

Powdery Mildew

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This summer working at SYG Nursery I learned a lot more about roses than I ever knew. I had the opportunity to see powdery mildew first hand and help take care of the problem. Powdery mildew is a white to grayish, fuzzy looking powder (almost like cotton). The plants that had powdery mildew were still growing, but not very well. The leaves kind of curled up and were drooping. New growth was affected the most (it really liked the bottom of buds and new growth), but it also spread down into the older growth. Because of the powdery mildew the plant overall did not look very healthy. >From the amount of powdery mildew it was preventing the new blossoms from opening, it was killing them before they could open.

The reason these roses had powdery mildew is they were packed too closely together in their sale area. After it would rain they didn't get enough air to dry off their

leaves before it warmed up during the day. Giving the perfect conditions to allow the powdery mildew spores to germinate and flourish.

In my own experience and according to my sources the best method to remedy this problem is prevention. Plants should be spaced far enough apart to get air and light, and the best watering system is a drip system to keep as much moisture off the leaves as possible. Other things that can be done are to look for cultivars that are hardy and disease resistant. If you already have powdery mildew it can be treated with fungicides, and cut out some of the most affected parts of the plant. Also using a disinfectant on the pruners to also help from spreading it. Some of the fungicides recommended by the University of Nebraska (1) are:

Benomyl, Benlate, Tersan 1991

Folpet, Phaltan

Bayleton

Funginex, Triforine

Karathane

Sulfur

Before any application the label should be read, proper clothing should be worn. You will want to cover the plant (bottom and top of the foliage). I also read about an experiment that tested baking soda. "Controlled experiments were conducted for some three years, using sodium bicarbonate or potassium bicarbonate in various combinations with insecticidal soap, Sunspray A ultra fine spray oil, or only water. The result: both diseases were subdued by a weekly spraying of either sodium or potassium bicarbonate at 3 teaspoons per gallon of water, combined with Sunspray at 2

tablespoons per gallon of water. The bicarbonates eliminated the fungi, but addition of the Sunspray provided a spreader-sticker action that increased its performance.”(2)

Sources:

(1) “Powdery Mildew: An Ounce of Prevention.” American Rose Society. Retrieved 26 November 2001. <http://www.ars.org/experts/powdery.html>

(2) “Powdery Mildew of Roses.” University of Nebraska. Retrieved 26 November 2001. <http://www.ianr.unl.edu/pubs/plantdisease/g979.htm>