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

Novel challenges and opportunities for resistance to pests and pathogens

PRELIMINARY CALL

Following the footsteps of their predecessors, the organizers plan to bring together investigators from all continents working on interactions between trees and pests or pathogens. Only four meetings on this topic were held in the past 50 years:

- 1964 – University Park, Pennsylvania, USA
- 1969 – Moscow, Idaho, USA
- 1980 – Wageningen, The Netherlands
- 2011 – Eugene, Oregon, USA (http://ucanr.edu/sites/tree_resistance_2011conference/Proceedings/ for the proceedings)

Although this workshop will build upon the discussions and presentations from the 2011 workshop, special focus will be put on the **recent invasions of non-native pests and pathogens** that are causing considerable damage and mortality in native and managed forests worldwide like:

- Sudden Oak death (*Phytophthora ramorum*)
- European Ash dieback (*Hymenoscyphus fraxineus*)
- Emerald Ash Borer (*Agrilus planipennis*)
- Japanese Larch disease (*Phytophthora ramorum*)
- etc.

and also on **emerging and expanding parasites** such as

- Woolly Poplar aphid (*Phloeomyzus passerinii*)
- Pine processionary moth (*Thaumetopoea pityocampa*)
- Pine nematode (*Bursaphelenchus xylophilus*)
- etc.

Genetic resistance to these pathogens and insects is the logical first line of defense for trees, and significant advances in developing resistance have been made in a few species. Now is an opportune time to convene and discuss what strategies to take and how to become even more efficient in developing resistant populations. The rationale behind these workshops is to create an interface between science and management to achieve sustainable forestry, so the conference addresses to several audience:

- **Forest pathologists and entomologists**
- **Tree Breeders**
- **Molecular and Population Geneticists**
- **Evolutionary Biologists**
- **Forest and Natural Resources Managers**

The **main topics** will be:

- Resistance / tolerance and virulence / aggressiveness **mechanisms**
- **Breeding and management strategies** for durable resistance in a **changing environment**
- Host-parasite **co-evolution**
- Novel host-parasite interactions due to **emerging or non-native** pests and pathogens
- **Population genetics** of pests, pathogens and vectors
- **New frontiers** in tree-parasite interactions : from genes to **landscapes** and **communities**

The workshop will take place in Orléans, approx. 100 km South of Paris, in the magnificent Loire Valley. The Loire Valley is part of the *UNESCO* list of World Heritage sites as a living cultural landscape. It is a most touristic place for its pastoral landscapes, historic villages, great architectural monuments, fine wines and, of course, its many *chateaux*.

The city of Orléans is famous for celebrating St Joan of Arc, its liberator, every year since 1430. The *Orléans Forest*, North of the town, covers a surface area of about 50,000 hectares, 35,000 hectares of which are owned by the state, making it the largest state-owned forest in France. South of the town of Orléans, a wild and peaceful area, the *Sologne,* is covered with game-filled *forests* and numerous ponds and is therefore popular with hikers, fishermen and hunters.

More details about the exact conference venue will be given with the First Announcement.

Preliminary schedule :

- ➔ Sunday August 23rd: arrival and registration
- ➔ Monday August 24th: sessions
- ➔ Tuesday August 25th: sessions
- ➔ Wednesday August 26th: field trip and conference dinner
- ➔ Thursday August 27th: sessions
- ➔ Friday August 28th: morning session and departure

To help us organize this Workshop, please fill the following questionnaire and send it back via email to any of the local organizers.
You can also answer this survey online by following this link: https://www.quicksurveys.com/s/n8R7CkY
Your Name :
Your Institution + Country:
Your topics of Interest:
Are you likely to attend the meeting? YES / MAYBE / NO
Will you want to present? YES / MAYBE / NO
Would you consider: ☐ An oral presentation ☐ A poster ☐ Either type of presentation
Would you have any family member(s) accompany you ? YES / NO
If yes, how many?

Local organizers

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This workshop is held under the sponsorship of several **IUFRO working parties**:

- 2.02.15 Breeding and Genetic Resources of Five-Needle Pines (confirmed)
- 2.02.20 Breeding and Genetic Resources of Southern Pines (confirmed)
- 7.03.11 Trees Resistance to Insects (confirmed)
- 7.02.05 Rusts of Forest Trees (confirmed)

Other potential sponsorships are being considered.