

A COMPARATIVE STUDY ON THE EFFECT OF DIFFERENT
ORGANIC FERTILIZERS ON THE GROWTH AND
YIELD OF SWEET CORN

A THESIS

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by

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ABSTRACT OF THE THESIS

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The study was conducted from December 23, 1996 to March 24, 1997 at the experimental field of the College of Agriculture, Central Philippine University, Jaro, Iloilo City. It was conducted to evaluate the efficacy of the different organic fertilizers on the growth and yield of sweet corn and to find the best organic fertilizer for sweet corn.

The experimental treatments were laid out in a randomized complete block design with three replications. The experimental treatments consisted of four commercial organic fertilizers namely: VMC, Cristina, V4 and Crop King. Plants applied with granular fertilizers and plants without fertilizer were used as control. Rate of fertilizers was based on the recommended rate of 60-30-30 kg N, P₂O₅ and K₂O/ha.

Results of the study showed that the different treatments used did not affect plant height, days to tasseling

and silking, diameter of ears and percent productive and unproductive plants. Plants fertilized with Crop King produced significantly ($P > 0.05$) more ears per plant (2.1) over those unfertilized plants and plants fertilized with VMC, Cristina, and V4. The number of ears per plant of the Crop King treatment was comparable to those of plants fertilized with granular fertilizer.

Plants fertilized with Crop King, VMC and granular fertilizer significantly ($P > 0.05$) produced the longest ears with average length of 15.6, 14.82, and 14.72 cm, respectively.

The weight per ear was also significantly ($P > 0.05$) affected by the different treatments used. Plants fertilized with granular fertilizer produced the heaviest ears at 0.19 kg, however, these are comparable to those of plants fertilized with Crop King.

Economic analysis of the study showed that plants fertilized with Crop King, which were the highest yielders, also gave the highest net income and percent return on investments which were ₱88,884.36 and 133 percent, respectively. Although plants fertilized with V4 yielded more than the unfertilized plants with the difference of 0.46 t/ha, economic analysis revealed that the net income and percent return on investments of the unfertilized plants were higher over those of plants fertilized with V4 with a difference of ₱6,800.02 and 20 percent, respectively.