

Plant Nutrition Newsletter

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THE APPLICATION METALOSATE® PRODUCTS TO 'THOMPSON SEEDLESS' TABLE GRAPES IN CHILE

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INTRODUCTION

Chile is the number 1 exporter in the world for table grapes. One of the major challenges is the distance Chile is from the markets to which it exports. The long distance necessitates having grapes of extremely high quality that can endure the trip and have a long shelf life. This trial was performed to study the effect that applications of Metalosate® products can have on the shelf life, berry firmness, and calcium content within the fruit.

MATERIALS AND METHODS

A large exporter of table grapes in Chile completed this trial which consisted of implementing a Metalosate program at the same cost as the grower's standard program. The export company then measured calcium content and the pressure in the grapes which were stored for a total of eight weeks.

RESULTS AND DISCUSSION

Table 1 shows the foliar nutrient program that was applied to the treated grapes. The cost of this program was the same cost as the grower's standard program.

Figure 2 shows the calcium content in the fruit measured

at three different times during storage.

Figure 3 indicates the fruit pressure as measured over the eight-week period of storage for the treated grapes. The control grapes had a fruit pressure of 302 g/mm on the date of harvest, while the Metalosate-treated fruit had a pressure of 333 g/mm on the date of harvest. The pressure then increased between the first- and second-measurement period and then began to drop over time. When the final measurement

was made on the treated fruit following eight weeks of storage, the pressure was the same as the control fruit was when it was harvested. This trial shows that it is possible to have firmer and higher-quality fruit if Metalosate products are used compared to the grower's standard program.

For more information how the Metalosate products can benefit you and your customers, please speak to your local Albion Plant Nutrition representative.



Figure 1. Thompson Seedless Grapes growing in the 5th region, San Felipe, Chile

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Table 1. Metalosate® Program on Table Grapes at the Same Cost as the Grower's Standard Program

		Rate		No. of
Stage	Product	L/Ha	FI. oz./Acre	Applications
15-30 cm of Growth	Metalosate [®] Multimineral™	1.0	13.7	1
	Metalosate® Zinc	1.0	13.7	1
Before Flowering	Metalosate® Boron	0.5	6.8	1
With Gibberellic Acid	Metalosate® Crop-Up®	1.0	13.7	4
Verasion	Metalosate® Potassium	1.0	13.7	1
	Metalosate® Calcium	1.5	20.5	1
7 Days After Verasion	Metalosate® Calcium	1.5	20.5	1

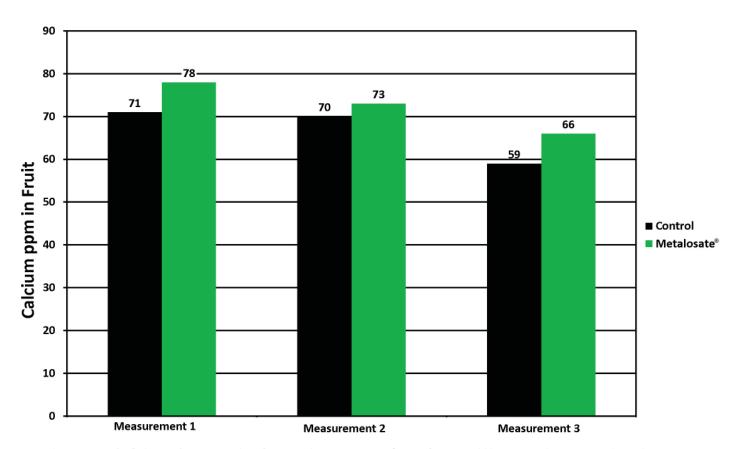


Figure 2. Calcium Content in the Fruit Measured at Three Different Times During Storage

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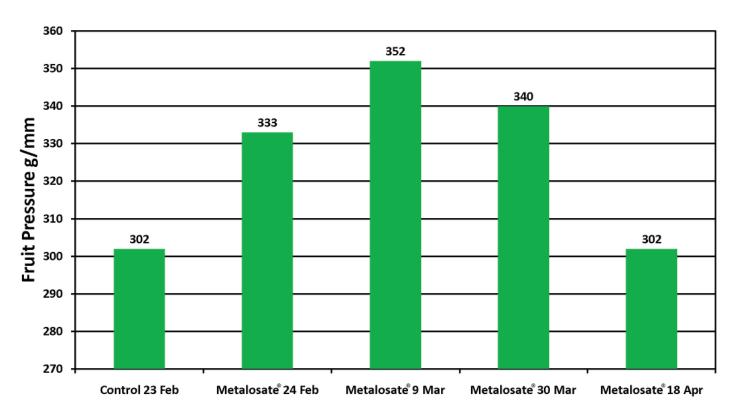


Figure 3. Fruit Pressure as Measured Over the Eight-week Period of Storage for the Treated Grapes

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