

**EFFECT OF NONI (*Morinda citrifolia*) AQUEOUS LEAF EXTRACT ON  
WATER QUALITY IN REARING NILE TILAPIA  
(*Oreochromis niloticus*) FINGERLINGS  
IN AQUARIA**

**By**

**ALEXIS RAMIREZ DUQUE**

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

**BACHELOR OF SCIENCE IN FISHERIES**

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

**2019**



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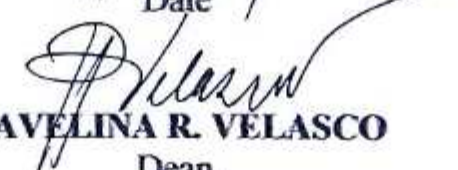
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## ACKNOWLEDGEMENT

The author would like to express his sincere and deepest gratitude to those who render their time for improving this piece of work:

First and foremost, the author would like to praise and thank the Almighty God for the countless blessings, wisdom, knowledge, guidance, protection and unending love He provided to the author.

To Prof. Janet O. Saturno, the author's very approachable adviser, for her understanding, thank you for the support and advice and for the effort and suggestion given in editing this paper for improvement.

To Ma'am Rea Mae C. Templonuevo, his critic, thank you for showing great patience, consideration and understanding, for diligent criticisms that led to the improvement of this piece of work.

To Dr. Remedios B. Bolivar, the College Research Coordinator for her considerations and for the patience, comments, suggestions and criticisms in editing this paper.

The author would like to take this opportunity to express a profound gratitude to all his mentor: Dr. Ravelina R. Velasco (Acting Dean), Dr. Lorenz J. Fajardo, Dr. Emmanuel M. Vera Cruz, Prof. Rodora M. Bartolome, Dr. Karl Marx A. Quiazon, Dr. Jose S. Abucay, Dr. Apolinario V. Yambot, Dr. Alvin T. Reyes, Prof. Janet O. Saturno and Ms. Rea Mae C. Templonuevo for all lessons and information imparted to the author, also for guiding the author during his college days.

My appreciation also goes to all the staff of the College of Fisheries and the Freshwater Aquaculture Center.

To Mrs. Juliet Holasca for sharing her knowledge, for the motivation and inspirational advices, for providing some materials needed and even her personal things during the author's conduct.

To Kuya Ruel for extending his helping hand without doubt and for guiding the author throughout his thesis conduct.

Special thanks goes to Sir Eddie Boy Jimenez for providing fish for his study.

To his classmates and friends, for priceless friendship and for all the memorable moments: Paulo, Noriel, Dan Dan, Ped, Glenn, Dada, Martin, Undan, Jeric, Bagis, Maricar, Elisa, Elna, Erline Rose, Emily and Melissa.

Special thanks to Niko Macaraeg for helping the author in analyzing the data gathered and for sharing his knowledge.

To all the thesis buddies of the author: Jhaymee, Maryly, Maybell, Gattoc, Palpox and Arjay for accompany the author during the sampling.

To his laboratory mates during water quality analyses.

To Alex and Daniel for the assistance during the preparation of the reagents.

To Benjamin for teaching on how to use the spectrometer.

To krizza for the documentations.

Special thanks to his special friend, Maricel Nueda Macapagal for the support, patience, motivation, encouragement to finish this piece of work. The author is very thankful and blessed to have these good people in his life.

Finally, sincerest thanks to his very supportive and caring parents, Mr. and Mrs. George and Maribeth Duque for all the efforts and sacrifices they provided, for the trust, and unending love and care, for supporting him financially, morally and spiritually, for all the encouragement and for all the things they have done to the author and to his siblings: Marie Joy and Grichelle, for always being there to help him all the way.

And for all those who have not mentioned but contributed greatly for the accomplishment of this paper. THANK YOU SO MUCH!!!

**ALEXIS RAMIREZ DUQUE**

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**ABSTRACT**

The 90-day experiment was conducted to determine the effect of noni (*Morinda citrifolia*) leaf extract directly applied in the rearing water of Nile tilapia (*O. niloticus*) fingerlings in aquaria. The study aimed to assess the effect of leaf extract on the water quality of Nile tilapia fingerlings. The study had three treatments which were replicated thrice: T1 - control, T2 - 40 mg/ml of noni leaf extract and T3 - 80 mg/ml of noni leaf aqueous extract. The extract was applied daily in the rearing water.

The results on the water quality parameters such as DO, pH and TAN were not significant ( $P > 0.05$ ) among treatments. All water quality parameter readings except DO were within the range for the rearing of Nile tilapia. The growth parameters evaluated are: initial weight, final weight, initial length, final length, gain in weight, and specific growth rate, feed conversion ratio. Analyses of variance of all growth parameters except final length were not significantly different. Analysis of variance showed that the mean operating expenses among treatments were significantly different.

It is suggested that to have another study be conducted using of other culture facilities such as pond or tanks. It is further recommended to use another extraction procedure and likewise to use higher concentration in the future studies.

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<sup>1/</sup> Undergraduate thesis presented to the faculty of College of Fisheries, Central Luzon State University as a partial fulfillment of the requirements for the degree of Bachelor of Science in Fisheries. Prepared at the Department of Aquatic Post-Harvest under the supervision of Prof. Janet O. Saturno.

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