

Powdery Mildew on Rhododendrons

Purplish markings on your rhododendron are probably the powdery mildew that the Pacific Northwest has been experiencing for several years. Several hybrids and species are susceptible to it. This powdery mildew has been identified as *Microsphaera penicillata* and is found not only in gardens but also in native stands of rhododendrons. Control can be accomplished by a combination of cultural practices and chemical sprays.

Culturally susceptible plants should be irrigated early in the day, so foliage is dry by evening when temperatures drop. Canopies can be pruned to thin out the growth to allow for better air circulation and sunlight penetration. It is best to rake and dispose of (not compost) dead leaves from diseased plants.

The time to control the mildew chemically is when the leaves begin to emerge, usually at or just after flowering in spring. Apply the sprays, alternating types, at 2-3 week intervals, until the infection period is over. The infection period has not been totally identified, but has been suggested to run into November.

Over the past several years, in discussing this with plant pathologists and extension agents from Washington and Oregon State Extension offices, the following is a listing of steps you can take:

1. If the plant is really diseased and has dropped its leaves, consider discarding the plant.
2. You can reduce the mildew population by removing the older, heavily infested leaves in fall or winter.
3. Practice garden sanitation as outlined above.
4. At leaf emergence time, you can incorporate some of the following:
 - a) Hose the plant down with water every several days to wash off spores. Early morning is the best time.
 - b) The newest findings on using Compost Tea for mildew control are promising. The theory is to apply living organisms to the foliage, which out-compete the damaging mildews. For more information, contact Bayview Nursery (360) 321-6789, Creative Gardens in Coupeville (360) 678-5706, South Whidbey Tilth's website: www.southwhidbeytilth.org or Soil Foodweb's website: www.soilfoodweb.com.
 - c) A fine horticultural oil, like Ecospray or Sunspray, (not dormant oil) can be applied to the foliage to act as a barrier, not allowing the spores to hook into the new foliage. Good coverage is necessary. Apply on non-sunny days. Make sure the plant is well watered.
 - d) Apply a fungicide, such as Bayleton, Rubigan, Banner, Funginex or Safer's Garden Fungicide with sulfur. As with any application of sprays, read and follow the directions.

As with any application of sprays, read and follow the directions. Wear protective clothing. Contact your local Agricultural Extension Agent for further information.

Research is underway to locate and identify natural predators of this mildew. Some research with a product from the Neem tree, Margosan, is under review. A biological control is being studied as well, in Davis CA, on other mildew prone plants. 'Serenade' is the name of this new product which is showing positive results against powdery mildew on food crops. I am looking into other "biopesticides" as well. The Univ. of California, Davis has a good publication talking about biopesticides in their book: *Natural Enemies Handbook*. Publication # 3386. Their internet address is <http://ipm.ucdavis.edu> and phone (800) 994-8849.