OPTIMIZING ORGANIC FERTILIZER LEVELS IN GLUTINOUS RICE (CL 142) PRODUCTION UNDER CLSU CONDITION

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ACCEPTANCE SHEET

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BIOGRAPHICAL SKETCH

The author, Mel Andrea Montejo Miraflor was born on the 11th day of August 1999 at Iba, Zambales. She was the youngest daughter among the three siblings of Mr. Arnel Venturuzo Miraflor and Merlita Montejo Miraflor. Her brother Mac Ancl M. Miraflor and her sister Merlyn M. Miraflor. They are now residing in San Fernando, Santa Cruz, Zambales.

She completed her elementary education at San Fernando Elementary School in 2011 and finished her secondary education at Santa Cruz Academy and graduated in 2015.

To finish her tertiary education, she enrolled at Central Luzon State University and took up Bachelor of Science in Agriculture, major in Crop Science and her field of specialization is Organic Farming.

Like the other students, the author has experienced trials, encountered a lot of problems and difficult times. It took a lot of hard work and patience. With the help of our Almighty God all these trials had been successfully conquered.

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ABSTRACT

MIRAFLOR, MEL ANDREA M. Department of Crop Science, College of Agriculture, Central Luzon State University, Science City of Munoz, Nueva Ecija, Philippines, **December 2019. OPTIMIZING ORGANIC FERTILIZER LEVELS IN GLUTINOUS RICE (CL-142) PRODUCTION UNDER CLSU CONDITION.**

Adviser: PAULINA J. ALVARAN, M.Sc.
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The study was conducted to determine the appropriate level of organic fertilizer that will give the highest yield in glutinous rice (CL 142). The experiment was laid out in a Randomized Complete Block Design (RCBD) with three replications. The treatments were: T_1 – control (no fertilizer applied); T_2 – 4 t OF ha^{-1}; T_3 – 6 t OF ha^{-1}; T_4 – 8 t OF ha^{-1} and T_5 – 10 t OF ha^{-1}. Results showed that the application of different levels of organic fertilizer had no significant differences among treatments in plant height at maturity (102.07 to 105 .53 cm), length of panicle (22.06 to 23.46 cm), number of spikelet per panicle (124 - 143), number of productive tillers (8 - 9), number of unproductive tillers (0), percent filled spikelet per panicle (91.34 to 94.10 %), weight of 1000 seeds (21.67 to 22.67 g), milling recovery (77.33 to 78.65 %) and head rice recovery (46.13 to 52.50 %). The computed grain yield per hectare obtained by CL 142 ranged from 4.40 to 4.67 t ha^{-1}. The non-significant result of the treatments evaluated could be attributed to the accumulated organic matter content of the area which 2.18% (medium) that could possibly reaches the optimum content necessary for the growth of the plant since the area was applied with organic fertilizer for 8 years now.

It is recommended that another trial should be conducted in both WS and dry season (DS) to further evaluate and validate the results of the experiment.

Keywords: glutinous rice, organic fertilizer level

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