EFFECT OF PIGMENT EXTRACT FROM SWEET POTATO (*Ipomoea batatas*) LEAVES ON THE GROWTH, SURVIVAL AND SKIN COLORATION OF RED TILAPIA FRY (*Oreochromis* sp.)

by

SUNSHINE VALEROSO AMO

An Undergraduate Thesis presented to the faculty of the 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

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SUNSHINE VALEROSO AMO

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EFFECT OF PIGMENT EXTRACT FROM SWEET POTATO (*Ipomoea batatas*) LEAVES ON THE GROWTH, SURVIVAL AND SKIN COLORATION OF RED TILAPIA FRY (*Oreochromis* sp.) [1/]

ABSTRACT

The study evaluated the effect of pigment extract from sweet potato (*Ipomoea batatas*) leaves on the growth performance, survival and skin coloration of red tilapia fry reared in indoor glass aquaria. Treatment I – control diet (with 0mg of pigment extract); Treatment II – treatment with 500 mg pigment extract and Treatment III – treatment with 1000 mg pigment extract were the treatments evaluated.

Results of the study showed that final weight, body weight gain, absolute growth rate and specific growth rate of red tilapia fed with diet with 1000 mg pigment extract were higher than those fed with diet with 500 mg pigment extract and diet without pigment extract. However, analysis of variance revealed that differences were not significant among the treatments. Survival rates were likewise comparable.

Skin colorations of red tilapia were compared to a color chart and comparison revealed more intense coloration of red tilapia fed with diet with 1000 mg pigment extract than those fed with diet with 500 mg and diet without pigment extract. However, analysis of variance showed that skin coloration of fish among the three treatments were comparable.

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