

Sudden Oak Death Science Symposium III

Program of Events

SUNDAY, MARCH 4, 2007

7:00 p.m. – 8:00 p.m. - Registration

MONDAY, MARCH 5, 2007

7:30 a.m. – 8:30 a.m. - Registration

Risk to Conifers Panel

Presented by the North American Plant Protection Organization

8:30 a.m. – 11:30 a.m.

Phytophthora ramorum quarantine regulations have impacted green lumber and saw log trade in Canada and the Western USA. This panel will discuss current impacts and other situations that are foreseen as future challenges. The panel will also focus on identifying research needs that would facilitate sound science-based phytosanitary decisions related to movement of conifer lumber and forest products. Phytosanitary issues related to *P. ramorum* in conifer forests in North America, Asia and Europe are becoming increasingly important. Numerous countries are concerned with the potential for *P. ramorum* to affect their forests. Regardless of the eventual impact on the landscape of conifer-dominated northern forests should *P. ramorum* ever become widely established, the threat of phytosanitary restrictions on the movement of conifer lumber and forest products is already a reality.

LUNCH 11:30 a.m. – 1:00 p.m. (on own)

11:30 a.m. – 12:30 p.m. - Registration

1:00 p.m. – 6:00 p.m. SUDDEN OAK DEATH FIELD TRIP

DINNER (on own)

7:00 p.m. – 8:00 p.m. Registration

TUESDAY, MARCH 6, 2007

7:00 a.m. – 8:15 a.m. Registration

8:15 a.m. – 8:30 a.m. Welcome – Susan Frankel/Katie Palmieri

8:30 a.m. – 9:00 a.m. Rethinking *Phytophthora*: Lessons from Sudden Oak Death -
Everett Hansen, Oregon State University

Wildland Update

9:05 a.m. – 9:20 a.m. Sudden Oak Death trends in California Forests – Dave Rizzo, UC
Davis

9:20 a.m. – 9:35 a.m. Eradication of *Phytophthora ramorum* from Oregon Forests: Status
after Six Years – Alan Kanaskie, Oregon Department of Forestry

9:35 a.m. – 9:55 a.m. Status of *Phytophthora ramorum* and *P. kernoviae* in Europe – Joan
Webber, Forest Research, UK

BREAK 10:00 a.m. – 10:30 a.m.

Nursery Update

10:30 a.m. – 10:45 a.m. US Nurseries – American Nursery and Landscape Association

10:45 a.m. – 10:55 a.m. Canadian Nurseries – TBA

10:55 a.m. – 11:10 a.m. European Nurseries – David Slawson, DEFRA, UK

Regulatory Update

11:10 a.m. – 11:25 a.m. US Update and Addressing the Challenges of Nursery
Eradication – Jonathan Jones, USDA APHIS, Plant Protection and Quarantine

11:25 a.m. – 11:40 a.m. Canadian *P. ramorum* Quarantine Update – Ken Wong,
Canadian Food Inspection Agency

11:40 a.m. – 11:55 a.m. European Union and United Kingdom *P. ramorum* Quarantine
Update – Stephen Hunter – DEFRA, UK

LUNCH 12:15 p.m. – 1:15 p.m. (provided)

1:15 p.m. – 2:30 p.m. Landscape Monitoring and Mapping

Natural Outbreaks of *P. ramorum* in the UK - Current Status and Monitoring Update -
Judith Turner, Central Science Laboratory, UK

How *P. ramorum* is affecting Historic Gardens and Plant Collections in the UK
Ian Wright, The National Trust, Devon & Cornwall, UK

Distribution and Magnitude of Sudden Oak Death Tree Mortality in the Big Sur
Ecoregion of California – Douglas Shoemaker, University of North Carolina at
Charlotte

Distribution of *Phytophthora ramorum*, *P. nemorosa*, and *P. pseudosyringae* in Native
Coastal California Forest Communities - Shannon Murphy, UC Davis

Detecting *Phytophthora ramorum* and Other Species of *Phytophthora* in Streams in
Natural Ecosystems Using Baiting and Filtration Methods - Jaesoon Hwang, Clemson
University

BREAK 2:30 p.m. – 3:00 p.m.

3:00 p.m. – 3:30 p.m. Landscape Monitoring and Mapping, Continued

2006 Pilot Survey for *Phytophthora ramorum* in Forest Streams in the USA - Steven Oak, USDA Forest Service, Southern Region FHP

The OakMapper WebGIS: Improved Access to SOD Data - Karin Tuxen, UC Berkeley

3:30 p.m. – 4:45 p.m. Diagnostics

Refining the Detection of *Phytophthora ramorum*: What PCR Kinetics can Tell - Pedro Uribe, USDA/ARS

Introducing the *Phytophthora* Database: An Integrated Resource for Detecting, Monitoring, and Managing *Phytophthora* Diseases – Seogchan Kang, The Pennsylvania State University (Presented by: Kelly Ivors, NC State University)

Detection and Quantification of mRNA by Reverse Transcription Real-Time PCR as an Indicator of Viability in *Phytophthora ramorum* Infected Soil and Plant Material – Antonio Chimento, UC Berkeley

5:00 p.m. – 7:00 p.m. CA Oak Mortality Task Force Nursery Committee Meeting

WEDNESDAY, MARCH 7, 2007

8:00 a.m. – 10:00 a.m. Nursery Research and Management

Effect of Environmental and Seasonal Factors on the Susceptibility of Different *Rhododendron* Species and Hybrids to *Phytophthora ramorum* – Isabelle De Dobbelaere, ILVO - Unit Crop Protection, Belgium

Can *Phytophthora ramorum* be Spread with Contaminated Irrigation Water? - Sabine Werres, Federal Biological Research Centre for Agriculture and Forestry, Institute for Plant Protection in Horticulture

Seasonal Symptom Expression, Laboratory Detection Success, and Sporulation Potential of *Phytophthora ramorum* on *Rhododendron* and *Camellia* - Steve Tjosvold, UC Cooperative Extension

Monitoring for *Phytophthora ramorum* and Other Species of *Phytophthora* in Nurseries and Urban Areas in the Southeastern USA - Yeshi A. Wamishe, Clemson University

Four Years of Experience with Filtration Systems in Commercial Nurseries for Eliminating *Phytophthora* Species from Recirculation Water – Thorsten Ufer, Federal Biological Research Centre for Agriculture and Forestry, Institute for Plant Protection in Horticulture (Presented by: Stefan Wagner)

Soil Treatments for the Elimination of *Phytophthora ramorum* from Nursery Beds: Current Knowledge from the Laboratory and the Field – Lani Yakabe, UC Davis

BMPs – Working Toward a Clean Stock Program – Karen Suslow, Hines Horticulture, Inc.

BREAK 10:00 a.m. – 10:30 a.m.

10:30 a.m. - 12:00 p.m. Forest Insects and Pathogens: Quarantine Issues

Facts or Friction: The Evolving Advisory Role of Science in Phytosanitary Issues – Eric Allen

Phytophthora ramorum + *P. kernoviae* = International Biosecurity Failure – Clive Brasier, Forest Research Agency UK

Overview of US Efforts to Revise Plants for Planting – Kerry Britton, USDA Forest Service

Risks to Conifers and Conifer Export Products – Brenda Callan, Canadian Forest Service
Q & A

LUNCH 12:00 p.m. – 1:00 p.m. (provided)

1:00 p.m. – 2:40 p.m. Biology and Ecology

Phytophthora ramorum Infects Sapwood and is Associated with Reduced Specific Conductivity of Xylem Vessels in Tanoak - Jennifer Parke, Oregon State University

Invasion of Xylem of Mature Tree Stems by *Phytophthora ramorum* and *P. kernoviae* - Anna Brown, Forest Research Agency, UK

Chemistry of Coast Live Oak Response to *Phytophthora ramorum* Infection – Frances Ockels, The Ohio State University (Presented by: Pierluigi Bonello)

Log Susceptibility of Iberian Tree Species to *Phytophthora ramorum* - Eduardo Moralejo, Instituto Mediterráneo de Estudios Avanzados

Infection of Tree Stems by Zoospores of *Phytophthora ramorum* and *P. kernoviae* - Clive Brasier, Forest Research Agency, UK

BREAK 2:40 p.m. – 3:00 p.m.

3:00 p.m. – 5:00 p.m. Biology and Ecology, Continued

Recovery of *Phytophthora ramorum* from mistletoe and California Bay Inflorescences and Possible Implications Relating to Disease Spread - Gary Chastagner, Washington State University, Research and Extension Center

Attraction of Ambrosia and Bark Beetles to Coast Live Oaks Infected by *Phytophthora ramorum* - Brice McPherson, UC Berkeley

Susceptibility to *Phytophthora ramorum* in California Bay Laurel, a Key Foliar Host of Sudden Oak Death - Brian Anacker, UC Davis

Human Activity and the Spread of *Phytophthora ramorum* - J. Hall Cushman, Sonoma State University

Distance from California Bay Reduces the Risk and Severity of *Phytophthora ramorum* Canker in Individual Coast Live Oaks - Ted Swiecki, Phytosphere Research

Dissemination of Aerial and Soilborne *Phytophthoras* by Human Vectors - Joan Webber, Forest Research, UK

Spread and Development of *Phytophthora ramorum* in a California Christmas Tree Farm
- Gary Chastagner, Washington State University, Research and Extension Center

5:30 p.m. – 7:30 p.m. Poster Session (social)

THURSDAY, MARCH 8, 2007

8:00 a.m. – 10:15 a.m. Biology and Ecology, Continued

Sporulation of *Phytophthora ramorum* and *P. kernoviae* on Asymptomatic Foliage -
Sandra Denman, Forest Research Station

The Ecology of *Phytophthora ramorum* in Ireland - Carmel O'Connor, Galway-Mayo
Institute of Technology

Stand Level Infection and Mortality Dynamics in *Phytophthora ramorum* Infested
Redwood-Tanoak Forests: Patterns and Predictions Based on Five Years of
Monitoring - Richard C. Cobb, UC Davis

Influence of Oak Woodland Composition and Structure on Infection by *Phytophthora
ramorum* - Nathan Rank, Sonoma State University

Landscape Connectivity Influences the Establishment of *Phytophthora ramorum* - T.
Emiko Condeso, Sonoma State University

Influence of Historical Woodland Expansion on the Establishment of *Phytophthora
ramorum* - Ross Meentemeyer, University of North Carolina at Charlotte

Pathogenicity of *Phytophthora* Species Isolated from Soil in the Eastern United States -
Yilmaz Balci, West Virginia University

Phytophthora Species Associated with Stem Cankers on Tanoak in Southwestern Oregon
- Paul Reeser, Oregon State University

BREAK 10:15 a.m. – 10:45 a.m.

10:45 a.m. – 12:00 p.m. Genetics

What can Availability of the *Phytophthora ramorum* Genome do for us? -
Niklaus J. Grünwald, USDA ARS

Genotyping Indicates Nursery and Early *Phytophthora ramorum* Collections are
Indistinguishable, while Showing Current Local Diversification of Wild Populations
Driven by Geography - Matteo Garbelotto, UC Berkeley

Population Structure of *Phytophthora ramorum* in Oregon - Jennifer Britt, Oregon State
University

Mitochondrial Genomics in the Genus *Phytophthora* with a Focus on *Phytophthora
ramorum* - Frank Martin, USDA ARS

LUNCH 12:00 p.m. – 1:00 p.m. (provided)

1:00 p.m. – 2:15 p.m. Modeling

Predicting Movement of Nursery Hosts Using a Linear Network Model - Steve McKelvey, Saint Olaf College

Epidemiological Modeling of *Phytophthora ramorum*: Network Properties of Susceptible Plant Genera Movements in the UK Nursery Sector - Marco Pautasso, Imperial College London

Assessment of Potential Economic and Environmental Impacts Caused by *Phytophthora ramorum* in Europe - Hella Kehlenbeck, Federal Biological Research Centre for Agriculture and Forestry, Department for National and International Plant Health, Germany

Climate-Host Mapping of *Phytophthora ramorum*, Causal Agent of Sudden Oak Death - Roger Magarey, USDA APHIS PPQ CPHST PERAL

Predicting the Spread of Sudden Oak Death in California: Spatio-Temporal Modeling of Susceptible-Infectious Transitions - Richard Hunter, University of North Carolina at Charlotte

BREAK 2:15 p.m. – 2:45 p.m.

2:45 p.m. – 3:25 p.m. Modeling, Continued

Revision of the USDA Forest Service National Sudden Oak Death Risk Map: Improved Procedures for Data Mining, Risk Mapping, and Modeling - Frank Koch, NC State University, Dept. of Forestry and Environmental Resources

Linking Sudden Oak Death Risk Models with Economic Impact Assessments - Thomas Holmes, USDA Forest Service, Southern Research Station

3:25 p.m. – 4:45 p.m. Can *P. ramorum* be Managed? (Landscape Management)

Comparison of Phosphonate and Azomite Treatments for Control of SOD in Coast Live Oak (*Quercus agrifolia*) - Doug Schmidt, UC Berkeley

Vegetation Response Following *Phytophthora ramorum* Eradication Treatments in Southwest Oregon Forests - Ellen Goheen, USDA Forest Service

Wildland Management of *Phytophthora ramorum* in Northern California Forests - Yana Valachovic, UC Cooperative Extension

Contingency Planning for *Phytophthora ramorum* Outbreaks.: Progress report Work package 7, EU RAPRA Project - Maarten Steeghs, Plant Protection Service, The Netherlands

4:45 p.m. – 5:00 p.m. Closing Remarks

Kerry Britton, USDA FS Research, Washington Office

FRIDAY, MARCH 9, 2007

Regulatory and Management Research Needs Assessment

8:30 a.m. – 9:00 a.m. General Session

Discuss goals for the day and set the stage for discussions, providing a summary of the notes/feedback gathered during the week

9:00 a.m. – 10:30 a.m. Concurrent Sessions

Forestry Needs Assessment
Horticultural Needs Assessment

BREAK 10:30 a.m. – 11:00 a.m.

11:00 a.m. – 12:00 p.m. General Session

Summary of Forestry Needs Assessment Session
Summary of Horticultural Needs Assessment Session
Feedback/Group discussion
Closing Remarks

12 p.m. - ADJOURN