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Application of Metalosate Products on Eggplant in Thailand

By Jeremy O'Brien

Introduction

The eggplant family is one of the most diverse crop groups in world agriculture. Over the last 60 years in the U.S., eggplant has transitioned from a minor ethnic crop into a major vegetable commodity. The American wholesale market has been almost exclusively composed of standard black, teardrop-shaped varieties, having thick skins for better shipping characteristics.

This trial took place in Chaing Mai, Thailand. The purpose of the trial was to compare a Metalosate® program to the growers' standard nutrient program.

Materials and Methods

The eggplants used in this project were a Japanese variety (*Solanum melongena* var. *serpenpinum* L.). Plants were grown from seed and transplanted into the field 15 days after seeding. This particular variety blooms at 75-80 days of age. The harvest period begins at 85-90 days old. This field was harvested on a daily basis for a period of 4.5 months.

Table 1 is a summary of the three treatments applied. Treatment 1, the control treatment, was applied every 6 days; treatments 2 and 3 were applied every 12 days. Applications

Table 1. Treatments Applied

Treatment	Products Applied	Applied-Solution Concentration
1 (control)	Atonic*	500 ml/1,000 liters water (6.4 fl.oz./100 gal.)
2	Metalosate® Multimineral	500 ml/1,000 liters water (6.4 fl.oz./100 gal.)
	Metalosate® Boron	250 ml/1,000 liters water (3.2 fl.oz./100 gal.)
	Metalosate® Potassium	500 ml/1,000 liters water (6.4 fl.oz./100 gal.)
3	Metalosate® Multimineral	500 ml/1,000 liters water (6.4 fl.oz./100 gal.)
	Metalosate® Boron	250 ml/1,000 liters water (3.2 fl.oz./100 gal.)
	Metalosate® Potassium	750 ml/1,000 liters water (9.6 fl.oz./100 gal.)

* Atonic® is an aromatic nitrogen foliar compound

were applied at the concentrations listed in Table 1. All plants were sprayed to the point of runoff. As the plants grew larger, the amount of product applied increased as a result of more surface area to spray.

Results

Table 2 is a summary of the yield results from this project. A running total over the entire harvest period provided the overall yields from each treatment. The growers' standard program (control) gave the lowest yield per area. Treatment 2 gave the most with treatment 3 falling between the two.

Discussion

The overall yield increase when making applications of Metalosate products over the growers' standard practice was significant. The increase of 264% in treatment 2 over the control demonstrated the positive effect Metalosate products had on the crop. This represented an excellent return on investment for the grower.

As demonstrated in this trial, the use of the Metalosate products can significantly increase yields and profitability. ☞

Table 2. Yield of Treated Plots

Treatment	Total Yield	% Increase Over Control
1 (control)	45,621 kg/ha (40,719 lb/acre)	NA
2	120,686 kg/ha (107,720 lb/acre)	264
3	84,912 kg/ha (75,789 lb/acre)	187

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