## **ABSTRACT**

Title: Comparative research analysis of two rice (*Oryza sativa L.*)

variety as applied with Yara Fertilizer in Pagbilao, Quezon

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This study was conducted in Barangay Malicboy, Pagbilao, Quezon from November 2020 to March 2021 to determine the growth and yield of "RC 18" and "RC 480" as applied with YARA fertilizer. The objectives of the study were: determination of variety of rice that will significantly produce better growth and higher yield in Pagbilao, Quezon, and to determine which variety can be primary source of planting materials for farmers in Pagbilao, Quezon, the data gathered were: plant height at 30, 60 and 90 DAT, number of tillers, number of days to flowering and maturity, and yield in tons per hectare. These data were analyzed by T-test wherein significant differences between treatments were tested using Least Significant Differences (LSD) at 5% and 1% levels of significance. The results showed that RC 18 and RC 480 varieties were significantly different at weekly plant height (30, 60, and 90 DAT), number of tillers per plant, number of days to flowering and maturity. On the other hand, yield in tons per hectare was not significantly different. The highest yield was obtained by RC 480 variety which was 8.4 tons per hectare while RC 18 produced 8.3 tons per hectare. The results of the study implied that RC 480 variety can be the sole source of good planting materials for farmers of Pagbilao, Quezon, as it showed a better yield with early manifestation of days to flowering and maturity.

**Keywords:** foliar fertilization, growth, yield, yara fertilizer, RC18, RC480