

~~C~~ RESPONSE OF IR-64 TO DIFFERENT
FERTILIZER COMBINATIONS

A Thesis

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A B S T R A C T

MANALO, ELMER P., Don Severino Agricultural College, Indang, Cavite, March 1989, "Response of IR-64 to Different Fertilizer Combinations", Adviser: Mr. Celso N. Nuestro.

The effect of different indigenous organic fertilizers in combination with inorganic fertilizer on the yield of IR-64 was studied during the wet season of 1988 at Palangue, Naic, Cavite. The four fertilizer combinations evaluated were: T_1 = 30 kilograms of dried ipil-ipil leaves plus 20 kilograms of N per hectare, T_2 - 30 kilograms of dried kakawate leaves plus 20 kilograms of N per hectare, T_3 - 30 kilograms of dried acacia leaves plus 20 kilograms of N per hectare, and T_4 - 40 kilograms of inorganic N per hectare were incorporated to the soil a week before transplanting.

Significant differences among the four treatments were observed for grain yield, number of panicles per hill, number of filled grains per panicle, percentage of unfilled grains per panicle and weight of 1000 grains. The fertilizer treatments did not significantly affect panicle length.

Rice plants fertilized with combined organic and inorganic fertilizers produced higher yield than plants fertilized with pure inorganic fertilizer. The

highest yield of 6.4 tons per hectare was produced by plants fertilized with acacia leaves and 20 kilograms of N per hectare. Similarly, cost and return analysis showed that combining organic and inorganic fertilizer produced higher return on investment as compared to application of pure inorganic fertilizer.

1	Average Height of Plants at 25 Days after Transplanting	20
2	Number of Tillers per Plant at 25 Days after Transplanting	22
3	Number of Panicles per Hill	24
4	Average Length of the Middle Panicle	26
5	Average Number of Filled Grain per Panicle	28
6	Average Number of Unfilled Grain per Panicle	30
7	Average Weight of 1,000 Fully Developed Grains	32
8	Average Yield in Ton per Hectare	34

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