

ABSTRACT

THE EFFECT OF PHOTOPERIOD ON THE GROWTH OF AFRICAN CATFISH (*Clarias gariepinus*) JUVENILE

By

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African catfish is a nocturnal fish (*C. gariepinus*). Active period of foraging might effect the growth rate of catfish. The aim of the study was to determine the effect of photoperiod on the growth of African catfish. Complete Randomized Designed (CRD) was assigned on the research which consist of 5 different photoperiod treatments namely A (6 hours light and 18 hours dark), B (12 hours light and 12 hours dark), C (18 hours light and 6 hours dark), D (24 hour dark and light 0 hours), and E (0 hours of light and 24 hours dark) and 3 replications for each treatment. ANOVA test results showed that photoperiod significantly effect the weight and length growth, but not significantly effect on Survival Rate (SR). The results showed that the longer dark period the higher the growth. Weight and length growth was highest in treatment E (24 hours dark end 0 hours light) with average weight of 1.989 gram, and with average growth of 7.044 cm long.

Key words: African catfish, photoperiod and growth rate.