

FERTILIZING LEVEL OF BPI-76 RICE VARIETY
IN FACTORIAL TREATMENT COMBINATIONS

A Thesis

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ABSTRACT

GABORNO, VICTORIANO A. 1966. Fertilizing Level of BPI-76 Rice Variety in Factorial Treatment Combinations. (Graduate Thesis. M.S. A.) 51 pp.

The design used was 4×2^3 factorial in randomized complete block, using four levels of fertilizer application, such as 40, 55, 70 and 85 kg. per hectare of N, P, and K applied singly and in all possible combinations of either two and three of the elements at the four aforementioned levels.

Results obtained indicate that nitrogen is the most important limiting factor in promoting growth and grain yield of rice. A linear effect was obtained on the yield as the rate of nitrogen was increased. It seems that the optimum amount of nitrogen for this particular rice variety is above 80 kg. per hectare, as determined in this work. All nitrogen-treated plots produced significantly over the control.

Phosphorus response was noted. Under the same soil conditions, the level of phosphorus requirement lies between 55 and 70 kg. per hectare. Further addition above 70 kg. per hectare of phosphorus was not necessary.

In this particular study there was no indication for the need for potassium.

Nitrogen-phosphorus combination promoted more grain yield, better than each applied alone. This was the best combination found or all other combinations were less effective. The level found most effective was 85-85-0.

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