

Emailed August 3, 2016



Moist Spring Brings Summer Challenges  
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Powdery Mildew on the veggies – Oh Dear!

The UCCE Master Gardeners of El Dorado create and maintain contact sheets for every problem brought to us from county residents experiencing issues with their gardens and plants. In looking over past year's problems during these summer months, a common problem emerged with respect to Powdery Mildew (PM), and that was in the drought years. I imagine it will be a more pronounced issue this year with the higher humidity we had this spring. That, and I have also encountered it personally for the first time on my grapevines. Grrr! So, what's a veggie gardener to do?

Powdery mildew is a disease caused by many different species of fungi. Each species attacks specific plants, but others attack a wide range of plants. Plant infection is favored by high humidity (50 to 90%) during twilight hours, and temperatures between 60° and 80° F. Those conditions sound familiar from this spring!

PM symptoms most often appear in the form of white spots; the spots enlarge as the white mycelium (threadlike filaments) grows over plant surfaces and produces spores, giving a powdery appearance that covers the leaves. The threadlike filaments are best seen under magnification; otherwise some of the smaller spots could be mis-diagnosed as an insect. The infection forms on either side of the leaves, spreading rapidly over the entire surface with the filaments penetrating the leaves and stems, robbing nutrients from the plant. Affected leaves will not manufacture as much food as they should, and may turn yellowish or brown and drop from the plant.

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There are two treatment options: Preventive and eradication. The first is used when you know the plant is susceptible to PM, and you treat to prevent its establishment (such as Grapes, treated with a soluble sulfur application every 2 weeks during the growing season). However, more likely, since you are reading this article, you've already got PM and you want to consider your next steps.

Well, now its decision time. Do you treat the plant to reduce or eradicate the PM, or can you live with it? Not all plant issues need to be addressed by a declaration of war!

Once you've determined to have active PM symptoms, and you want to treat it, you will need an eradicant to kill the infection to avoid further damage. Since the established PM is a parasite to the host plant, using a preventative treatment such as sulfur will not stop further damage to the plant. Least toxic eradication options include horticultural oils, such as Saf-T-Side Spray Oil, Sunspray Ultra-Fine Spray Oil; or one of the plant-based oils, such as neem oil or jojoba oil. Another eradication option, though less effective than oils, is the biological fungicide "Serenade." A word of caution: avoid any of the oil spray options within two weeks of using sulfur, as plants may be injured. In all cases, please consult the label before applying any fungicides.

More information on Powdery Mildew can be found in our pest notes catalog at:

<http://ipm.ucanr.edu/PMG/PESTNOTES/pn7406.html>

Would you like to continue to harvest luscious, home-grown vegetables even after the heat of summer subsides? If so, now is the time to plant for a fall and winter harvest. Learn how to grow a successful winter vegetable garden from UC Master Gardener Zach Dowell at his free class this Saturday, August 6: Fall and Winter Vegetables. Class is from 9:00 a.m. to noon at the Government Center Hearing Room, Building C, 2850 Fairlane Court in Placerville.

Next Wednesday, August 10<sup>th</sup>, join Master Gardener Heidi Napier for her free class on Orchids. You can grow orchids in your home and yard; learn about the care and feeding of these enchanting plants during class from 9:00 a.m. to noon at Cameron Park Community Center, 2502 Country Club Drive in Cameron Park.

UCCE Master Gardeners are available to answer home gardening questions at local Farmers Markets and Tuesday through Friday, 9:00 a.m. to noon, by calling (530) 621-5512. Walk-ins are welcome at our office, located at 311 Fair Lane in Placerville. For more information about our public education classes and activities, go to our UCCE Master Gardeners of El Dorado County website at <http://mgeldorado.ucanr.edu>. Sign up to receive our online notices and e-newsletter at [http://ucanr.edu/master\\_gardener\\_e-news](http://ucanr.edu/master_gardener_e-news). You can also find us on Facebook.

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