A Study on the Response of Transplanted Rice (ORYZA SATIVA Var, IR-26) to Three Liquid Fertilizers Applied at Different Rates and Stages of Growth.

The study attempted to find out the response of transplanted rice Var-IR-26 to three nitrogen foliar fertilizers like Nitrofoska, Complesal and Basfoliar which were applied at different rates and stages of growth. The study was conducted at the Research Farm at the Mariano Marcos Memorial College of Science and Technology in June 1975 to October 1975 in a 720 square meter area. The Split-Plot-Method was used and each plot had a dimension of 2 x 5 meters. The seedlings were planted 30 by 25 cm. apart. There were three treatments in the main plots and four in the sub-plots. The rice seedlings were transplanted after the plots were well prepared. The first application of fertilizers was done 14 days after; the third, at the booting stage; and the fourth, during the milking stage. The first application used 6 millimeters; the second, 8 millimeters; the third, 10 millimeters; and the last 12 millimeters; of each of the three liquid fertilizers in each plot.

The usual care and management was given to the transplanted rice plant like weeding, control of pests and diseases and irrigation. Plant height, grain weight, size of grains, total tillers (productive and unproductive), filled and unfilled grains, yield per hectare were used as bases in data gathering. The gathering of data was done during the maturity period.

The plants applied with Nitrofoska were found to be the tallest with a mean height of 72.71 cm. and those applied with Basfoliar to be the shortest with a mean of 70.41 cm. Plants applied with Basfoliar and were found to have the most number of productive tillers with a mean of 25.83 productive tillers and those with Nitrofoska the least number (22.85). Basfoliar had the most unproductive tillers (12.00) while Complesal hah the least (11.67). In the number of filled grains, those applied with Nitrofoska hand the most number with a mean of 94.41 followed by plants applied with Basfoliar. (90.22). Complesal had the most number of unfilled grains with a mean of 10.53 unfilled
grains followed by those with Basfoliar (9.86). In the weight of per 1,000 grains those with Basfoliar had the heaviest with a mean of 23.6 grams followed by those with Nitrofoska with a mean of 21.47 grams. In the total analysis, Basfoliar showed the best production per unit area with 166 cavans per hectare and was followed by Complesal with 146 cavans per hectare.

Comparing the usual production of rice of 60 to 80 cavans per hectare (with the use of solid fertilizer) the use of foliar Nitrogenous fertilizers is found to be better with a production of 134 to 166 cavans per hectare.