Soil Technologies Corp.
Research and Development Department

Research Report

Title: Evaluation of Fungastop in Gray Mold Control

Location: Japan

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Biocontrol Research and Development

Crop: Cucumber

Date: 2001

Abstract:
The purpose of this study was to evaluate the efficacy of Fungastop[1] as a control treatment for Gray mold or *Botrytis cinerea*, in cucumber plants. In a growth chamber, cucumber seedlings received treatments of Fungastop at 100, 200, and 400 dilution rates and Procymidone[2] at 3,200, 64,000, and 128,000 dilution rates. Shortly after receiving each treatment, the seedlings were inoculated with *B. cinerea* and effects were observed three days later. All treatments demonstrated a high protective value at all concentrations.

Methods:
In a growth chamber, cucumber seedlings received treatments of Fungastop at 100, 200, and 400 dilution rates and Procymidone at 3,200, 64,000, and 128,000 dilution rates. Shortly after receiving each treatment, the seedlings were inoculated with *B. cinerea* and effects were observed three days later.

[1]Fungastop is an EPA 25b list antifungal and antibacterial product manufactured by Soil Technologies Corp. in Fairfield, IA USA
[2]Procymidone is a chemical pesticide CAS #32809-16-8

Results:
Plants were evaluated for signs *B. cinerea.* Any signs were measured for average diameters. Spots of *B. cinerea* on treated plants were compared to the untreated control and a protective value was calculated for each treatment. All treatments demonstrated a high protective value at all concentrations.

Treatment	Dilution	Average Diameter %	Protective Value %
Fungastop	X 100	0.0	100.0
	X 200	0.0	100.0
	X 400	0.3	98.5
Procymidone	X 3,200	0.0	100.0
	X 64,000	0.0	100.0
	X 128,000	0.0	100.0
Untreated	----	16.4	----

Table 1: *B. cinerea* size on plants and protective value of treatments

Conclusions:
This study demonstrates that both Fungastop and Procymidone have efficacy in protecting against *B. cinerea*. In this study Fungastop at 100 and 200 times dilution rates and Procymidone at 3,200, 64,000, and 128,000 times dilution rates provided 100% protective value of Gray Mold on cucumbers.