

Soil Technologies Corp.
Research and Development Department



Research Report

Title: Evaluation of Gray Mold Control with Fungastop

Location: Jardines de los Andes, Bogotá, Colombia

Principal Investigators: Fabiola Valcarce, PhD

Crop: Chrysanthemum

Date: May 2003

Abstract:

The purpose of this experiment is to evaluate the efficacy of Fungastop¹ in treating Gray Mold (*Botrytis cinerea*) on Chrysanthemum plants. Chrysanthemum plants were placed in a humidity chamber, inoculated with *B. cinerea* and then treated with Fungastop plus a dispersant. Plants treated with Fungastop were compared to a control group that was also inoculated with *B. cinerea* and placed in a humidity chamber. Five days after the inoculation, *B. cinerea* infection spots were evident on the plants without treatment while no symptoms of infection were evident in plants treated with Fungastop. These results indicate a potential for use of Fungastop as an effective control agent for Gray Mold in Chrysanthemum plants.

Methods:

The emulsion quality of the test material Fungastop was evaluated. Jars filled with Fungastop, and jars filled with Fungastop plus a dispersant were shaken and evaluated 30 seconds afterwards (Photo 1, right). Due to the longer emulsion times the following test were performed with Fungastop and dispersant agent.



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

Potted Chrysanthemum plants were placed into a humidity chamber in a laboratory and inoculated with *B. cinerea*. One group of plants was treated with Fungastop plus a dispersant while the control group was left without treatment. Five days after the inoculation plants were evaluated for signs of *B. cinerea*.

Results:

Five days after the inoculation, Botrytis infection spots (Photo 2, circled in red) were evident on the plants without treatment (right). There are no symptoms of disease on the Fungastop treated plants (center and left). Photo 3 shows additional treated plants with no signs of *B. cinerea*.



Photo 2: Treated and Untreated plants side by side.



Photo 3: Treated plants.

Conclusions:

Fungastop has demonstrated potential for being an effective control agent for Graymold in Chrysanthemum plants. Plants that were treated with Fungastop did not show any symptoms of infection compared to the control group which exhibited infection spots of *B. cinerea*.