

**GROWTH, SURVIVAL AND SKIN COLORATION OF RED TILAPIA
(*Oreochromis sp.*) FRY FED WITH CAROTENOID PIGMENTS
FROM WATER SPINACH (*Ipomoea aquatica*) LEAVES**

by

JENNELLE ALCANTARA GALVAN

An Undergraduate Thesis presented to the faculty of the College of Fisheries
in partial fulfilment 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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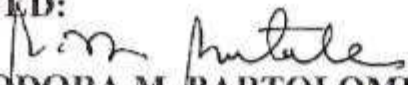
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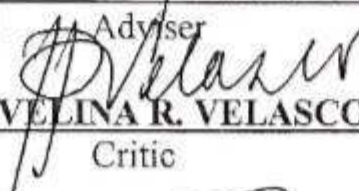
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ABSTRACT

The 30-day feeding experiment was conducted in aquaria to evaluate the growth, survival and skin coloration of red tilapia (*Oreochromis sp.*) fry fed with diet containing carotenoid pigments from water spinach (*Ipomoea aquatica*) leaves. The treatments evaluated were Treatment 1 (commercial feeds (control) + 0 carotenoid pigments from water spinach leaves), Treatment 2 (commercial feed + 500 mg carotenoid pigments from water spinach leaves) and Treatment 3 (commercial feeds + 1000 mg carotenoid pigments from water spinach leaves).

The red tilapia fed with commercial feeds + 1000 mg carotenoid pigments from water spinach leaves obtained the highest final weight and gain weight, while those fed with commercial feeds + 500 mg carotenoid pigments from water spinach leaves obtained the highest survival rate. Analysis of variance revealed that final weight, specific growth rate, survival rate and gain in weight of red tilapia in all treatments were comparable.

Result of the study showed that red tilapia fed with commercial feeds + 500 mg carotenoid pigments from water spinach leaves had more intense skin coloration compared to the other treatments. However, analysis of variance showed that skin coloration of red tilapia in three treatments were comparable.

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