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Metalosate® Field Trial on Blueberries in Oregon, USA

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Introduction

This field trial took place in the area of Cornelius, Oregon, USA. Applications of Metalosate® products were made to increase the overall nutritional value of blueberries.

Materials and Methods

In commercial blueberry production in the Pacific Northwest, the current cultural practices indicate that there are standard times when applications of chemicals and fertilizers are made. The first fertilizer application was made in May; the second was made in June with the third and final application being made in July

We put together a program that could be compared to the one the grower was currently utilizing which is summarized in Table 1.

Table 2 lists the timing, rates and label claim of the Metalosate® products applied in the project.

In the Metalosate® treatment the May application was based on general guidelines for blueberry production. Following this application, tissue samples were collected and the June

application was made based on the T.E.A.M.® recommendations. The same process was followed for the July application.

In the grower's standard program, no adjustments were made based on tissue analyses. The program was written prior to the growing season based on past experience and applications were made based on the written program. There was also an area that did not receive any fertilizer applications.

Results

We performed a mineral analysis on samples of the blueberries from each treatment. The results are shown below in Table 3. Two samples were analyzed from each treatment and the results averaged.

Conclusion

The results from this field trial are very promising. As can be seen in the information contained in Table 3, the Metalosate® treated blueberries contained higher levels of the minerals

Table 2. Metalosate® Treatments

Timing	Product Applied	Label Claim
May	32 fl oz/ac (2.3 L/ha) Metalosate® Zinc	6.8% Zinc
	32 fl oz/ac (2.3 L/ha) Metalosate® Calcium	6.0% Calcium
June	48 fl oz/ac (3.5 L/ha) Metalosate® Magnesium	2.1% Magnesium
	32 fl oz/ac (2.3 L/ha) Metalosate® Calcium	6.0% Calcium
July	16 fl oz/ac (1.2 L/ha) Metalosate® Boron	5.0% Boron
	32 fl oz/ac (2.3 L/ha) Metalosate® Calcium	6.0% Calcium

applied, and in most cases of minerals that were not applied as well.

The Metalosate® applications in this project proved to be the most effective products to increase the mineral nutrition status within the blueberries. When comparing the actual amount of mineral applied on a per-acre basis, the Metalosate® products were far superior to the grower's standard program. With all of these things taken into consideration, I am confident this grower will want to make the Metalosate® program his standard program. For the full text on this trial contact your local Albion representative.

Acknowledgements

I wish to thank Bruce Wendland of Western Farm Service for coordinating this trial with his grower and for collecting the berry samples. ☺

Table 1. Grower's Standard Program Treatments

Timing	Product Applied	Label Claim
May	64 fl oz/ac (4.7 L/ha) Phosphorous, Calcium, Zinc Combination	15% P ₂ O ₅ , 13% Calcium, 7.4% Zinc
June	48 fl oz/ac (3.5 L/ha) Phosphorous, Calcium, Zinc Combination	15% P ₂ O ₅ , 13% Calcium, 7.4% Zinc
	48 fl oz/ac (3.5 L/ha) Calcium	23.7% Calcium
July	64 fl oz/ac (4.7 L/ha) Magnesium	20.0% Magnesium
	48 fl oz/ac (3.5 L/ha) Calcium	23.7% Calcium

Table 3. Blueberry-Fruit Mineral-Analysis Results

Treatment	Mineral Analysis										
	Total N %	S %	P %	K %	Ca %	Mg %	B ppm	Zn ppm	Mn ppm	Cu ppm	Fe ppm
Albion Metalosate®	0.82	0.08	0.09	0.67	0.13	0.06	13	20	17	7	51
Grower's Standard	0.84	0.07	0.09	0.57	0.09	0.05	9	11	13	3	29
No Foliar Applied	0.72	0.06	0.08	0.58	0.09	0.05	7	8	15	3	23

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