

## Checking Landscapes for Sudden Oak Death Symptoms



Photo to be credited to Department of Environment, Food and Rural Affairs, UK : Leaf lesions caused by *Phytophthora ramorum* on a camellia.

David W. Marshall, the author, directs environmental education programs for the University of Florida IFAS Extension in Leon County . For more local gardening information, visit the UF-IFAS Leon County Extension website at <http://leon.ifas.ufl.edu>

May 9, 2004

**Y**ou've probably heard or read a little about sudden oak death (SOD) in the news recently. So far SOD, which can infect a number of types of woody plants, has only been found in Florida on a very few individual nursery plants in a small number of retail nurseries. One of these nurseries was in Tallahassee . All of these plants came from one rather prestigious wholesale nursery in Azusa , California ; Monrovia Growers. Florida Department of Agriculture (FDACS) acted quickly to stop plant shipments from California into Florida following the news that SOD had been found in the California nursery. FDACS also stopped sales in Florida retail nurseries of plants that had already come from the California nursery where the disease was found as well as from other locations owned by that California nursery chain.

Plant samples were taken from the retail nurseries in Florida that were customers of Monrovia Growers. Only samples at a small number of Florida nurseries have tested positive for *Phytophthora ramorum*, the fungus that causes SOD. Two plants were found at one retail nursery in Tallahassee and those individual plants, and a generous buffer of plants around them at the nursery, were destroyed offsite by burial six feet below ground.

SOD may, or may not, have the potential to be a very serious landscape plant disease in our area. We suspect that disease development may require a cool, moist environment such as in the northwest United States . But, at this point the experts just don't know. So far, the disease has not been found anywhere in a landscape situation in the U.S. outside of California and Oregon . Retail nurseries in Florida have been very cooperative with the authorities in trying to find and remove plants with the disease. But, now it's time to start checking landscapes to eliminate the possibility that some of the Monrovia plants that gardeners have purchased in 2003 and 2004 haven't introduced the disease into the landscape. University of Florida IFAS County Extension offices will be acting as screening sites for disease samples from home landscapes. The UF-IFAS Leon County Extension office (487-3004) will screen samples from Leon County .

Practically every plant in your landscape has leaf spots on it. So don't panic now and jump to the conclusion

## Checking Landscapes for Southern Oak Death Symptoms

that the spots are caused by SOD. The following information outlines the procedures for determining which spots we will be concerned about checking.

**Type of Plant** - Camellias, azaleas (any *Rhododendron* species), and viburnums are the only three types of plants that we will be screening. These are the types of plants that seem most likely to be infected under Florida conditions. Interestingly enough, experts feel that live oaks are not likely to be susceptible to the disease.

**Source of Plant** - In 2003-2004, did you purchase plants that came from Monrovia Growers in California ? Monrovia uses a distinctive green plastic pot with white lettering showing their name. Tallahassee Nurseries, Esposito Gardening Center , and Royalty Plant Nursery are the three nurseries in town identified by FDACS as buying plants from Monrovia in Azusa . The only other California nursery that has been found to have SOD infected plants is Specialty Plants, Inc., and they only sell mail-order, direct to the consumer, so it is unlikely that you would have their plants. We want to focus only on landscape samples from plants originating from one of these two California nurseries and only during the period of 2003-04. However, if you purchased new plants during this period, and you can't remember if they were in Monrovia pots, yet your camellias, azaleas, or viburnums have symptoms as following, then we'll consider them.

**Symptoms** - Leaf lesions usually form on leaf tips and edges. Unfortunately, because the symptoms are on the leaf tip or outer edge, they are very similar to those of fertilizer burn, drought damage, and other symptoms of stress to the root system. Sometimes, though, these lesions are on the stem edge of the leaf, unlike with root stressors. Margins of lesions are indistinct and diffuse, not sharply defined as are many fungus leaf spots. Leaf lesions may progress down the stem of the leaf into the plant stem. This may lead to a bark canker. If you would like to see additional photos of SOD symptoms, visit this FDACS website, <http://www.doacs.state.fl.us/pi/enpp/pathology/sod-up.html>

**Collecting Samples** - Before going to the trouble of bringing a sample to the UF-IFAS Leon County Extension office at 615 Paul Russell Road (about 1/4 mile east of the fairgrounds), we want to make sure the symptoms closely match those given above. The best way for you to do this is to call (487-3004) and talk to a Master Gardener about the symptoms and the source of the plants. If you are then asked to bring in a sample, we want you to bring a generously-sized sample, not just a few leaves. We want samples that show the transition zone between lesions and healthy tissue. If the symptoms are leaf symptoms, bring in the whole small branch with the leaves. The best way to transport your sample is between dry paper towels, sealed in a large ziploc bag. Be sure to sterilize your pruning tools with rubbing alcohol after cutting the sample so that you don't potentially spread the disease to other plants. Also, wash your hands well (not for your protection, but for prevention of spread to other plants).

If the symptoms have moved down the leaf stem and into the stem of the plant, forming a canker and causing stem dieback, then you will need to bring that whole section of the plant as well. If it is a small plant, you may just want to bring the whole plant. In that case, just place the whole plant in a bag. From the time you take the sample until it arrives at the Extension office, keep it out of heat and bright sunlight.

When you bring in the sample, be prepared to help the Master Gardener in the Extension office to fill out an information form about the sample. Your complete address will be needed, as well as number of plants affected, and total number of plants of that type in the immediate area. Be sure that you give your phone number and e-mail address under the Sender's Remarks at the bottom of the form. That will enable someone from FDACS Division of Plant Industry (DPI) to contact you should your sample prove to be positive for SOD.

Before mailing your sample to the FDACS lab in Gainesville , though, my assistant or I will examine it and

## Checking Landscapes for Southern Oak Death Symptoms

decide, based on the symptoms, whether to forward it on to the lab. While you're awaiting diagnosis of your samples, do not destroy the plants in your yard or attempt treatment. If your plant samples do show presence of the SOD fungus, DPI officials will contact you, guiding you as to how to dispose of the affected plants. Rather than just try and control the disease, DPI officials want to eradicate it from Florida while we have the chance.

###