CALIFORNIA OAK MORTALITY TASK FORCE REPORT
AUGUST 2010

MONITORING

Britain's Forestry Commission is continuing to try to minimize the spread of *P. ramorum* by felling tens of thousands of Japanese larch (*Larix kaempferi*), first found to be a sporulating host in southwest England in fall 2009. Since then, thousands of trees have died. Follow-up aerial surveys in southwest England and Wales, and up into western Scotland, have identified 203 suspicious sites in a mix of privately owned and Forestry Commission public woodlands in England and Wales. Of these, 42 sites in southwest England and eight in Wales have confirmed infestations. More than 30 hectares of trees were felled last winter, with an additional 250 hectares planned for removal this summer and fall. Felling is continuing in the southwest England counties of Devon and Cornwall, including Plym Woods, a popular forest for public recreation near the city of Plymouth, and is getting under way in Wales. The Forestry Commission hopes that by taking decisive action in southwest England and south Wales it can prevent the pathogen from spreading further into Britain.

Affected forests are remaining open to visitors, except for areas where felling is taking place, due to safety reasons. Visitors are being asked to stay on stone paths, keep dogs on short leads, and clean shoes and bikes before leaving infested areas. Private landowners are also being asked to regularly inspect woodlands where larch is present and to report any suspected *P. ramorum* outbreaks to the Forestry Commission. For more information, go to http://www.forestry.gov.uk/pramorum.

NURSERIES

Two Northern California retail nurseries were confirmed positive for *P. ramorum* on 7/2/10. The Mendocino County nursery was found to have a *P. ramorum*-positive *Rhododendron* sp. during an annual compliance inspection. The nursery does ship interstate (trace-forward investigations include three interstate shipments) and was also found positive for the pathogen in 2008. The Confirmed Nursery Protocol (CNP) is underway. The Humboldt County retail nursery was found to have *P. ramorum*-positive *Pieris* sp. (Forest Flame) during a general nursery inspection. The nursery does not ship interstate. It was also found positive for *P. ramorum* in 2004, 2006, 2007, and 2008. CNP is underway. For more information, contact Erin Lovig at ELovig@cdfa.ca.gov.

A King County, Washington retail nursery was found to have six *P. ramorum*- positive rhododendrons in July. This nursery was also found positive for the pathogen in 2004, 2005, and 2006. CNP is underway. To date in 2010, the Washington State Department of Agriculture has processed more than 13,000 samples and detected *P. ramorum* at eight nurseries. For more information, contact Brad White at bwhite@agr.wa.gov.

A Washington County, Oregon retail nursery was found with two *P. ramorum*- positive *Rhododendron* plants in mid-July. The nursery requested a survey after

identifying a potential out-of-state customer. Prior to the confirmation, the nursery had not shipped interstate. This is the first time *P. ramorum* has been detected in this nursery. The USDA Retail CNP has been enacted.

As of 7/21, the Oregon Department of Agriculture has completed testing for the 2010 *P. ramorum* Federal Order Survey on 15,670 samples collected from 392 nursery grower locations. So far, *P. ramorum* has been detected in seven Oregon nurseries, with three nurseries having completed the CNP. For more information, contact Nancy Osterbauer at nosterba@oda.state.or.us.

FUNDING

The USDA Forest Service, Pacific Southwest Research Station Sudden Oak Death/*P. ramorum* research program list of 2010 funded projects is now available at http://www.fs.fed.us/psw/programs/sod/funding/FY2010PSWSODFunding.pdf. Thirteen new projects as well as 14 continuing projects were funded, for a total of $1,401,441. For more information, contact Susan Frankel at sfrankel@fs.fed.us.

REGULATIONS

The implementation of the Federal Order requiring pre-notification for shipping *P. ramorum* host nursery stock from regulated and quarantine areas has been delayed until further notice. The intent to implement advanced notification is to allow states receiving *P. ramorum* host nursery stock to assign and prioritize resources, assure rapid response, and provide direct traceability for any nursery stock (as defined under 7 CFR 301.92-2) known to be positive for *P. ramorum*. For more information, contact Prakash K. Hebbar at prakash.hebbar@aphis.usda.gov or (301) 734-5717.

The 2010 National Plant Board (NPB) meeting was held in Indianapolis, IN on July 25-29 (http://www.nationalplantboard.org/meetings/index.html). The *P. ramorum* NPB/PPQ regulatory topics were divided into seven categories reflecting the work groups set up last December at the APHIS *P. ramorum* stakeholders' meeting. The High Risk Plants working group is analyzing host data and reviewing literature and data from the nursery industry, with the goal of providing recommendations on high-risk plants in relation to protocols and regulations. They are also reviewing the possibility of sampling asymptomatic plants (ELISA/PCR) to determine the vulnerability of nurseries to *P. ramorum* and assessing the feasibility of stricter control of fungicides that may be masking disease symptoms. The Critical Control Points (CCP))/Best Management Practices (BMP) working group has defined six CCPs – plants, pots, media, water, substrate, and conveyance, and drafted a menu of BMP options available to address each CCP. The Q37 (federal regulations for imported plants that are either prohibited or restricted) working group is evaluating the Q37 regulations and policies as they pertain to *P. ramorum* host plant imports. The group is identifying high-risk countries, analyzing ports of entry data, and determining risk, and compiling and evaluating *P. ramorum* host plant import data for the top five imported hosts. Other work groups, the Nursery Field Teams, *P. ramorum* Regulatory Protocols, Regulatory Triggers, and Regulatory Surveys, reported updates as well.

The NPB is a non-profit organization comprised of the plant pest regulatory agencies for each state and the Commonwealth of Puerto Rico. *P. ramorum* discussions at the meeting included the Farm Bill 10201 Project Update for FY10 and 11 (contact Matthew H. Royer, USDA APHIS PPQ, Matthew.H.Royer@aphis.usda.gov) and USDA Forest Service activities on *P. ramorum* and firewood policies (contact Robert Mangold, U.S. Forest Service, rmangold@fs.fed.us). For more information on the updates from the *P. ramorum* NPB/PPQ Regulatory Working Groups, contact Prakash Hebbar, USDA APHIS PPQ, at prakash.hebbar@aphis.usda.gov or Gray Haun, NPB-TN, at Walker.Haun@tn.gov.

RELATED RESEARCH

Kale, S.D.; Gu, B.; Capelluto, D.G.S.; Dou, D.; Feldman, E.; Rumore, A.; Arredondo, F.D.; Hanlon, R.; Fudal, I.; Rouxel, T.; Lawrence, C.B.; Shan, W.; and Tyler, B.M. 2010. External Lipid PI3P Mediates Entry of Eukaryotic Pathogen Effectors into Plant and Animal Host Cells. Cell 142:284–295.

Kang, S.; Mansfield, M.A.; Park, B.; Geiser, D.M.; Ivors, K.L.; Coffey, M.D.; Grünwald, N.J.; Martin, F.N.; Lévesque, C.A.; and Blair, J.E. 2010. The promise and pitfalls of sequence-based identification of plant pathogenic fungi and oomycetes. Phytopathology 100:732-737.

Nagle, A.M.; Long, R.P.; Madden, L.V.; and Bonello, P. 2010. Association of *Phytophthora cinnamomi* with white oak decline in southern Ohio. Plant Disease 94:1026-1034.

Scanu, B.; **Linaldeddu**, B.T.; and **Franceschini, A. 2010.** First Report of *Phytophthora pseudosyringae* Associated with Ink Disease of *Castanea sativa* in Italy. Plant Disease, Disease Notes Volume 94, Number 8, Page 1068. DOI: 10.1094/PDIS-94-8-1068B.

Weiland, J.E.; Nelson, A.H., and Hudler, G.W. 2010. Aggressiveness of *Phytophthora cactorum*, *P. citricola* I, and *P. plurivora* from European beech. Plant Disease 94:1009-1014.

EDUCATION AND OUTREACH

***Phytophthora ramorum* Prevention Workshops for Grower Nurseries – In response** to increasing international interest in "clean stock" nursery programs, the California Department of Food and Agriculture (CDFA) and the California Association of Nurseries and Garden Centers (CANGC) have kicked off a series of preventive practices and systems approach workshops that focus on minimizing the risk of *P. ramorum* introduction into nurseries as well as movement out of nurseries via infested plant purchases. At the free workshops, nursery owners and staff will work with CDFA's Primary Plant Pathologist as well as Nursery Program Specialists to customize individualized best management practices (BMP) manuals for preventing the entry and spread of *P. ramorum*. Funding for the workshops is made possible through CANGC's

USDA/Foreign Agricultural Service Technical Assistance for Specialty Crops grant. For more information on upcoming workshops, see the Calendar of Events below. Additional workshops will also be held in the fall at undetermined locations.

Four *P. ramorum* Preventative Treatment Training sessions will be offered this fall from September through November on the UC Berkeley campus. Each two-hour outdoor session will cover basic Sudden Oak Death information, integrated pest management approaches, how to select candidate trees for treatment, and proper preventative treatment application. CEU credits are being applied for with DPR, ISA, SAF, and California Urban Forestry Council. For more information, see the "Calendar of Events" below.

"Turning Over a Clean Leaf," a new poster developed by The National Trust of the United Kingdom and Washington State University, is now available online in English and Spanish at http://www.puyallup.wsu.edu/ppo/sod/extension/publications.htm. The content focuses on how to protect your garden from pest and disease invaders.

CALENDAR OF EVENTS

8/16 - *P. ramorum* Prevention Workshop for Grower Nurseries: Developing a Best Management Practices Program for your Nursery; CDFA Plant Pest Diagnostic Lab; 9:00 a.m. – 12:00 p.m.; 3294 Meadowview Road; Sacramento, CA 95832; Registration is free. For more information or to register, contact Kathy Kosta, CDFA Primary State Plant Pathologist at kkosta@cdfa.ca.gov. Additional information can also be obtained from CANGC at (916) 928-3900 or info@cangc.org.

8/18 - *P. ramorum* Prevention Workshop for Grower Nurseries: Developing a Best Management Practices Program for your Nursery; 1:30 – 4:00 p.m.; Address Pending; Ventura County; For more information, see the 8/16 listing above.

8/26 - *P. ramorum* Prevention Workshop for Grower Nurseries: Developing a Best Management Practices Program for your Nursery; 9:00 a.m. – 12:00 p.m.; Address Pending; San Diego County; For more information, see the 8/16 listing above.

9/1 - *P. ramorum* Prevention Workshop for Grower Nurseries: Developing a Best Management Practices Program for your Nursery; 9:30 a.m. – 12:00 p.m.; Address Pending; Humboldt County; For more information, see the 8/16 listing above.

9/9 - *P. ramorum* Prevention Workshop for Grower Nurseries: Developing a Best Management Practices Program for your Nursery; 9:00 a.m. – 12:00 p.m.; Address Pending; Visalia; For more information, see the 8/16 listing above.

9/15 - SOD Treatment Workshop; Meet at oak outside of Tolman Hall, UC Berkeley Campus; 1 – 3 p.m.; Pre-registration is required. This class is free and will be held rain or shine. To register, email kpalmieri@berkeley.edu, and provide your name, phone number, affiliation (if applicable), and the date for which you are registering. For more information, go to http://nature.berkeley.edu/garbelotto/english/sodtreatmenttraining.php or contact Katie Palmieri at (510) 847-5482 or kpalmieri@berkeley.edu.

10/6 - SOD Treatment Workshop; meet at oak outside of Tolman Hall, UC Berkeley Campus; 1 – 3 p.m.; Pre-registration is required. For more information, see the 9/15 listing above.

10/20 - SOD Treatment Workshop; meet at oak outside of Tolman Hall, UC Berkeley Campus; 1 – 3 p.m.; Pre-registration is required. For more information, see the 9/15 listing above.

11/3 - SOD Treatment Workshop; meet at oak outside of Tolman Hall, UC Berkeley Campus; 1 – 3 p.m.; Pre-registration is required. For more information, see the 9/15 listing above.