CHEMICAL CHARACTERIZATION OF FLORA AND FAUNA FOR ITIK-PINAS (*Anas platyrynchos* Linn.) RAISED UNDER RANGE MANAGEMENT SYSTEM DURING RAINY SEASON

RAZLE A. MARTIN

An Undergraduate Thesis Submitted to the Faculty of the Department of Animal Science, College of Agriculture, Central Luzon State University, Science City of Muñoz, Nueva Ecija, Philippines in Partial Fulfillment of the Requirements for the Degree of

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ACCEPTANCE SHEET

This undergraduate thesis entitled **"CHEMICAL CHARACTERIZATION OF FLORA AND FAUNA FOR ITIK-PINAS *(Anas platyrynchos* Linn.*)* RAISED UNDER RANGE MANAGEMENT SYSTEM DURING RAINY SEASON"**, prepared and submitted by **RAZLE A. MARTIN,** in partial fulfillment of the requirements for the degree of **BACHELOR OF SCIENCE IN AGRICULTURE (ANIMAL SCIENCE)**, is hereby accepted:

ERNESTO A. MARTIN, Ph.D.
Adviser

5-30-19
Date Signed

PAUL HENRIC B. GOLO CRUZ, M.Sc.
Co-Adviser

5-31-19
Date Signed

JOSEPH R. MENDOZA, M.Sc.
Critic

05-31-19
Date Signed

ANTONIO J. BARROGA, Ph.D.
Department Research Coordinator

6-4-19
Date Signed

Accepted as partial fulfillment of the requirements for the degree of **BACHELOR OF SCIENCE IN AGRICULTURE (ANIMAL SCIENCE):**

ERNESTO P. GARILLO, Ph.D.
Chair, Department of Animal Science

6-4-19
Date Signed

EDILYN V. LANSANGAN, Ph.D.
College Research Coordinator

6-7-19
Date Signed

ERNESTO A. MARTIN, Ph.D.
Dean, College of Agriculture

6-9-19
Date Signed

BIOGRAPHICAL SKETCH

The author was born on 26th day of August, 1999 at Barangay Bella Luz, San Mateo, Isabela. He is the eldest of the two children of Mr. Andres P. Martin and Mrs. Greta A. Martin. The author has one younger sister, Ruth Bea A. Martin.

He finished his primary education in Estrella-Bella Luz Elementary School at Barangay Bella Luz, San Mateo, Isabela in 2011 and completed his secondary education in Eveland Christian College at Barangay 4, San Mateo, Isabela in 2015.

He decided to pursue his tertiary education at Central Luzon State University, Science City of Muñoz, Nueva Ecija, with the degree of Bachelor of Science in Agriculture, major in Animal Science with Poultry Production as specialization.

The author is a proud member of the Iglesia Ni Cristo and officer of Christian Brotherhood International (CBI) – CLSU Chapter.

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ABSTRACT

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Adviser: ERNESTO A. MARTIN, Ph.D.
Co-Adviser: PAUL HENRIC P. GOJO CRUZ, M.Sc.

The study was conducted to characterize the flora and fauna found in a 75 m^2 paddy field enclosed with a mesh net fence to document the feed preferences of ITIK-Pinas while grazing. A total of 18 laying ducks (45 weeks old) were used in the study. The ducks were starved for 12 hours and brought to paddock to graze for 3 hours. They were sacrificed after grazing and their digestive tracts were dissected. Flora and fauna present in the gut were identified by a biologist. Sample of flora and fauna consumed by the ducks were brought to the laboratory for proximate, calcium, phosphorus, energy and cadmium analysis. A 1 kg of soil sample from the field was also brought to laboratory for cadmium analysis.

The results showed that flora and fauna in the area were: rice, water spinach, jungle rice, sandbur, golden apple snails, caterpillar, and common lizard during rainy season. The most preferred and consumed flora of ducks were rice seeds, water spinach, rice hays and jungle rice. In fauna, golden apple snails were the most preferred by ducks. The proximate and mineral contents of each materials consumed by the ducks were the following: water spinach had 13.29% moisture, 13.06% ash, 28.70% crude protein (CP), 19.66% crude fiber (CF), 1.32% fat, 23.97% nitrogen free-extract (NFE), 0.74% Ca, 0.80% P and 3,012

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