

M. Roses (Greenhouse)
(*R. dilecta* var. Delilah)
JH Biotech, Inc., Agronomy Department

Powdery mildew
(*Sphaerotheca pannosa* f. *sp rosaea*)

Control of powdery mildew on commercially grown roses at H & M Roses, Inc. of Carpinteria, CA: One row, 125 feet long of commercially grown roses in a 1 acre greenhouse was set aside for the trial. Temperature was maintained at 80° F, humidity was raised with the use of micromisters. Plants were grown in coconut bark filled bags and fed via microdrip irrigation with a custom fertilizer blend. The growth media was maintained at 79-80% field capacity.

Complete randomized design was used with three treatments at seven day intervals for four weeks and five replications. Three adjacent plants constituted a single plot. Fifteen plots were marked out, then randomly assigned to a treatment group and labeled. Data was collected for both pretreatment and post treatment infection levels using the University of California Pathogenicity rating scale (0-5).

Applications were made to the point of runoff using a handpowered backpack sprayer (20-25 gal/ac.) and left to dry and post treatment data was collected seven days later. Statistical analysis was performed for both pre-and post treatments using the ANOVA and Duncan's Multiple Range Test.

CG-3 at 2% solution showed a significantly lower rate of infection when compared to the control. A noticeable decrease in infection was observed in three of the five replications and no noticeable increase in infection was seen in the other two replications. GC-3 at 1% did not show control at a significant level. Infection within the control group did increase slightly over the seven days for two of the five treatments. No phytotoxicity was observed in any of the treatments.

GC-3 on Roses

