GROWTH AND YIELD PERFORMANCE OF BUSH SNAP BEANS (Phaseolus vulgaris Linn) AS AFFECTED BY COMMERCIAL FERTILIZER AND SLUDGE AS A SOURCE OF NUTRIENTS UNDER DRIP IRRIGATION SYSTEM

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ABSTRACT

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The study was conducted at the Faculty Village of the Cavite State University (CvSU) in Indang, Cavite from November 1999 to January 2000, to determine the effect of commercial fertilizer and sludge on the growth performance of bush snap beans under drip irrigation system.

Complete Randomized Designed (CRD) was used in the conduct of the study. There were four treatments, namely: complete fertilizer (T_1); sludge (T_2); combination of complete fertilizer and sludge (T_3); and plain water or the control (T_o). Each treatment had three replications.

Results of the study showed that the used of complete fertilizer significantly outperformed other fertilizer materials in terms of growth parameters (height of the plant and root length of plant). Sludge significantly affected the said growth parameter as compared to the unfertilized plants. Results also showed significant effects on the number, length, diameter and the weight of pods which significantly increased with the application of complete fertilizer. Application of sludge also showed satisfactory results as indicated by its promotive effect on increasing the yield parameter of snap beans. Findings revealed that using drip irrigation and fertilizer efficiency had significant disparity between the control plants and other treatments with drip irrigation in terms of its growth and yield parameters.

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