

K. Melons (Watermelon)
(Cucurbitacea vulgaris)
JH Biotech, Inc., Agronomy Department

Powdery mildew
(Erysiphe chioracearum)

Control of powdery mildew on Watermelons at H. Spitzer & Sons, Inc., Arvin, CA: A field in complete row closure with 6-8 inch fruit on the vine was used in the trial. The field was infected with powdery mildew at a moderate level with of 10-15% of the surface area of the underside of the leaves showing infection. Individual treatment plots were 10 feet long by 10 feet across for a total area of 100 square feet per block. Trial design was a CRD with four treatments and five replications. Temperatures in the field ranged in the mid 80's to mid 90's for the duration of the trial.

Applications were made to the point of runoff using a handpowered backpack sprayer (approx. 50 gal/ac.) after first applying water at the rate of 100 gal/ac (1qt./plot). The applications were made in the morning hours when temperature ranged from 75° F to 80° F. Data collection method used was to randomly sample five newly mature leaves per plot and count the number of active powdery mildew colonies present per one square inch in on the underside of each leaf near the tip. GC-3 performed very well in this trial. Complete coverage is essential for good control. Spots of untreated areas showed little control if GC-3 was not applied sufficiently to the entire leaf surface, top and bottom.

GC 3 on Watermelon , 99

