International Journal of Applied and Natural Sciences (IJANS) ISSN(P): 2319-4014; ISSN(E): 2319-4022 Vol. 8, Issue 6, Oct–Nov 2019; 21-28 © IASET



## COMPARATIVE STUDIES OF SOME PHYSICO-CHEMICAL PARAMETERS OF WATER IN TWO TROPICAL RESERVOIRS

## Olumuyiwa Olasunmibo Ajala & Olatunde O. Fawole

Research Scholar, Department of Pure and Applied Biology, Ladoke Akintol a University of Technology,
Ogbomoso, Nigeria

## **ABSTRACT**

Some physico-chemical parameters of Oba reservoir accessed through Ibese, in Ogbomoso North local government, Oyo state, Nigeria and Erinle reservoir accessed through Oree, in Odo-otin local government, Osun state, Nigeria, were investigated over a two year period (2016-2018). The selected parameters were water temperature, hydrogen ion concentration (pH), dissolved Oxygen (DO), biochemical Oxygen demand (BOD), and electrical conductivity. Standard methods were used for the determination of these values. Seasonal variation of mean values of all the parameters studied except temperature, showed significant differences in seasons (dry and raining seasons). Although the mean values for all the parameters in the two reservoirs fell within standard aquaculture values, there were significant differences (p < 0.05) between the two reservoirs in some parameters. These suggested that Oba reservoir is probably, relatively polluted than Erinle reservoir. The values recorded in Oba reservoir showed a sharp deviation from values of previous studies in the reservoir. This indicated the possibility of introduction of polluting agentsin recent past as a result of increased anthropogenic activities around the tributaries feeding the reservoir.

KEYWORDS: Anthropogenic, Parameters, Physico-Chemical, Pollution

Article History

Received: 14 Sep 2019 | Revised: 29 Sep 2019 | Accepted: 22 Oct 2019

<u>www.iaset.us</u> editor@iaset.us