



Hot Topics

News for Placer County Home Gardeners

This newsletter highlights the latest most-frequently-asked questions coming in to the Hotline, the Master Gardeners' of Placer County help desk.

The Hotline receives over 500 inquiries a year from gardeners looking for help with their gardening problems, and there are often trends in what gardeners want to know or share.

If you have questions or want to share what's happening in your garden, call us at (530) 889-7388 or visit our website at http://pcmg.ucanr.org/Got_Questions/ to find out how you can email your question or bring in a sample.

Black Oaks Lose Leaves in El Nino Winter

BERKELEY - This summer, people living in the Sierra Nevada and Coast Ranges have reported seeing the leaves on California black oaks covered with brown spots, curling at the edges and even turning completely brown and falling off. In some cases, entire hillsides are blanketed with brown tree crowns. While black oaks are deciduous - changing color and dropping their leaves in the fall - they are normally fully leafed out with dark-green foliage in early and mid-summer.

Many landowners, concerned their trees are dying, have contacted their University of California Cooperative Extension county office, the California Department of Forestry and Fire Protection or local arborists and landscapers to find out what is causing the problem and whether their trees are in jeopardy.

While several organisms may be contributing to the symptoms observed, two fungi -- *Septoria quercicola* and *Cylindrosporium kelloggii* -- have been identified from leaf samples sent to the California Department of Food and Agriculture, according to Doug McCreary, natural resources specialist with UC's Integrated Hardwood Range Management Program. While these foliage diseases were present on black oaks last year, they are much more prevalent and widespread this year, he says. Last spring's extremely wet conditions are responsible, providing an ideal environment for the fungi to infect the leaves.

According to Don Owen, pest specialist with the California Department of Forestry and Fire Protection, more damage is unlikely, since the rains have ended. However, trees may continue to lose their leaves throughout the summer, he says. The level of leaf loss relates directly to the severity of infection: If leaf loss occurred early in the year, the trees will be able to refoliate. Tree vigor also helps determine the amount of refoliation, since trees with more energy reserves are better able to refoliate than weakened trees. Trees with pre-existing stress, or infected trees that lose their foliage relatively late in the season, may not refoliate as fully. They may also experience some dieback in the crown.

While there are fungicides available to prevent the infection, they must be applied in the spring when the leaves are susceptible to the fungi.

UC Master Gardeners of Placer County are University of California Cooperative Extension (UCCE) ambassadors to the Placer County home gardening community. Master Gardeners promote environmental awareness and sustainable landscape practices, and extend research-based gardening and composting information to the public through educational outreach. UCCE is part of the Division of Agriculture and Natural Resources (ANR) of the University of California. UCCE Placer County: 11477 E Avenue, Auburn, CA 95603, (530) 889-7385

Hot Topics, News for Placer County Home Gardeners

Timing is critical; if conditions favor infection over an extended period of time, multiple treatments may be necessary.

The leaf loss resulting from these diseases can be harmful to the trees, since it reduces their ability to manufacture food through photosynthesis."Over time, repeated defoliations can seriously weaken trees," McCreary says. "We would also expect reduced acorn production on trees where damage is severe, which in turn could adversely affect the many wildlife species dependent upon acorns as a food source."

While spotting and brown leaves on oaks in late spring and early summer are certainly a cause for concern, the vast majority of the affected trees should recover and leaf out normally next year, McCreary says. However, in rare cases, severely weakened trees could be killed by the defoliation. For more information about oaks and oak management and the names of experts working with oaks by region, visit the home page of the Integrated Hardwood Range Management Program at <http://danr.ucop.edu/ihrmp/>.

Prepared and edited by Richard B. Standiford

University of California, Oak Woodland Management

http://ucanr.edu/sites/oak_range/Oak_Articles_On_Line/Oak_Pest_Management/Black_Oaks_Lose_Leaves_in_El_Nino_Winter/