



Research Report

Title: Fungastop on the Control of Botrytis in Strawberry Plants

Location: Quillacollo, Cochabamba, Bolivia

Principal Investigator: Freddy Espinoza

Crop: Strawberry

Abstract:

The purpose of this study is to evaluate the effects of Fungastop¹ on the control of *Botrytis cinerea* on strawberry plants. Varying doses of Fungastop (2.5, 5.0, and 7.5L/500L of water) were applied to strawberry plants at 14 and 21 days after the appearance of blossom formation. The evaluation of disease severity was done at 10 and 20 days after the second application. All dosages of Fungastop demonstrated an ability to control the disease severity of *B. cinerea* compared to the control group. However, a dosage of 5.0 L / 500 L of water demonstrated the strongest control of the pathogen.

Methods:

Varying doses of Fungastop (2.5, 5.0 and 7.5 L / 500 L of water) were applied to strawberry plants at 14 and 21 days after the appearance of blossom formation. The evaluation of disease severity was done at 10 and 20 days after the second application. Subjective measurement of disease severity, where 100% means maximum disease severity and 0% minimum disease severity, during a limited period of time. Each treatment was replicated three times.

Results:

The percentage of disease severity was observed at 10 and 20 days after application of the treatments and is recorded in the table below. Strawberry plants that were treated with Fungastop at all dosage rates exhibited a lower percentage of disease severity compared to the control group. Ten days after the application of treatment, the average disease severity of the control group was 56.1% while plants treated with Fungastop had an average of 6%. After 20 days, the control groups' average disease severity increased to 59.1% while the average of the treated group decreased to 1.9%. Plants that were treated with Fungastop at a rate of 5 L / 500 L of water had the lowest average disease severity rating of 3.25%.

¹Fungastop is a natural alternative to synthetic agro-industrial chemicals with antifungal and antibacterial compounds manufactured by Soil Technologies Corp. in Fairfield, IA USA

Fungastop (per 500 L of water)	Percentage of Disease Severity			
	10 Days After Treatment		20 Days After Treatment	
	Control	Treatment	Control	Treatment
2.5 L	56.1	6.1	59.1	2.0
5.0 L	56.1	4.9	59.1	1.6
7.5 L	56.1	7.1	59.1	2.1

Table 1: Percentage of Disease Severity

Conclusions:

All dosages of Fungastop demonstrated an ability to control the disease severity of *B. cinerea* on strawberry plants compared to the control. A dosage of 5.0 L / 500 L of water demonstrated the strongest ability to control the pathogen with the lowest average disease severity of 3.25%. The severity of disease in the control groups continued to increase over time, while plants treated with Fungastop, at all dosage rates, decreased in disease severity. Ten days after the application of treatment, the average disease severity of the control group was 56.1%, while plants treated with Fungastop had an average of 6%. After 20 days, the control groups' average disease severity increased to 59.1%, while the average of the treated group decreased to 1.9%.