

O. Squash (Zucchini)
(Cucurbita pepo)
JH Biotech, Inc., Agronomy Department

Powdery mildew
(Sphaerotheca fuliginea)

Control of powdery mildew on zucchini at Beylik Ranch, Fillmore, CA: A field approximately three-quarters of the way to maturity was used in the trial. Temperatures ranged from 50° F at night to 90° F during the day. A completely randomized design was employed, using four treatments and five replications. Plots were marked out in two rows approximately 100 feet long. Individual treatment plots were 10 feet long by 5 feet across for a total area of 50 ft² per plot.

Treatments included a control with no treatment, the grower's standard practice of 2 oz. Bayleton per acre, GC-3 at a 1% solution and GC-3 at 2% solution. Applications were made with a hand powered backpack sprayer and applied to the point of run-off, approximately 50 gallons per acre. Applications were applied in the morning when air temperatures were below 90° F and were made weekly for four consecutive weeks.

Statistical analysis was performed and means separated using The University of California Pathogenicity rating scale (0-5). After four weeks, powdery mildew infection was relatively low in treatment blocks when compared to the control. Bayleton exhibited the most control followed closely by the GC-3 2% treatment. There was no phytotoxicity observed in any of the treatment blocks. GC-3 exhibited significant levels of control at both the 1% and 2% levels. GC-3 at 2% showed virtually the same level of control as Bayleton in this trial.

GC3 99 - ZUCCHINI

