Disease and Insect Resistance in Forest Trees

Fourth International Workshop on the Genetics of Host-Parasite Interactions in Forestry

http://ucanr.org/sites/tree_resistance_2011conference/

First Announcement and Call for Papers

July 31 - August 5, 2011 Valley River Inn Eugene, Oregon, USA

Sponsored by:

IUFRO Working Parties: 7.03.11 (Resistance to Insects)

2.02.15 (Breeding and Genetic Resources of Five-Needle Pines)

USDA Forest Service: Western Wildland Environment Threat Assessment Center

Eastern Wildland Environmental Threat Assessment Center

Pacific Northwest Region (Forest Health Protection & Genetic Resources)

Pacific Southwest Research Station

California Oak Mortality Task Force

Purpose and Objective:

The purpose of this workshop is to advance progress in genetic resistance programs by fostering collaboration between scientific and management communities throughout the world. Updates on current status, issues, and future plans for applied resistance programs, as well as research information and tools to fast-track the development and use of resistance in trees will be presented and discussed.

It has been three decades since the last international workshop on "Disease and Insect Resistance in Forest Trees." During that time, ongoing resistance programs have made significant progress, molecular research tools have become available, and several new serious insect and pathogen problems have arisen. Scientists, land managers, and policymakers with experience in genetics, tree breeding, pathology, entomology, physiology, evolutionary biology, forestry, and other related areas are encouraged to attend to foster exchange of ideas.

Call for Papers, Case Studies, Speakers, and Posters:

We are seeking abstracts (up to 1-page) of proposed papers or posters by **February 15, 2011**. These should be submitted via e-mail using the format (including font size and style) of the <u>MS-Word example</u> (see <u>website</u>) and should **clearly state if you would like to present a paper or a poster or if either option would be acceptable**. Abstracts should be sent to:

Katie Palmieri, California Oak Mortality Task Force

e-mail: <u>kpalmieri@berkeley.edu</u> ph.: 510-847-5482 or 530-344-7530

If you have ideas for mini-sessions within the workshop, contact Richard Sniezko (<u>rsniezko@fs.fed.us</u>) by February 15, 2011.

Authors of accepted papers and posters will be notified by March 1, 2011.

Extended abstracts (up to 4 pages) or papers of all oral and poster presentations will be published by the Pacific Southwest Research Station as a General Technical Report. **Papers are due September 30, 2011**. Selected papers may be submitted as a package for a special issue of a research journal. Complete instructions for paper preparation will be sent out upon abstract acceptance notices.

Topics:

The scientific program for the workshop will consist of contributed and invited talks and posters on all aspects of genetic resistance relating to forests and natural ecosystems. Invited speakers outside of forestry with backgrounds in plant genetics, horticulture, and evolutionary biology will add insights from related fields.

Submissions are solicited in areas of resistance, including, but not limited to:

Progress & status of established applied programs

Deployment of resistance

New invaders and genetic resistance (e.g. *Phytophthora ramorum*)

Resistance in natural systems

Managing genetic resistance for restoration

Geographic variation in resistance

Durability of resistance

Inheritance of resistance

Cross resistance to multiple pathogens and/or insects

Climate change – potential impacts on resistance

Climate change and range expansion of pests and diseases

Maintaining genetic variation in resistant populations

Host/pathogen interactions: the molecular basis for infection, host recognition, resistance mechanisms

Tolerance vs. resistance

Exapted disease resistance

Benefits from genome sequencing

Marker assisted resistance & genomics based breeding

High throughput genotyping and phenotyping

Pathogen and insect genetic variability – adaptation potential in pathogen & insect populations Statistical tools: test designs, analysis to aid resistance programs

Future needs for maximum progress in genetic improvement of resistance in forest trees

Conference Location and Information:

The workshop will be held July 31 - August 5, 2011 in Eugene, Oregon, USA at the Valley River Inn (VRI). **Based on availability, a hotel conference room rate of \$97.00 (plus 10.5% tax) is being offered through June 29, 2011. As space is limited**, we encourage you to reserve your

accommodations early. Online hotel reservations may be made at <u>Valley River Inn Reservations</u>. To make arrangements over the phone, call 1-800-543-8266 and ask to make a reservation for the USDA Forest Service Resistance in Forest Trees Workshop meeting in August. *Note:* All travel expenses and registration fees are the responsibility of the speakers and participants.

Tentative schedule:

Sunday, July 31 PM Registration

PM Social Mixer/Evening Reception

Monday, August 1 AM Registration

Symposium/Indoor Presentations

Tuesday, August 2 Symposium/Indoor Presentations

PM Poster Session and Reception

Wednesday, August 3 Field Trip - A fieldtrip to the USDA Forest Service's Dorena

Genetic Resource Center (DGRC), Cottage Grove, Oregon and BLM's Tyrrell Orchard Complex is planned. DGRC has been the USDA Forest Service's regional forest genetics facility in the Pacific Northwest for resistance breeding for >45 years. There are active programs underway in breeding for resistance to white pine blister rust (caused by the non-native pathogen *Cronartium ribicola*) in several white pine species, and to a root pathogen,

ribicola) in several white pine species, and to a root pathogen, *Phytophthora lateralis*, in *Chamaecyparis lawsoniana* (Port-Orford-cedar, Lawson's cypress). We will also visit Bureau of Land Management's Tyrrell Orchard site to see a blister rust resistance field test of *Pinus monticola*, a *Chamaecyparis lawsoniana* clone bank, and Douglas-fir (*Psudotsuga menziesii*)

and P. lambertiana seed orchards.

Thursday, August 4 Symposium/Indoor Presentations

Friday, August 5 1/2 day Symposium/Indoor Presentations, meeting adjourned

For More Information

Submission of Abstracts, Conference Logistics, and Facilities

• Katie Palmieri, California Oak Mortality Task Force (510) 847-5482, kpalmieri@berkeley.edu

Registration

• Janice Alexander, California Oak Mortality Task Force (415) 499-3041, jalexander@ucdavis.edu.

Program Content

• Richard Sniezko, USDA Forest Service - Dorena Genetic Resource Center (541) 767-5716, rsniezko@fs.fed.us

Request for Additional Conference Sponsors:

Show your organization's support for resistance research and management by becoming a Symposium sponsor. Your sponsorship will convey your collaboration to all that attend, read about the Symposium, or reference the Proceedings or other meeting materials for years to come.

We know that budgets are extremely tight; however, any support would help offset costs while also sending a message that your organization is contributing to the battle to protect our natural resources from the most damaging pathogens and insects. Funds will be used to offset speaker travel costs, for conference room rentals, and for other conference expenses.

To become a sponsor, send a check made out to the CA Oak Mortality Task Force, a 501(3)c nonprofit, public benefit corporation, Tax ID 94-3248518. Note on the check that the funds are for "DISEASE AND PEST RESISTANCE IN FOREST TREES" Workshop sponsorship. Checks may be sent care of Stephen Jones, COMTF Treasurer at 612 Martha Way, Roseville, CA 95678.

If you have particular questions or requests regarding the use of donated funds, please contact Katie Palmieri at kpalmieri@berkeley.edu or Janice Alexander at jalexander@ucdavis.edu. All sponsorships are requested by April 15, 2011 in order to insure inclusion in all printed symposium materials.

Be sure to check the website for updates and further details. We hope to see you in Eugene in summer 2011!