



POWDERY MILDEW

Prevalent on Foothill Oaks this Year



By Scott Oneto, Farm
Advisor/Director —
Amador, Calaveras, El
Dorado and Tuolumne
Counties

Many blue oak trees in California foothills might be more accurately described as “silver oaks” this year. From a distance, they shimmer with a silvery halo. On closer inspection the outermost leaves are coated with a white to gray powdery fuzz.

The cause is powdery mildew. Powdery mildew, a group of fungi that causes a white, flour-like growth on the surface of leaves, is common on roses, begonias, grapes, and many other ornamental plants.

Powdery mildew rarely kills the majestic trees. Even small seedlings that have all of their leaves severely infected usually survive and recover.

Powdery mildew makes it more difficult for the affected leaves to photosynthesize and produce food, and if it's severe enough, it can also result in the leaves distorting, curling up, dying and falling to the ground. But most affected trees will simply grow a new crop of leaves later in the summer or the following spring. And if weather conditions return to a more normal pattern next year, with little or no rainfall after March, it is unlikely that powdery mildew would continue to be severe or widespread.

Some people may be inclined to treat affected trees with fungicides. However, these treatments are most effective before the symptoms first appear, which occurred weeks or months ago. It is also generally not recommended to treat trees in wildland settings. There are too many trees to treat and the potential environmental risks of applying fungicides across a large landscape can outweigh the benefits. Above all, don't panic and cut down the trees, even if all their leaves fall off.

The trees are still very much alive, losing their foliage is just the oak's way of dealing with an unwanted pest. By this time next year they should again be leafed out without that silver covering currently observable. ♡

SUMMER 2017

Contact Your Local Master Gardener

Amador County

209-223-6838
Office hours: 10 am–Noon
Tuesday–Thursday
mgamador@ucanr.edu

El Dorado County

530-621-5512
Office hours: 9 am–Noon
Tuesday–Friday
mgeldorado@ucanr.edu

Sign Up Online

Not on our e-newsletter distribution list yet? Know someone who would like to receive our newsletters and notifications on classes and events?

Sign up online at:
<http://ucanr.edu/mgenews>

Free Pest Notes

Free Pest Notes are available on a variety of topics. For more information, call or email your local UCCE Master Gardener office. To explore the Pest Notes on the UC Integrated Pest Management (IPM) website, go to www.ipm.ucdavis.edu



Tomatillo

The Little “Tomato” That Could

by Paula Bertram and Suzanne Surburg
UCCE Master Gardener and Master Gardener/
Master Food Preserver of El Dorado County

While puttering about at the horse stable, we spotted a scraggly collection of plants growing in a rock driveway around a drainage grate. Further investigations showed many of the same plants in various locations: horse paddocks, ditches, and manure piles. Sun or shade, they were everywhere!

A few weeks later, there was a minor panic when a small child was discovered eating a green fruit while her mother was riding. Mom was very anxious about it being poisonous. Lo and behold, those scraggly plants were now producing small green fruits with papery husks—tomatillos! How did they come to be growing at a horse stable? Nobody quite knew, but one plausible theory is that they had “escaped” from the kitchen of Fernando, the barn manager who lives on the premises.

Fortunately, the mom was not unjustified in her concerns. Tomatillos (as well as tomatoes, eggplant, and potatoes) are members of the nightshade family (also known as the *Solanaceae* family of plants). These are plants with a long cultivation history, and



were apparently first grown by the Aztecs. The early Spanish explorers introduced them to Europe. Tomatillos are popular in Mexican and Central American cuisine and are found in many local markets here in El Dorado County.

Free plants! Being a cheapskate something-for-nothing type, a few small plants were immediately “liberated,” put in a bag with some shavings, and re-homed in one author’s garden. They flourished, producing cute yellow flowers and a bumper crop of small-to-medium fruits encased in papery husks. Tomatillos (*Physalis phildephica*), aka “Mexican husk tomato,” will grow wherever regular tomatoes will grow (and places that tomatoes won’t, too). The plants tend to sprawl. Providing some support keeps the fruits from molding on the ground, but we didn’t bother.

They are not the same genus and species as true tomatoes (*Lycopersicon esculenta*) so you don’t need to worry about cross pollination or inadvertent hybridization. If the horse facility is any indication, they self-seed readily and will not need replanting. However, some UCCE Master Gardeners contend that allowing tomatillos to self-seed each year results in smaller fruit. No worries, the seedlings are easy to pull up. Now that’s my kinda plant! Of course, if there is no free source, tomatillo seeds are readily available and can be started from seed just as you would other vegetables.

Tomatillos make excellent fresh salsa and cooked sauces. Most recipes use them in their firm green “unripe” condition. They are ready to harvest when the fruit fills up the papery husk. The skin can vary

Get Answers to Your Gardening Questions Online

http://cecentralsierra.ucanr.edu/Master_Gardeners

- Information about UCCE Master Gardeners and how to become one
- Calendar of Master Gardener events including a list of public classes
- Useful links to gardening websites
- Home gardening publications

Got a specific question?

Ask a question through our online form:

[Ask a MG of Amador County](#)

[Ask a MG of El Dorado County](#)

Or just email us!

Amador: mgamador@ucanr.edu

El Dorado: mgeldorado@ucanr.edu

► *Tomatillo... (continued from page 2)*

from green to yellow to a light purple. The flesh will be a pale ivory and a bit drier than a normal tomato.

Try throwing them whole into a stew with pork and corn kernels. Just remember to remove the paper husks before processing. Liven up a tomato salad by adding a few sliced tomatillos to add color and tart taste. They will turn paler green or light yellow as they ripen, and assume a slighter sweet taste. If some get a little ripe, there are recipes for preserves or jams as well. Did I mention they freeze beautifully? Just throw them whole into a baggie for future use.

Our own UCCE Master Food Preservers have developed some recipes to help you use these hardy low maintenance little beauties. (*Contact information can be found on page 7.*)

A summer garden is not complete without a few tomatillo plants. With a little luck and good weather one can preserve the harvest for use throughout the

winter. Fortunately, last summer provided my family with enough tomatillos to last all year. Prior to preserving any product, please read about the process on either <http://nchfp.uga.edu/index.html> or <http://www.freshpreserving.com>.

A few suggestions for preserving your harvest:

Freeze whole, remove the outer husk, wash well, and blanch in boiling water for 30–45 seconds. Immediately put into an ice water bath to stop the cooking process. Drain, and dry tomatillos, place in a single layer on a tray. Put into your freezer. When the tomatillos are completely frozen, put them into a zip-lock freezer bag, remove the air, and seal. Freezing on a tray in a single layer makes it possible to remove only the amount of product one needs for a recipe and save the remainder. Blanching stops enzyme growth and helps retain color.

Below is a recipe for canning tomatillo salsa from the *USDA Complete Guide to Home Canning*. ♡

Tomatillo Green Salsa

Yield: About 5 pints

- 5 cups chopped tomatillos (or green tomatoes may be used)
- 1-1/2 cups seeded, chopped long green chiles
- 1/2 cup seeded, finely chopped jalapeño peppers
- 4 cups chopped onions
- 1 cup bottled lemon juice
- 6 cloves garlic, finely chopped
- 1 tbsp ground cumin (optional)
- 3 tbsp oregano leaves (optional)
- 1 tbsp salt
- 1 tsp black pepper

Procedure:

Caution: Wear plastic or rubber gloves and do not touch your face while handling or cutting hot peppers. If you do not wear gloves, wash hands thoroughly with soap and water before touching your face or eyes. Combine all ingredients in a large saucepan and stir frequently over high heat until mixture begins to boil, then reduce heat and simmer for 20 minutes, stirring occasionally. Ladle hot salsa into hot pint jars, leaving ½ inch headspace. Remove air bubbles and adjust headspace if needed. Wipe rims of jars with a dampened clean paper towel. Adjust lids and process.

Recommended process time for Tomatillo Green Salsa in a boiling-water or atmospheric steam canner

Style of Pack	Jar Size	0 - 1,000 ft	1,001 - 6,000 ft	Above 6,000 ft
Hot	Pints	15 min	20 min	25 min

UCCE Master Gardeners Participate in Farms of Amador School Field Trip Program



The class will be invited back next year as 5th graders to harvest their plantings in the fall.

Bus transportation costs are provided by Farms of Amador, as well as stipends to the farmers who host the students. Master Gardeners have been instrumental in helping Farms of Amador coordinate local school participation, mentoring in-school teaching gardens and providing education to youth during field trips. ♡

*By Ron Antone
UCCE Master Gardener of Amador County*

UCCE Master Gardeners continue their involvement in the Amador County school farm tour program sponsored by Farms of Amador. The 4th grade class from Plymouth Elementary took part in an immersive learning experience on May 11th at one of Amador County's most mindful farming endeavors. Daniel D'Agostini's Demeter certified Biodynamic farm, hosted the students to a full day of activities with the help of Master Gardeners Ron Antone, Betty Olson-Jones, John and Susan Wimer, and Master Gardener Program Coordinator, Tracy Celio.

The day included hands on learning about seasonal crops, organic growing methods and the importance of sustainable farming. The 4th grade students helped harvest long rows of fava beans, assisted with building compost piles, tasted edible flowers and planted corn and squash seeds.

Lunch snacks included organic popcorn and baked kale chips prepared by Andriana Lewis, Cal Fresh Nutrition Educator for Amador County.

Most of the children had never been on a farm before, so it was an enlightening day for everyone involved.



Keys to Plant Problems

Do Plants Talk?

By Penny Villanueva

UCCE Master Gardener of El Dorado County

Yikes! What's wrong with my plant? The day before it looked stunning, but today something is wrong. How could this happen overnight? What to do now? Some may try previous remedies, or others may consult a garden center person. But a gardener with experience follows a few basic steps before treating the plant. The basic steps are to know what the plant is, gather specifics about the problem, know the environmental conditions surrounding the plant, and treat the problem specifically.

While this amount of information seems excessive, every gardener after a few years will already know a lot about the garden. So what specifics are essential?

First, know what the plant is: don't guess. Every plant has certain problems specific to that plant variety.

Second, study the symptoms. Each symptom tells the cause. Plants are generally composed of three parts: shoots, roots, and leaves. Each part is interconnected, so what happens in one part of the plant affects the other parts of the plant. Consider how each plant structure functions.

Think of the shoots in several ways: conductor, supporter, supplier, and messenger. Inside the shoot are two straw-like structures, moving liquid foods and water up and down between leaves and roots. Damage to the stem interferes with all these functions.

The root acts like the plant's "brain" to ensure plant survival, growth, and production. Damage to the roots affects the entire plant. Root problems weaken the entire plant making it susceptible to diseases or insects.

Leaves are the "digestive body" or "stomach" of the plant producing food for the roots. On the underside of leaves, there are "tiny holes" or stomata so the plant can breathe and manage water needs. Leaf symptoms can indicate nutrient needs, toxic chemical exposure, or excessive loss of water.

Third, practice problem solving for the plant. Know the garden well including the climate conditions and light exposure on the plant. Remember, symptoms are clues to the plant's problem but the plant is also affected by the surrounding environment. Understand the relationship between the plant's location and soil type. Become a "plant doctor," and take a complete history of your plant before starting to treat it.

Finally, treat the plant problem specifically and appropriately. Recall how each plant part is essential to the other? Examine all the symptoms of the plant: when did the symptom start, where did it start, what part of the plant is affected, and what is the pattern of the symptoms on the plant? Understand why this plant began having problems. Ask yourself if the plant problem is related to other gardening practices or applied treatments. Think through each of these questions before commencing with any treatment. Not every problem should be treated with a chemical because other treatments may be more effective.

To successfully treat and salvage a plant, know what the plant is, know the symptoms, practice problem solving, and then treat correctly. This process saves money, time, and effort. Once you have all the facts, check out potential problems and solutions at the UC ANR Integrated Pest Management website at <http://www.ipm.ucanr.edu>. 🦋



California Sister on Orange-ball Buddleia

Photo taken June 2017 in the
Sherwood Demonstration Garden – Butterfly Garden

Photo credit: Honorary Master Gardener, Jan Sherwood



Free! PUBLIC EDUCATION CLASSES

Classes are from 9 am to Noon, unless otherwise noted.

Please call ahead or check online to confirm locations.

Click on the class title for the option to schedule an email reminder for the class.

Amador County

Click on class title for more information.

Questions? Call 209-223-6838.

Jun 24 [Care & Use of Herbs from the Garden](#)

Spice up your flower or vegetable garden this year by adding a few useful herbs. There are many good reasons to plant herbs in your garden. Fresh and dried culinary herbs are handy to have for cooking and other types can be used as ornamental plants or for crafts. Master Gardeners will provide instruction on how to successfully grow herbs and then discuss the culinary aspects, as well as tips on the proper preservation of various herbs. They will also explain how to use herb plants as ornamentals to beautify your garden and attract beneficial insects. In addition, tips on using herbs as craft materials will be included. Hand-outs will be provided. Location: Amador County GSA Building, 12200-B Airport Road in Jackson.

Jul 15 [Kids in the Garden](#)

Looking for something a little different to keep the kids busy? Why not bring them to the "Kids in the Garden" Public Education class provided by the UCCE Master Gardeners of Amador County on Saturday, July 15, 2017 from 9am-Noon? Learn how to make and maintain your own worm farm.

Investigate how to make a butterfly garden and which plants encourage beneficial insects to visit our gardens. Plant seed trays and practice transplanting seedlings. Information provided and all activities are kid friendly. All ages are welcome. Location: Amador County GSA Building, 12200-B Airport Road in Jackson.

Jul 27– [Visit the Master Gardeners at the Amador County Fair](#)

Time: Noon – 5:00 pm. Location: Amador County Fairgrounds.

Aug 5 [Planning for Fall & Winter Gardens](#)

Location: Amador County GSA Building, 12200-B Airport Road in Jackson.

Sep 9 [Summer Fruit Tree Pruning](#)

Location: Off site. Call 209-223-6838 for location.

Sep 23 [Understanding & Improving Your Garden Soil](#)

Location: Amador County GSA Building, 12200-B Airport Road in Jackson.

[Master Gardener of Amador County Classes](#)

El Dorado County

Click on class title for more information.

Questions? Call 530-621-5512.

Jul 8 [Saturdays with Barry \(9 am – 11 am\)](#)

A lot of things are happening in the summer vegetable garden. Barry will explain various planting, thinning and pest control needs as well as needs for the success of your vegetable garden during each month's demonstration. Parking fee: \$2.00 (see kiosks in college parking lot). Location: Sherwood Demonstration Garden, 6699 Campus Drive in Placerville (behind Folsom Lake College, El Dorado Center).

Jul 12 [All About Berries – Combo Class](#)

Master Gardeners and Master Food Preservers combine their knowledge in this class on berries. Master Gardeners will discuss how to grow and care for the various berry plants, and the most common diseases and pests in our area. Then Master Food Preservers will show you how to preserve your garden bounty in fun and creative ways. From basic jams and jellies, flavored vinegars, pie fillings, and more.. Location: Cameron Park Community Center, 2502 Country Club Drive in Cameron Park.

Aug 9 [Stone Fruit: From Garden to Table – Combo Class](#)

Master Gardeners and Master Food Preservers combine their knowledge in this class on stone fruit. Master Gardeners will discuss the care and feeding of stone fruit trees, and the most common diseases and pests in our area. Then Master Food Preservers will show how to preserve your garden bounty in fun and creative ways, from basic canned fruit to chutneys and BBQ sauces. Location: Cameron Park Community Center, 2502 Country Club Drive in Cameron Park.

Aug 12 [Fall and Winter Vegetables](#)

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 UCCE Master Gardener Zack Dowell. Location: Government Center Hearing Room, Building C, 2850 Fairlane Court in Placerville.

Aug 12 [Saturdays with Barry \(9 am – 11 am\)](#)

See description above. Parking fee: \$2.00 (see kiosks in college parking lot). Location: Sherwood Demonstration Garden, 6699 Campus Drive in Placerville (behind Folsom Lake College, El Dorado Center).

[Master Gardener of El Dorado County Classes](#)

Sherwood Demonstration Garden Open through October 31

From April 1 to October 31, the Sherwood Demonstration on Garden (SDG) is open on Fridays and Saturdays from 10 am – 2 pm.

UCCE Master Gardeners of El Dorado County care about your safety. SDG is closed when it is raining or when temperatures reach above 95 degrees.

Our website now has a link to the weather forecast we use. Please check our website before visiting for these or any other changes in current open days.

On open days, there are trained Master Gardener docents on duty to talk with visitors about the garden and answer questions.

Guided tours can be arranged for small or large groups by contacting Sheri Burke at 530-676-1009.

Visit the SDG at 6699 Campus Drive in Placerville. Built on property owned by the El Dorado County Office of Education, SDG is located between Folsom Lake College-El Dorado Center (FLC-EDC) and the Cameron Park Observatory.

Parking in the FLC-EDC parking lot is \$2.00.

For more information about the Sherwood Demonstration Garden, please call the UCCE Master Gardener office at 503-621-5512 (Tue-Fri from 9-12) or check out the SDG pages on our website.

 [Sherwood Demonstration Garden](#)



University of California
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**PUBLIC
CLASSES**

El Dorado County Classes

Phone: 530-621-5506 • Email: edmfpc@ucanr.edu

Jul 12 All About Berries – Combo Class

(9:00 am–noon) Cameron Park Community Center, 2502 Country Club Drive in Cameron Park.

Jul 15 Snacks on the Go: Dehydrating

(9:00 am–noon) Bethell-Delfino Agriculture Building, 311 Fair Lane in Placerville.

Aug 9 Stone Fruit: From Garden to Table – Combo Class

(9:00 am–noon) Cameron Park Community Center, 2502 Country Club Drive in Cameron Park.

Amador/Calaveras County Classes

Phone: (209) 223-6857 • Email: acmfpc@ucdavis.edu

Jul 8 Farm to Fork All Year Long

(9:00 am–noon) Amador County GSA Building, 12200-B Airport Road in Jackson.

Jul 19 Boiling/Steam Canning Basics

(6:30 pm–8:30 pm) Calaveras Senior Center, 956 Mountain Ranch Road in San Andreas.

Aug 12 Salsa & Chutneys

(9:00 am–noon) Amador County GSA Building, 12200-B Airport Road in Jackson.

[Central Sierra Master Food Preserver Classes](#)



MASTER GARDENERS ON FACEBOOK

[UCCE Master Gardeners of Amador County](#)
[UCCE Master Gardeners of Calaveras County](#)
[UCCE Master Gardeners of El Dorado County](#)
[UCCE Master Gardeners of Tuolumne County](#)



MASTER FOOD PRESERVERS ON FACEBOOK

[UCCE Master Food Preservers of Amador/Calaveras County](#)
[UCCE Master Food Preservers of El Dorado County](#)



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Should you need assistance or require special accommodations for any of our educational programs, please contact us at 530-621-5502.