



CALIFORNIA OAK MORTALITY TASK FORCE REPORT APRIL 2005

NURSERIES

To date, trace-forward investigations from the large wholesale nursery in Los Angeles County, found to have a *Phytophthora ramorum*-positive camellia plant in January, have identified 13 California nurseries with *P. ramorum* infection on camellias. Ten of the 13 confirmations are retail outlets, one has both retail and production operations, one is a production nursery, and one is a wholesale nursery. None of the identified nurseries ship out of California. The California Department of Food and Agriculture is applying their Confirmed Nursery Protocol (CNP), modified for retail facilities at the retail stores, and the USDA Animal and Plant Health Inspection Service (APHIS) Plant Protection and Quarantine (PPQ) CNP at the other sites.

A retail nursery in Sacramento, CA was identified as having *P. ramorum*-infested *Rhododendron* sp. v. Colonel Coen on March 15, 2005. The California Department of Food and Agriculture (CDFA) has delimited the infestation and destroyed infected lots. Additional mitigation measures will be implemented. Trace-back investigations are underway to determine the probable source of the infected plants.

A Nursery Interception Task Force, comprised of a cooperative effort between the nursery industry, CDFA, and APHIS, was deployed in February, 2005, to capture key biological information regarding *P. ramorum* in nurseries without disrupting the regulatory activities that were ongoing. Issues being explored include comparing various detection methodologies, the correlation between soil and plant symptoms, comparisons of *P. ramorum* in symptomatic or asymptomatic plant tissue, analyzing soil under pots, and water and soil testing. The information will be published and accessible when testing is complete and results have been analyzed.

***P. ramorum* nursery detection statistics for 2004 have been updated to account for an additional bonsai camellia confirmed February 15, 2005 by USDA APHIS PPQ. The bonsai camellia sample submitted from Pennsylvania was received by the customer in December 2003 and confiscated on June 8, 2004. The plant had not been outdoors. With this new confirmation, the total number of USDA APHIS *P. ramorum*-positive detections (in or associated with nurseries) for 2004 has been adjusted to 177 positive finds in 22 states, with Pennsylvania having 2 detections.**

For 2005, USDA APHIS reports 15 *P. ramorum*-positive nursery sites, all of which are in California.

RESEARCH

The 2005 USDA Forest Service Pacific Southwest Research Station *Phytophthora ramorum* Request for Proposals has been announced. Research proposals are due on or before April 15, 2005. With critical information still needed on the biology, epidemiology, and behavior of *P. ramorum*; pathogen detection and spread; disease



management and resource utilization; ecosystem impacts; economic and social consequences; and Native American issues, the research station will grant nearly \$1 million through a competitive, peer-reviewed process. The RFP is posted to the COMTF website as a [PDF](#). For more information, contact Susan Frankel, Acting Sudden Oak Death/*P. ramorum* Research Program Manager at sfrankel@fs.fed.us or (510) 559-6472.

Both the APHIS PPQ Beltsville National Plant Germplasm and Biotechnology Laboratory (NPGBL) and the CDFA laboratory in Sacramento have encountered a *Phytophthora* species that inconsistently produces bands similar to that produced by *P. ramorum* when using nested PCR. Real time PCR currently in validation at the Beltsville laboratory appears to not react to this organism. CDFA reports possible detections of this species on photinia, pyracantha, and azalea. The new species is being temporarily referred to as *Phytophthora* “azalea.” CDFA has agreed to share DNA samples and cultures of *P. “azalea”* with the NPGBL, where the use of real time PCR will be investigated for distinguishing between the species as it continues to validate this diagnostic method. According to CDFA, based on morphology and partial ITS sequence, the newly identified species is not a strain or subspecies of *P. ramorum*.

The European Union Risk Analysis for *P. ramorum* (RAPRA) team met March 9-11 in Majorca, Spain. Five European countries are participating in RAPRA under the leadership of Joan Webber, UK Forest Research, to investigate, collate, and identify information on:

- Distribution: Collate and publish available information on the extent of entry and distribution of *P. ramorum* in the EU and Europe;
- Host susceptibility: Establish the level of susceptibility (to both European and American isolates) of tree and non-tree species of significant environmental and economic value to the EU;
- Epidemiology: Quantify the sporulation, germination, infection, incubation period, latency, survival, and dispersal components of the epidemiology of European and American isolates of *P. ramorum*;
- Mating potential: Establish the potential for mating between *P. ramorum* (predominantly A1 mating type) found in Europe and *P. ramorum* (predominantly A2 mating type) present in the USA;
- Chemical control: Evaluate at least three existing chemicals and at least two new chemical active ingredients for the control of *P. ramorum* in ornamentals;
- Management: Develop, refine, and publish harmonized risk management strategies and contingency plans for dealing with *P. ramorum* in Europe while minimizing the need to disrupt free-trade; and
- Pest Risk Analysis: Develop, refine, and publish a European Pest Risk Analysis for *P. ramorum* and provide information to underpin and advise EU plant health policy and legislation.



Charles G. (Terry) Shaw served as a focal point for sharing information within USDA and from USDA to RAPRA at the meeting. For more information on RAPRA, go to <http://rapra.csl.gov.uk/> or contact Terry Shaw at cgshaw@fs.fed.us.

CPHST is working on granting provisional approval for laboratories to perform PCR assays for *P. ramorum*. These labs will be permitted to make final determinations of negative samples, while positive samples will need to be confirmed by APHIS PPQ. So far, the Washington State Department of Agriculture has been provisionally approved. Nine other labs are at various points in the approval process.

Australia is interested in developing a *P. ramorum* risk map similar to the US *P. ramorum* risk map. Such a map would enable them to prioritize what species to target for pathogenicity studies to be undertaken in the US and/or Europe to evaluate the risk that *P. ramorum* poses to Australian flora. Two Australian species, *Eucalyptus gunnii* and *Pittosporum undulatum*, and a South American species, *Nothofagus obliqua* (the genus is a significant component of temperate rainforests in Australia), have been found sensitive to *P. ramorum* outside of Australia. The USDA FS has been working with the University of Melbourne, instructing them on the procedures for *P. ramorum* risk mapping, formulation, basic data analysis, GIS, and interpretation of results. Support for Australia's effort is ongoing, and being led by Dr. William Smith, USDA FS. For more information on the program, contact Dr. Smith at wsmith22@nc.rr.com.

REGULATIONS

USDA APHIS issued a memo March 14, 2005 that defines shipment documentation for non-host nursery stock from approved non-host nurseries in CA, OR, and WA. Nurseries in these three regulated states shipping non-host plants interstate are encouraged to include a printout (with each shipment) from their state department of agriculture's website that lists the state's approved nurseries. To access the memo, go to the APHIS website at: http://www.aphis.usda.gov/ppq/ispm/pramorun/pdf_files/sproda-2005-05.pdf.

RESOURCES

USDA APHIS has changed its *P. ramorum* website address. The new address: <http://www.aphis.usda.gov/ppq/ispm/pramorun/> has been established to refer to the site by the pathogen's name, rather than Sudden Oak Death, which only represents one of the diseases caused by *P. ramorum*.

The USDA APHIS PPQ *P. ramorum* science panel report addressing General Issues, Biology and Ecology, Epidemiology, Control and Eradication, Survey and Monitoring, and Diagnostics has been updated based on new information presented in January, 2005, at the Second Sudden Oak Death Science Symposium in Monterey. To access the updated report, go to: <http://www.aphis.usda.gov/ppq/ispm/pramorun/sciencepanel.html>.

Preventing invasive pathogens: deficiencies in the system. Clive Brasier, Emeritus Mycologist; Forest Research, UK Forestry Commission; Forest Research Station, Alice



Holt, Farnham, Surrey, GU10 4LH, United Kingdom. *The Plantsman* 4, 54-57 (2005).
<http://www.rhs.org.uk/learning/publications/plantsman/0305/plantsmanmar2005.asp>.

KUDOS

Dr. David T. Kaplan has been appointed Assistant Deputy Administrator to the USDA APHIS PPQ Pest Detection and Management Programs. Starting May 1, 2005, he will provide national leadership to PPQ's pest detection activities, pest management programs, and emergency response, which includes the *Phytophthora ramorum* federal regulatory program. Kaplan will be vacating his position as National Science Program Leader for Integrated Pest Management and Emergency Programs in the PPQ's Center for Plant Health Science and Technology.

Mark Stanley, COMTF Chair, has been appointed Chief Deputy Director for the California Department of Forestry and Fire Protection (CDF). Stanley plans to continue in his role as COMTF Chairman.

Steve Tjosvold, UCCE farm advisor, Santa Cruz County, received two 2004 Distinguished Service Awards from the UC Division of Agriculture and Natural Resources (DANR). One award was for "Team Work" with three other farm advisors and one for "Extension" in recognition of his outstanding contributions to the teaching, research, and public service mission of DANR. Tjosvold currently manages an active outreach and research program on Sudden Oak Death as well as several other horticulture programs.

EDUCATION

State Cooperator training for the 2005 National *P. ramorum* Early Detection Survey for Forests is underway. The training is intended for state forestry agency personnel who will be conducting the survey. At this time, 38 states are participating. There will be seven sessions for various regions of the country, beginning with Asheville, NC for the southern states, and ending in June with a session at a location to be determined for West Coast cooperators. It is anticipated that about 20 people will attend each session. Approximately 15-20 diagnostic laboratories will be conducting molecular diagnostics nationwide in support of the field work once the survey begins. For more information, contact Steve Oak, of the USDA FS, at soak@fs.fed.us.

The COMTF is offering a free all day *Phytophthora ramorum*/Sudden Oak Death training session on Tuesday, May 24, 2005 at City Team Camp May-Mac in Felton. The morning classroom portion of the training includes a disease update and overview, the latest information on pathogen diagnosis and sampling in both wildland and nursery settings, updated wildland and nursery management information, and a panel discussion. The afternoon field component will provide attendees with an opportunity to see symptoms, diagnosis, and sampling, as well as treatments, sanitation, and best management practices in a field setting. For more information on the training session, or to register, go to the COMTF website at: www.suddenoakdeath.org or contact Katie Palmieri at palmieri@nature.berkeley.edu.



The Washington Organic Recycling Council (WORC) held a Sudden Oak Death Information Session and Best Management Practices (BMP) Workshop for approximately 50 attendees in Puyallup, Washington on March 31. The workshop was intended to provide information on *P. ramorum* and to develop BMPs for organic processing facilities in WA, in an effort to limit the spread of the pathogen through processed organics. Morning presentations covered current research, regulations, and management techniques, while the afternoon focused on a roundtable discussion of potential BMPs. Participants were primarily from Washington, but representatives from Oregon, British Columbia, and other locations were also in attendance.

The COMTF has completed its outreach survey - many thanks to everyone that participated. More than 300 respondents completed the online survey, with responses well-distributed among the 14 infested counties, as well as many non-infested counties and other states. Feedback was greatest from government affiliations, followed by UCCE/Master Gardeners. The surveys will be thoroughly analyzed and a report of the findings will be posted to the COMTF website in the coming months. Survey results will be used to help the Task Force improve the quality of its website, publications, and training workshops. The 5 randomly selected winners for the survey contest will be chosen April 6th. If selected, your thank you gift should arrive in the mail before the end of April.

CALENDAR OF EVENTS

4/5 – Free COMTF half-day training session on *P. ramorum* diagnosis and management; UCCE Contra Costa, Pleasant Hill, from 9 a.m. – 12:30 p.m. Registration is required. For more information, or to register, go to the COMTF website at: www.suddenoakdeath.org or contact Janice Alexander at JAlexander@co.marin.ca.us.

5/24 – Free all-day COMTF training session on *P. ramorum* diagnosis and management; City Team Camp May-Mac, Felton, from 9:00 a.m. – 3:00 p.m. This training will include a classroom portion and field component. Registration is required. For more information, or to register, go to the COMTF website at: www.suddenoakdeath.org or contact Katie Palmieri at palmieri@nature.berkeley.edu.