

THE INFLUENCE OF ROW SPACING, NITROGEN
AND POTASSIUM APPLICATIONS AND
HARVEST AGE ON ALCOHOL YIELD
OF PHIL 6607

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ABSTRACT

SANTOS, DORETA A. DE LOS, University of the Philippines at Los Baños, August 1983. The Influence of Row Spacing, Nitrogen and Potassium Applications and Harvest Age on Alcohol Yield of Phil 6607. Major Professor: Dr. Elpidio L. Rosario.

A field experiment was conducted at PHILSUCOM, La Granja, La Carlota City from December 1980 to December 1981 to determine the effects of row spacing, nitrogen and potassium applications and age of canes at harvest on alcohol yield of Phil 6607.

Mature canes produced more alcohol per ton of cane due to high amounts of total sugars; however, yields per hectare were influenced by tonnage. Ten-month old canes yielded 3,076 and 2,102 liters more than the 8- and 12-month harvests. Average yields per hectare per month was 834, 975 and 637 liters for 8-, 10- and 12-month old canes. Alcohol yields were highest at closer row spacings and higher plant populations.

General observations show that alcohol content of sugarcane planted in December and harvested 10 months later was highest at a spacing of 75 x 30 cm and fertilized with 100 kg N and 200 kg K₂O.

Results also show that spacing had no significant effect on cane and sugar yields. The sugarcane variety responded to the application of 100 kg N/ha. Potassium increased PS/ha only

because of its effect in increasing PS/TC with higher rates of K fertilizer applied.