

**ACTIVATED-CHARCOAL ON THE WATER QUALITY OF RED TILAPIA
(*Oreochromis* spp.) CULTURE**

by

CHRISTOPHER ANIN FERNANDEZ

An Undergraduate Thesis submitted to the faculty of the College of Fisheries in partial
fulfilment of the requirements of the degree of

BACHELOR OF SCIENCE IN FISHERIES

**Department of Aquatic Post-Harvest
COLLEGE OF FISHERIES
CENTRAL LUZON STATE UNIVERSITY
Science City of Muñoz, Nueva Ecija
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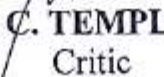
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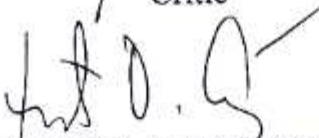

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ABSTRACT

A 30-day experiment was conducted to determine the effect of powdered activated-charcoal in teabag on water quality of Red tilapia (*Oreochromis* spp.) specifically on ammonia. Four treatments were used and replicated thrice: Treatment 1 (control), Treatment 2 (10 grams of activated-charcoal), Treatment 3 (20 grams of activated-charcoal) and Treatment 4 (30 grams of activated-charcoal). At the of the experiment treatments in the variables of temperature, pH and total ammonia nitrogen have no significant differences. Also the calculated nitrite and nitrate means were not significant different to all treatments. Dissolved oxygen showed significant difference ($P<0.05$) in T1 to all treatment, the same with T2 it is significant different to all treatment. T3 and T4 were not significantly different but significantly different to T1 and T2, it is might due to the imbalance pressure of the aerator pump in the wet laboratory. Regarding the fish survival, T1 has the highest rate due to the very fine particles of activated-charcoal that comes out in teabag once it was soaked in the water. Very fine particles of activated-charcoal settle at the bottom and considered waste that accumulates and might be porous that could have an effect to the experimental fish.

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