



Metalosate® Applications to Strawberries in Sweden

by Winnie Olsen; edited by Jeremy O'Brien

Introduction

This trial was performed to demonstrate the efficacy of the Metalosate® products in a well designed program. The purpose of this program was to increase the weight, firmness, and sugar content of the berries.



The use of Metalosate Crop-Up® is to supply a range of minerals to the plant at the flowering stage which is considered a critical stage with high stress to the plant. The use of Metalosate Calcium and Metalosate Potassium from the onset of flowering until harvest is to help reduce flower drop. Later applications are to give firmness and increase sugar content in the fruit.

Materials and Methods

The trial was performed in Åhus, Sweden on "Honeoye" strawberries. 1 hectare (2.47 acres) was treated with a Metalosate program and 1 hectare (2.47 acres) were treated with the growers standard program (inorganic magnesium, boron, and potassium) sprayed on May 17, 26, June 6, 21.

The Metalosate treatments were as follows: Metalosate Crop-Up 2 liter/ha (27.4 oz/acre) and Metalosate Boron 1 liter/ha (13.7 oz/acre) on May 17 at the flowering stage. On May 26 (fruit set) Metalosate Calcium 1.5 liter/ha (20.5 oz/acre) and Metalosate Potassium 1.5 liter/ha (20.5 oz/acre). Two additional applications were made before harvest on June 6 and 21 of Metalosate Calcium and Metalosate Potassium at 5 liter/ha (120.5 oz/acre.).

Results and Discussion

Four sets of 10 plants per treatment were measured on June 20. The Brix value, the weight, and the firmness were measured for each berry collected. In addition, the number of berries per plant was counted. All red berries on a plant were picked. The pale unripe berries were left on the plant.

Table 1 shows the results related to fruit weight, firmness, and soluble solid content. There was not a significant difference in the number of berries per plant.

Considering an average of just over 20,000 plants/ha (8000 plants/acre) and using the values of average weight per berry and average

number of plants, we can estimate the average yield per acre for this harvest shown in Table 2. The increase in estimated yield was 35% for the Metalosate treated plants.

Table 1. Average Weight/Berry, Firmness, and Brix Value.

Treatment	Wt/ Berry	Firmness	Brix
Control	13.58g	0.54	7.60
Metalosate®	20.18g	1.31a	9.26a

a: Very strong significant difference
p < 0.001

Table 2. The Effect of Metalosate® Treatment on the Average Yield

Treatment	Yield	
	Lbs/acre	Kg/ha
Control	613.1	687.2
Metalosate®	947.1	1061.5

The Metalosate program yielded sweeter berries with a higher weight and increased firmness. The assessment was made on the second harvest, and it is believed results from the first harvest were even better.

Contact your local Albion® representative for information on the Metalosate products and crop-specific programs for your area. ☺