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PRODUCTIVITY AND PROFITABILITY OF USING ORGANIC AND
INORGANIC FERTILIZER INVOLVING SELECTED VEGETABLE
CROPS UNDER SNAP BEAN BASED CROPPING PATTERN

ISABELITA P. ROMERA

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ISABELITA P. ROMERA
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ABSTRACT

ISABELITA P. ROMERA. Don Severino Agricultural College, Indang, Cavite, April 1992. Productivity and Profitability of Using Organic and Inorganic Fertilizer Involving Selected Vegetable Crops Under Snap Bean Based Cropping Pattern". Major Adviser: DR. EUSEBIO V. ALAVA.

This study was conducted with the following objectives to determine the effects of the different cropping patterns on the growth and yield of snap beans; to find out the effects of intercropping on the incidence of pests and diseases of snap beans; to determine the effects of using organic versus inorganic fertilizer on the growth and yield of the main crop and selected intercrops; and to evaluate the economics of production of the different intercropping systems.

Four crops were used in the study. Pole Bagiuo beans (BSU-1 variety) as the main crop and Garlic (Cavite white variety), carrots (T-summer) and radish (Radish 60 day variety) as the intercrops.

Organic fertilizer (Sander, 12-10-8) and inorganic fertilizer (14-14-14) served as the main treatment in the study.

Split plot in Randomized Complete Block Design (RCBD) was used in the experiment with 14 intercropping treatments.

Results showed that intercropping had no adverse effect on the incidence of pests and diseases of snap beans.

In terms of growth and yield, snap beans intercropped with garlic was the most compatible combination.

However, after evaluating the economics of production of the different intercropping systems, snap beans intercropped with carrots gave the highest net return, since the cost of production (P289,863.70) was comparatively lower when compared to snap beans + garlic combination (P402,802.74).

Similarly, organic fertilizer treatment gave better result in terms of growth, yield and net return as compared to inorganic fertilizer.

Practically, carrots could be well intercropped with snap beans to increase income of the vegetable growers particularly in the highland of Cavite.

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INTRODUCTION

Snap beans (Phaseolus vulgaris L.) is a cool season vegetable introduced from temperate and subtropical zone. It grows better at high elevations where temperature is relatively low (13 - 17 °C average) or during the cool months of the year from November to January.

Snap beans or "Baguio beans" is also believed to originate in Central America but spread to Africa, Middle East parts of Europe and Asia, where it became an important crop. It is called Baguio bean because the commercial supply of this type of bean came from the city of Baguio.

This leguminous vegetable contain appreciable amounts of vitamins especially A and minerals like calcium and potassium. It is generally consumed in the green pod stage as a fresh vegetable.

Baguio beans is a luxury legume vegetable in the country mainly because of its limited supply and high market price. Supply is scarce because of limited production area in the highland. Moreover, transport cost and handling losses of the produce account for a big proportion of the retail price (Farrales, et. al., 1986). Its scarcity and high market price evidenced clearly that increased productivity in the Philippines has not reached a desired peak to offset the population growth rate.