

COMPARISON OF FUNGICIDES FOR CONTROL OF POWDERY MILDEW ON DECIDUOUS AZALEA, 2000: The objective of this trial was to compare different fungicides for control of azalea powdery mildew. Fungicide treatments were arranged in a randomized complete block design in a commercial block of deciduous azaleas. Each fungicide treatment was applied to 4 sets of 4 plants for a total of 16 plants per treatment. All treatments were applied using a solo backpack sprayer set at 60 psi. All treatments were applied at a rate of 100 gal water/A with a total of 0.75 to 1 gal of a spray suspension applied to each treatment. Treatments were applied on 27 Jun (just after hedging), 11 Jul (new shoots starting to grow), 25 Jul and 8 Aug. Hedging produced a flush of new growth during the trial period, therefore, all data observations were based on new shoots. The incidence of powdery mildew was evaluated on 23 Aug by examining all leaves on 5 new shoots per two plants (10 shoots total per replicate). The average length of new shoots was measured on 5 Sep.

The first powdery mildew lesions were detected on 19 Jun before the initiation of fungicide treatments. Fungicides, however, were applied as new shoots began to develop after hedging. All plants treated with fungicide had significantly fewer leaves with powdery mildew than plants nontreated. The number of leaves with powdery mildew on all Heritage treated plants were not significantly different from those on water treated plants. Plants treated with Compass or Garden Fungicide (sulfur) had the fewest number of leaves with powdery mildew, however, the number of leaves with powdery mildew on plants treated with Immunox, Banner or Kaligreen were not significantly different. Plants treated with Garden Fungicide (sulfur) had several necrotic or sunburned leaves within a week after the first treatment. After plants were sprayed on the morning of 27 Jun, record temperatures in the mid 90's F were recorded that afternoon. Kaligreen treated plants had much less but a few sunburned leaves during the same time period. Kaligreen treated plants also had a slightly different color from the normal bluish tint of the other plants.

Treatment and Rate/100 gal water	Leaves with Powdery Mildew (%)*	Average Length of New Shoots (cm)**
Nontreated	44.7 a	8.1
Water only	36.8 ab	8.5
Heritage 50 WG 1 oz	21.3 bc	8.4
Heritage 50 WG 2 oz	21.4 bc	9.2
Heritage 50 WG 4 oz	20.3 bcd	7.9
Heritage 50 WG 8 oz	21.6 bc	10.4
Compass 50 DG 4 oz	4.4 d	8.9
Immunox 8 fl oz	11.6 cd	9.0
Banner 1.1 E 8 fl oz	6.0 cd	8.1
Kaligreen 5 lb	16.0 cd	8.1
Garden Fungicide (0.4% sulfur) 2 fl oz	4.4 d	8.8

* Means followed by the same letter do not differ significantly based on Fisher's protected LSD (P=0.05).

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