GROWTH, SURVIVAL AND SKIN COLORATION OF NILE TILAPIA (*Oreochromis niloticus*) FRY FED WITH DIET CONTAINING CAROTENOID PIGMENTS FROM SQUASH (*Cucurbita maxima*) LEAVES

BY

MARINEL B. DELA CRUZ

An undergraduate thesis proposal submitted to the faculty of College of Fisheries in partial fulfillment of the requirements for the degree of

BACHELOR OF SCIENCE IN FISHERIES

COLLEGE OF FISHERIES
CENTRAL LUZON STATE UNIVERSITY
Science City of Muñoz, Nueva Ecija
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GROWTH, SURVIVAL AND SKIN COLORATION OF NILE TILAPIA (*Oreochromis niloticus*) FRY FED WITH DIET CONTAINING CAROTENOID PIGMENTS FROM SQUASH (*Cucurbita maxima*) LEAVES [1/]

ABSTRACT

The study evaluated the effect of varying levels of carotenoid pigments from squash (*Cucurbita maxima*) leaves on the growth, survival and skin coloration of Nile tilapia (*Oreochromis niloticus*) fry reared in glass aquaria. The treatments evaluated were Treatment I- commercial feeds + 0 mg pigment extract, Treatment II- commercial feeds + 500mg carotenoid pigment from squash leaves and Treatment III- commercial feeds + 1000mg carotenoid pigment from squash leaves.

Nile tilapia in Treatment I obtained the highest final weight and gain in weight while Nile tilapia in Treatment III obtained the highest specific growth rate. However, analysis of variance revealed that final weight, gain in weight, and specific growth rate of Nile tilapia in all treatments were not significantly different. Fish survival in three treatments were also comparable.

Nile tilapia in Treatment III showed more intense skin coloration compared to other treatments. Analysis of variance revealed that skin coloration of Nile tilapia in Treatment 3 was significantly more intense compared to those in other treatments.

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