cm and 0.91 – 1.77 g/L, respectively. There was significant difference ( $p < 0.05$ ) between all the parameters measured, except for water temperature among the seasons, but there was no significant different ( $p > 0.05$ ) in all the parameters between the stations and all the recorded values were within the recommended limit for fish production.*

**Keywords:** Conductivity, Physico-chemical, Tekeze reservoir, Seasonal variation

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