

**EARLY GROWTH AND SURVIVAL OF NILE TILAPIA (*Oreochromis niloticus* L.)  
FED WITH HORSERADISH (*Moringa oleifera*) SEEDS**

**by**

**JOMARIE SHANE IGNACIO ESCUADRO**

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 Aquatic Resources, Ecology and Management  
COLLEGE OF FISHERIES  
CENTRAL LUZON STATE UNIVERSITY  
Science City of Muñoz, Nueva Ecija  
Philippines**

2018



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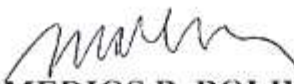
  
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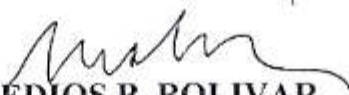
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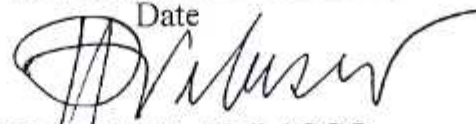
  
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## ACKNOWLEDGEMENTS

The author would like to extend her deepest gratitude to the following persons behind the success and accomplishment of this paper:

First of all, to our God Almighty for giving the author the strength, knowledge, wisdom, guidance and patience that she needed to finish this paper.

To the author's family, to her grandparents, Mr. Jorge C. Escudro and Mrs. Julie C. Escudro; parents, Mr. Joel C. Escudro and Mrs. Lotgarda I. Escudro and to her siblings, Xyriel, Gabriel, Vincent also to her cousin Zxyka for their love, encouragement, sacrifices, moral and financial support they gave to the author which inspire her to give her best in making this paper.

To her adviser, Dr. Ravelina R. Velasco; her critic, Prof. Rodora M. Bartolome, and the College Research Coordinator, Dr. Remedios M. Bolivar for their unfailing and unselfish support, guidance, encouragement and the knowledge they shared for the improvement of this paper.

The author would like to extend her gratitude to all the faculty members of the College of Fisheries, Dr. Emmanuel M. Vera Cruz, Dr. Jose S. Abucay, Prof. Janet O. Saturno, Ms. Claire Samantha T. Juanico, Dr. Alvin T. Reyes, Dr. Lorenz J. Fajardo, Ms. Rea Mae C. Templonuevo and Dr. Apolinario V. Yambot, for imparting knowledge, skills and learning they have contributed to the author.

The author would also like to thank Ms. Juliet D. Holasca and Mr. Roel Gabales for their help during the conduct of this study in the Wet Laboratory.

To her classmates and friends such as Ms. Laura Marie, Kris Angel, Camille, Janessa, Grichelle and Maricar. For their support and encouragement to finish this paper. Also to Ms. Jemimah Ann T. Torrado for all the laughter she and the author shared for four years. To her boyfriend Mr. Renato T. Rivera for his indefatigable support.

The author is very thankful and blessed to all those who is in one way or another extended assistance to her.

Glory to God!

**JOMARIE SHANE I. ESCUADRO**

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# EARLY GROWTH AND SURVIVAL OF NILE TILAPIA (*Oreochromis niloticus* L.) FED WITH HORSERADISH (*Moringa oleifera*) SEEDS<sup>1/</sup>

## ABSTRACT

The study evaluated the effect of horseradish (*Moringa oleifera*) in the early growth and survival of Nile tilapia (*Oreochromis niloticus* L.) fry reared in glass aquaria. The treatments evaluated were Treatment 1-(control) 100 % commercial feeds, Treatment 2- 90% commercial feeds with 10% *M. oleifera* seeds, and Treatment 3-70% commercial feeds with 30% *M. oleifera* seeds.

The general objective of this study was to evaluate the effect of horseradish (*Moringa oleifera*) seeds on the early growth and survival of Nile tilapia (*Oreochromis niloticus*) fry.

Results of the study showed that Nile tilapia fry fed with 10% and 30% *Moringa oleifera* seeds had higher final weight, body weight gain, specific growth rate and survival rate than those fed with pure commercial feed. Analysis of variance, revealed that differences in final weight, specific growth rate, body weight gain and fish survival were significantly different among treatments ( $p < 0.05$ ). Inclusion of horseradish seeds demonstrated a positive effect on the growth and survival of Nile tilapia.

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<sup>1/</sup> Undergraduate thesis presented to the faculty members of College of Fisheries, Central Luzon State University as partial fulfillment of the requirements for the degree of Bachelor of Science in Fisheries. Prepared at the Department of Aquatic Resources, Ecology and Management under the supervision Dr. Ravelina R. Velasco.

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