

**COMPARATIVE EVALUATION OF HOG MANURE BASED ORGANIC
FERTILIZER AND INORGANIC FERTILIZER ON THE
YIELD OF MUSTARD (*Brassica juncea* L.)**

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This undergraduate thesis entitled "COMPARATIVE EVALUATION OF HOG MANURE BASED ORGANIC FERTILIZER AND INORGANIC FERTILIZER ON THE YIELD OF MUSTARD (*Brassica juncea* L.)," prepared and submitted by EDISON R. PARICA, in partial fulfillment of the requirements for the degree of BACHELOR OF SCIENCE IN ENVIRONMENTAL SCIENCE (SUSTAINABLE AGRICULTURE), is hereby accepted:


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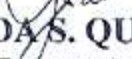
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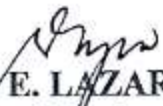
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BIOGRAPHICAL SKETCH

The author was born on 10th of March in 1999 at Dagupan, San Mateo, Isabela. He was raised by his father, Edwin Parica and her mother, Rolinda Parica. He has an older brother and he is the youngest between them. He finished his elementary at San Mateo East Central School, Barangay 2, San Mateo Isabela; his secondary education at San Mateo General Comprehensive Highschool; and attended tertiary education at Central Luzon State University, Science City of Muñoz.

He is a quiet student, but he was always participating both in academic and extra-curricular activities like poster making, singing, dancing, drum and lyre competition and he also attended Boy Scout in national, provincial, etc. He was elected as Supreme Student Government (SSG) Peace Officer during his last year in high school.

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ABSTRACT

EDISON R. PARICA, Department of Environmental Science, College of Arts and Sciences, Central Luzon State University, Science City of Muñoz, Nueva Ecija, Philippines, February 2020, **COMPARATIVE EVALUATION OF HOG MANURE BASED ORGANIC FERTILIZER AND INORGANIC FERTILIZER ON THE YIELD OF MUSTARD (*Brassica juncea* L.)**

Adviser: **ANTONIO J. BARROGA, Ph.D.**

Mustard is a cool season vegetable that prefers a sunny location and fertile soil. In order to grow. Fertilizer is needed to ensure its good quality. Fertilizer can be either chemical fertilizer or organic. Inorganic fertilizer or also known as commercial fertilizer are from synthetic compounds. Advantage of inorganic fertilizer, it releases nutrients easily into the soil and absorbed by the plants. The disadvantage of this is the cost is relatively much higher than organic fertilizer. Organic fertilizer are fertilizers derived from animal waste, human waste and vegetable waste. Naturally occurring organic fertilizer include animal waste from meat processing, peat, manure, slurry and guano. This study aimed to, prepare organic fertilizer from hog manure enhance with bio-plus activator; evaluate the effect of hog manure and the used of inorganic fertilizer on the growth and development of the mustard; determine the benefits derived from application hog manure and inorganic fertilizer; asses the effect of hog manure and fertilizer on the soil; and: determine the profitability on the use of hog manure and inorganic fertilizer.

In this study there were two fertilizer treatments and three replicates. Growth related parameters namely; the plant height, length of leaves, weight of plant, number of marketable and non-marketable leaves, root system, were compared using t-test. The result of this study in terms of the plant height, length of leaves, weight of plant, and number of

marketable leaves have a significant difference among treatment means. The result of this study in terms of roots system and unmarketable leaves have no significant difference among treatment means. Treatment 1 (inorganic) has the better result compared to Treatment 2 (organic).

Key words: hog manure, organic fertilizer, chemical fertilizer, inorganic fertilizer

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