

**EFFECT OF CAROTENOID PIGMENTS FROM CARROT (*Daucus carota*)
PEEL ON THE GROWTH, SURVIVAL AND SKIN COLORATION
OF RED TILAPIA (*Oreochromis sp.*) FRY**

by

RENIEL REYES DANDAN

An Undergraduate Thesis presented to the faculty of College of Fisheries in partial fulfillment of the requirement for the Degree of

BACHELOR OF SCIENCE IN FISHERIES

**Department of Aquaculture
COLLEGE OF FISHERIES
CENTRAL LUZON STATE UNIVERSITY
Science City of Muñoz, Nueva Ecija
Philippine**

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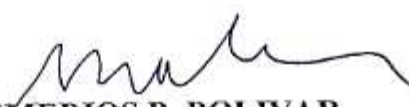

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ABSTRACT

The present study was conducted to determine the effect of carotenoid pigments from *Daucus carota* peel on the growth, survival and skin coloration of red tilapia (*Oreochromis* sp.) fry. The treatments evaluated were 0 mg (control), 500 mg (Treatment II), and 1000 mg (Treatment III) of carotenoid pigments from *D. carota* peel. The feeding experiment was conducted for 30 days. The growth parameters were determined bi-weekly and skin coloration was determined after 30 days of culture period.

Red tilapia fry fed with commercial feeds with 1000 mg of carotenoid pigments from *D. carota* peel had the highest final weight, gain in weight, specific growth rate and survival rate, followed by red tilapia fed with commercial feeds with 500mg of carotenoid pigments from *D. carota* peel. Red tilapia fed with commercial feeds obtained the lowest final weight, gain in weight, specific growth rate and survival rate. However, analysis of variance revealed that final weight, gain in weight, specific growth rate and survival rate of experimental fish in all treatments were not significantly different.

Red tilapia fry fed with commercial feeds with 1000 mg of carotenoid pigments from *D. carota* peel (Treatment III) showed darker skin coloration compared to the other treatment. Analysis of variance revealed that red tilapia in Treatment III had significantly intense skin coloration than red tilapia in Treatments I and II.

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