

**EFFECTS OF WATER LIMNOLOGY AND ENTEROPARASITIC INFESTATION  
ON MORPHOMETRICS OF *OREOCHROMIS NILOTICUS* (LINNE, 1757)  
(CICHLIDAE) IN A TROPICAL RESERVOIR**

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**ABSTRACT**

Water quality and enteroparasitic infestation are factors that affect the productivity of fish aquaculture. American Public Health Association's methods were used to determine Limnological characteristics of water while morphometric and enteroparasitological studies of *Oreochromis niloticus* were done using standard methods. Temperature of water in the reservoir was detected to be declining in value when compared with previously acquired data as a result of climate change. The water was turbid and *O. niloticus* was found to thrive well in the turbid water as indicated by the abundance and condition factor values obtained in the two years of study. Values of investigated limnological characteristics were within acceptable standards for fish aquaculture. The growth pattern of the fish in the reservoir was positively allometric. Gastro - intestinal helminth parasites recovered were comprised of two Acanthocephalan (*Neoechinorhynchus rutili*, *Acanthocephalus tilapiae*) and the metacercaria of a Trematode, (*Clinestomum tilapiae*). Infestation by enteroparasites was found to affect the correlation coefficient of length - weight relationship in infested fishes, though the difference in length and weight was not significant ( $p = 0.05$ ) from those of uninfested fishes.

**Keywords:** *Oreochromis niloticus*, Morphometry, Limnology, Enteroparasite.