

**G. Cucumbers (*Susumis sativus*) Greenhouse**  
**JH Biotech, Inc., Agronomy Department**

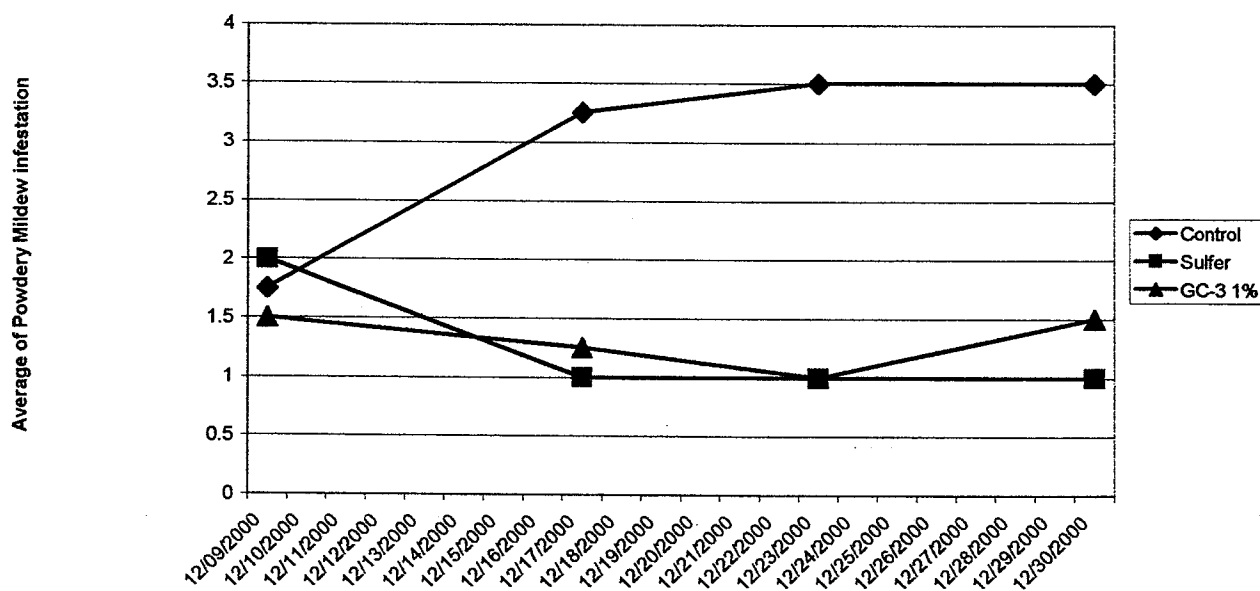
**Powdery mildew**  
**(*Sphaerotheca fuligenea*)**

Control of powdery mildew on greenhouse cucumbers at Westfield Farms, Camarillo, CA: Two 50 foot rows of four week old cucumber plants grown at 75-80 degrees with automatic drip irrigation were used in the trial. Treatment plots were 10 feet long with a three-foot buffer zone between each plot. Complete randomized design was used with three treatments at seven day intervals for four weeks and four replications.

Applications were made to the point of runoff using a handpowered backpack sprayer (50-60 gal/ac.) and left to dry. Data sampling method involved selecting five plants at random from each treatment plot and labeling one lowest, healthy leaf from each. Percentage of infection was estimated by observing the topside of the selected leaves and applying the University of California Pathogenicity rating scale (0-5). Statistical analysis was performed using the ANOVA and Duncan's Multiple Range Test at the 5% level of significance.

A 1% solution of GC-3 at a rate of 50-60 gallons per acre showed excellent control of *S. fuligenea* on cucumbers. The occurrence of mildew was very low in the treated plants; there was a highly significant difference between GC-3 and the control. There was no phytotoxicity associated with the GC-3 treatment for the four weeks of the trial.

GC-3 on Cucumber ,1999



	09-Dec	17-Dec	23-Dec	30-Dec
Control	1.75	3.25	3.5	3.5
Sulfur	2	1	1	1
GC-3 1%	1.5	1.25	1	1.5

Date