Effective Microorganisms - Its Use in Vegetable Production System of the Philippines

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Abstract: EM controlled diamond backmoth and aphids infesting cabbage. The efficacy was statistically similar with insecticide. This was observed in all the assessments. Although the percent damage of plants sprayed with insecticide alone was lower than EM-sprayed plants, statistics showed no significant differences. The presence of beneficial insects and parasitoids on EM-sprayed plants proved that the use of EM as control of diamond backmoth was safe and friendly. Yield in all the treatments was statistically similar except the control (untreated) plants.

Experimental results show that the height and yield of celery was significantly affected by the application of organic fertilizer fermented with EM. Plots applied with organic fertilizer fermented with EM produced taller and heavier celery plants than those plots treated with chicken manure + NPK. A 70% increase in height and a 53% increase in yield was obtained from plots treated with EM-fermented organic fertilizer as compared to farmer's practice (ChM+NPK).

The use of EM (3x) followed by fungicide as foliar spray against potato late blight was of equal efficacy with fungicide alone. Plants sprayed with EM alone had also lower disease rating than the untreated plants. More jumbo-size potato tubers were recorded on plants sprayed with EM (3x) followed by fungicide than the rest of the treatments. The extra-large, large, big, medium, and small-size tubers were produced by the plants. There were no significant differences among them. For the total marketable yield, plants sprayed with fungicide alone produced statistically similar yield with all the treatments, except the untreated ones. There was no phytotoxic effect of EM on potato plants. All plants were normally growing, leaves were in their natural color, and there was no abnormality in the appearance of the plants.