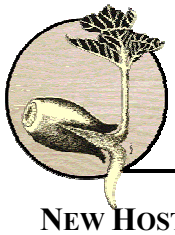

REPORT TO THE CALIFORNIA OAK MORTALITY TASK FORCE
SEPTEMBER 2001

NEW HOSTS

Phytophthora ramorum has been recovered from **bigleaf maple** (*Acer macrophyllum*) trees in multiple locations throughout the known range of Sudden Oak Death. The pathogen causes leaf spots similar to those caused by anthracnose fungi. Identification of *Phytophthora ramorum* was done using PCR analysis of leaves.

PCR analysis also detected P. ramorum on Manzanita (*Arctostaphylos manzanita*). Although results are currently restricted to this species, researchers believe it will occur on other *Arctostaphylos* species. *Phytophthora ramorum* causes leaf spots and may cause branch dieback on Manzanita.

Two species of eastern oaks, **northern red oak** (*Quercus rubra*) and **pin oak** (*Quercus palustris*) may be susceptible to *P. ramorum*, Dave Rizzo, the UC-Davis who first isolated *P. ramorum* in California, announced at the American Phytopathological Society (APS) annual meeting held the last week in August in Salt Lake City, Utah. Both species of seedlings developed stem cankers after inoculations with *Phytophthora ramorum*, the fungus that causes Sudden Oak Death. Rizzo indicated that based on his results, the eastern species were equally or more susceptible to the pathogen than tanoak, a species currently believed to be one of the most highly susceptible in natural settings. Although the results cause great concern for eastern oaks forests, researchers warned that extrapolation of these results to mature trees should be done with caution. These experiments were conducted in a controlled greenhouse setting, which can often yield different results than field trials due to climate and other factors. While researchers work to understand the role of some of these other factors in disease development, studies will continue to determine if mature northern red oak and pin oak in eastern forests will develop the disease that is killing so many of our native oaks.

The findings are a collaboration of researchers under the direction of David Rizzo at UC-Davis and Matteo Garbelotto at UC-Berkeley and Steve Koike UCCE

DISTRIBUTION

Sudden Oak Death was confirmed in **Solano** County. *Phytophthora ramorum* was isolated from coast live oak and California bay laurel in two locations along Lake Madigan. Researchers reported that the isolations were taken from trees close to the lakeshore and another location up on a ridge above the lake. According to Dave Rizzo, the ridge location "appears to be the point at which the fog commonly stops in this area of Solano County." This finding extends the easternmost known distribution of Sudden Oak Death to approximately 50 miles from the coast.

Phytophthora ramorum was also isolated from coast live oak and bay laurel trees on Crow Canyon Boulevard in **Alameda** County, confirming fears of East Bay residents.

DISTRIBUTION CONT'D

A preliminary survey for P. ramorum in the Southeast United States did not find pathogen. Steve Oak, with the USDA-Forest Service in Asheville, NC did a survey for P. ramorum in declining rhododendrons in Virginia, Tennessee and North Carolina. Neither P. ramorum nor any other Phytophthora sp. was recovered from the 10 locations surveyed.

REGULATIONS

The National Plant Board, representing agriculture departments in all 50 states, passed a Sudden Oak Death resolution at their annual meeting the week of August 13 in Charlotte, NC. The resolution calls for USDA to issue a domestic and international quarantine for Sudden Oak Death.

FUNDING

The COMTF is in the process of compiling a table to track funding for Sudden Oak Death. Below is a partial list of projects funded by the USDA Forest Service-Research, with funds administered by the Pacific Southwest Research Unit. For additional information contact Pat Shea (pshea@davis.com) or Garland Mason (Gmason@fs.fed.us**).** Please look for the funding table in future updates.

Pacific Southwest Research Station has hired a USDA- Forest Service post-doctoral researcher housed in Dave Rizzo's lab in UC Davis. Salary and overhead support for the position will come from PSW research appropriations, the SOD program will provide operating funds, starting with $70,000. The primary research responsibility for this position is to develop the necessary protocols for testing laboratory susceptibility and field infection rates of SOD on various species of oaks, both those native to California and elsewhere in the United States.

University of California, Davis. Dr. David Rizzo, Associate Professor Plant Pathology. Cooperative Agreement of $270,000 for 2 years. The objectives of this research are to: (1) determine the mechanisms of survival, spread, and intensification of SOD; (2) determine the population structure, mating genetics, and species status of the new *Phytophthora;* and (3) determine the susceptibility of host species within and beyond California.

University of California, Berkeley. Dr. Matteo Garbelotto, Forest Plant Pathologist. Cooperative Agreement of $307,000 for 2 years. The objectives of this research are to: (1) determine the phylogenetic placement and evolutionary history of this new *Phytophthora;* and (2) develop methodologies for quick and accurate diagnosis of the new *Phytophthora.*

FUNDING CONT'D

California State University-San Luis Obispo. Dr. Norman Pillsbury, Department Head, Natural Resources Management Department. Cooperative Agreement of $52,000 for 3 years. The primary long-term objective of this study is to collect and analyze volume, growth, yield, and economic data from a series of thinned and unthinned permanent oak dominated plots established in 1984 in Monterey, San Luis Obispo, and Santa Clara counties (all counties with positive ID of SOD). Starting this year these plots will also be assessed for the presence, incidence, and effect of SOD on thinned and unthinned plots throughout the study areas.

University of California, Forest Products Laboratory, Richmond CA., Dr. Frank Beall, Director. Cooperative Agreement for $216,000 for 2 years. This research is aimed at: (1) analyzing the technical feasibility of using *Phytophthora*-infected material for wood products including composits, solidwood, and fuel and firewood (chips, firewood, and densified fuel); (2) assessing the risk of pathogen survival in processed products; and (3) testing control methods for wood products including heat, chemical and other typical wood pathogen control methods, i.e., heat sterilization and the effect of temperature and its correlation with wood thickness and moisture content, and the effectiveness of sodium borates. In addition the Forest Products Laboratory will provide PSW with a SOD Research Program Coordinator whose responsibilities include: (1) development of a program of research through partnerships with academia, state and other private and public entities; (2) recruitment and negotiation of research agreements; (3) tracking progress of PSW funded research; (4) representing PSW at all appropriate local, regional, national, and international meetings concerning SOD; (5) providing assistance to the PSW management team to effectively utilize appropriated funds; (6) ensuring Forest Service recognition of research efforts; and (7) initiate and organize meetings of research cooperators to coordinate research and utilization of research sites.

MEETINGS

The next California Oak Mortality Task Force Meeting will be held Thursday, November 15, 2001 in Petaluma. Featured is a half-day training session on compliance under the California Sudden Oak Death Regulations. At this session, sampling, survey, permitting and other aspects of the regulations will be covered. Please look for details at the events section of www.suddenoakdeath.org in a few weeks.

IN THE NEWS….

August 20,2001 Warning to hikers, bikers, campers and horseback riders
Planning to go hiking, bike riding, or camping along the coast of Northern California or Southwest Oregon this summer? If so, the California Oak Mortality Task Force reminds all vacationers planning to visit Monterey, Santa Cruz, Marin, Napa, San Mateo, Santa Clara, Sonoma, and Mendocino counties that these counties are considered a "Zone of Infestation" due to the presence of a pathogen causing Sudden Oak Death. Removing any plant parts from oak or other host species, and transporting this material without a permit, is illegal. To view full release visit http://www.cnr.berkeley.edu/comtf/pages/press.html

September 4, 2001
If Oak Malady Moves East, Many Trees Could Die By Mary M. Woodson
A disease that has killed many thousands of trees on the West Coast could pose a threat elsewhere if it spreads east because northern red oaks and pin oaks, classic trees of the Midwestern and Eastern forests, also seem susceptible, a plant pathologist has warned. For full article visit http://www.nytimes.com/

If you know of a group that is working to minimize the impacts of Sudden Oak Death email the Nicole Palkovsky at palkovsk@nature.berkeley.edu and we'll be sure to include them in our Kudos section.