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**INFLUENCE OF BLACK SOLDIER MAGGOTS AS AN ALTERNATIVE PROTEIN
SOURCE ON THE GROWTH PERFORMANCE OF FARMED NILE TILAPIA**

(OREOCHROMIS NILOTICUS)

BY

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BU/UP/2017/219

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**A DISSERTATION SUBMITTED TO THE FACULTY OF AGRICULTURE AND ANIMAL
SCIENCES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD
OF THE DEGREE OF BACHELOR OF ANIMAL PRODUCTION AND MANAGEMENT OF
BUSITEMA UNIVERSITY.**

FEBRUARY, 2021

DECLARATION

I Nassozi Mary Frances hereby declare that the information written in this proposal is mine and has never been submitted to any other university for any academic award.

Signature

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Date

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Signature

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DEDICATION

This work is dedicated to my parents MR Ntambi Jude and MRS Ntambi Bernadate who have supported me not only academically but also in all aspects of life and are still supporting me up now when am at the university. I also dedicate it to my 5 siblings as a sign of encouragement for academic enhancement.

ACKNOWLEDGEMENT

First and foremost, I would like to thank the Almighty GOD who has protected me throughout this course. Busitema University for granting me the opportunity to study my bachelor's degree. Special thanks go to all my lecturers especially those of the animal department, my supervisor, Mr. Muhinda Robert your infinite assistance, guidance, generosity, and tolerance during the training will not be forgotten.

In a special way I also wish to extend my sincere gratitude and appreciation to Arapai Campus management/ staff for providing comfortable and convenient accommodation during my stay at Campus, and to the various people that have supported me financially, academically, morally, and spiritually during my stay at the university.

My course mates especially Ibrahim, Mastula, Mercy, Hamila, Adreen, Kaija and Martin with whom we cooperated during the course.

May God bless and reward you all abundantly for the kindness and sympathy towards me during the training.

LIST OF ABBREVIATIONS

BSF - Black soldier fly

FM - Fish meal

SBM - Soya bean meal

AMPS- Antimicrobial peptides.

DM - Dry matter

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ABSTRACT

The main aim of the study was to determine the growth performance and Protein efficiency ratio of farmed Nile Tilapia (*Oreochromis niloticus*) fingerlings. Feeding trial was conducted for 4 weeks. It involved dividing 150 fingerlings (2 months old) into 3 treatments using water hoppers which were placed in pond of volume 1500m³. Treatment 1 was fed on a formulation containing fish meal as a protein source, treatment 2 was fed on a formulation containing maggot meal as a protein source and treatment 3 was fed on a standard feed obtained from Kajjansi feed distributors. All the fingerlings had an average initial weight of (12.7g). Twice daily, diets were fed to fish at feeding level (5%) of total biomass. Black soldier fly meal improved fish growth performance to (29.6g) and feed efficiency ratio 48% significantly. Black soldier maggots had a good growth performance and feed conversion ratio compared to fish meal. Therefore black soldier maggot meal is a good protein source for fish.