

**MAJOR PRACTICE IN THE CULTURAL MANAGEMENT PRACTICES OF
CACAO (*Theobroma cacao* L.) var. FORASTERO BEANS PRODUCTION**

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An undergraduate major practice manuscript presented to the faculty of the
Department of Crop Science, College of Agriculture,
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fulfillment of the requirements
for the degree

**BACHELOR OF SCIENCE IN AGRICULTURE
(Crop Science - Horticulture)**

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ACCEPTANCE SHEET

This undergraduate major practice manuscript entitled “**MAJOR PRACTICE IN THE CULTURAL MANAGEMENT PRACTICES OF CACAO** (*Theobroma cacao* L.) var. FORASTERO BEANS PRODUCTION”, prepared and submitted by **MARK JEREMIAH E. GARCIA**, in partial fulfillment of the requirements for the degree of **BACHELOR OF SCIENCE IN AGRICULTURE (CROP SCIENCE)**, is hereby accepted:


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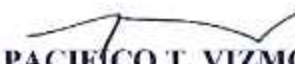
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BIOGRAPHICAL SKETCH

The author MARK JEREMIAH E. GARCIA, was born on January 23, 1995 at Caloocan City, Metro Manila. He is the only child of Mr. Feliciano DG. Garcia and Mrs. Ana E. Garcia.

The author completed his elementary education in Blessed Hope Christian School at Brgy. Poblacion, Jaen, Nueva Ecija. After he graduated, he continued his secondary education at Salvador Araneta Memorial Institute, in Potrero, City of Malabon in 2011.

He pursued his college degree at De La Salle Araneta University in 2011 and took up Bachelor of Science in Animal Husbandry. In 2015, he transferred at Central Luzon State University and took up Bachelor of Science in Agriculture major in Crop Science with specialization in Horticulture.

As the author continued on college education, certain things happened beyond his control that he wished he could deal with more courage like failures that led to depression. The author learned lesson and become hopeful to overcome trials through perseverance and with the help of the God Almighty, as well as his family and friends.

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ABSTRACT

MARK JEREMIAH E. GARCIA, Department of Crop Science, College of Agriculture, Central Luzon State University, Science City of Muñoz, Nueva Ecija, August 2018.

Major Practice in the Cultural Management Practices of Cacao (*Theobroma cacao* L.) var. Forastero Beans Production

Venue: Department of Crop Science Pomology Project Area,
College of Agriculture, Central Luzon State University,
Science City of Muñoz, Nueva Ecija.

Adviser: **Mr. Jeremias L. Ordonio**

This Major Practice in the Cultural Management Practices of Cacao (*Theobroma cacao* L.) var. Forastero Beans Production was conducted from the months of August 2018 to March 2019 at the Pomology Area, Department of Crop Science, College of Agriculture, Central Luzon State University, Science City of Muñoz, Nueva Ecija.

The general objectives of the major practice were to enhance the knowledge of the student and developed skills in cacao beans production; to produce 20 kg of beans per 15 trees; and to morphologically characterize the 15 Forastero variety.

The field practice student experienced hands-on training in different activities namely water management, pruning, removal of water sprouts, pesticide application, harvesting, fermentation and sun drying.

In terms of yield, all 15 forastero variety trees bear a total of 229 cacao pods and produced 9 kg of cacao beans. The average pod length was about 15.64 cm with an average pod width of 8.27 cm and average pod wall thickness of 0.87 cm.. The recorded number of pods per tree was 15 pods while the average mummified pods per tree was 21 mummified pods. The average number of ridges per pod was 10 ridges as well as the average weight of pod was 396 g. The average number of beans per pod was about 44 beans with an average bean length of 2.48 cm, average bean width of 1.53 cm and average bean thickness of 0.70 cm. The average number of formed beans was about 32 beans with an average deformed beans per pod of 2 beans. Moreover, the average weight of 10 beans per pod of each sample pods was about 28.68 g. Also, the presence of aphids and mealybugs were observed in the pods.

A total yield of 9 kg dried beans was produced from 15 forastero cacao trees, which was lower by 11 kg than the objectives of the field practice student. This is because of high occurrence of mummified pods in the forastero trees.

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