

Unit 7.02.00 - Pathology Newsletter



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Message from the Coordinator

Jolanda Roux



Hallo Colleagues and Friends,

Let me start by wishing you all the best for 2013. The year promises to be a busy one, with several IUFRO and tree health related meetings taking place globally. More information on the meetings that Tod and I know about can be found in

this newsletter and on the IUFRO website, but let me highlight two of the bigger IUFRO ones.

In June the 3rd IUFRO Latin American congress (IUFROLAT) will take place in Costa Rica from June 12–15, jointly organized with the Tropical Agricultural Research and Higher Education Centre (CATIE). This meeting will include at least two tree health sessions as well as a tree health field tour. Although the focus is on Latin America, there will be a number of attendees from other parts of the world and many talks on tree health and forestry globally.

In October (5–11) 2014 the XXIV IUFRO World Congress will take place in Salt Lake City, USA. Call for session proposals are now open (until April 2013). We encourage forest health specialists to get together and submit proposals to ensure a strong focus on tree health at the meeting. Please liaise with Tod Ramsfield who is on the scientific committee for the meeting.

As usual, I encourage you to send us news of what is happening in forest/tree pathology in your part of the world. In this issue of the newsletter we have feedback from two working party meetings that took place in 2012. However, I am sure there are many other happenings that will be of interest to others. Please contact Tod or I if you would like to make suggestions for news, or want to contribute something yourself. You are all most welcome.

Let us also celebrate the achievements of our friends and colleagues. For example, we can all congratulate Mike Wingfield (Prof) of South Africa who received an honorary doctorate from the University of British Columbia in 2012 (see Branchlines Vol 23 #4, 2012: <http://www.forestry.ubc.ca/branchlines/>). He will in the next few weeks receive a 2nd honorary doctorate from a University in the USA!

Let's keep the news flowing in and keep in touch!

Yours in tree health,
Jolanda Roux
Research Group Coordinator
Forestry and Agricultural Biotechnology
Institute (FABI), University of Pretoria, South
Africa

XXIV IUFRO World Congress 2014

The next IUFRO World Congress will be held in Salt Lake City, Utah, USA from October 5–11, 2014. The call for session proposals will open in January 2013 and will close in April 2013. Full information on session proposals and the submission process is available at the world congress website: <http://iufro2014.com/scientific-program/session-proposals/>. If you are planning to develop a session proposal, please liaise with Tod Ramsfield as we want to coordinate sessions to avoid overlaps and present a diversity of forest health issues. Also, when developing your session proposal, consider that participants in the congress will represent all divisions and session proposals that incorporate multiple perspectives and reflect the IUFRO strategy will be looked upon favourably.

Proceedings Published

Submitted by Richard Snieszko

The proceedings of the Fourth International Workshop on the Genetics of Host-Parasite Interactions in Forestry: Disease and Insect Resistance in Forest Trees held in Eugene, Oregon, in 2011 have been published. A total of 88 papers, extended abstracts and abstracts are available individually as PDFs from the US Forest Service Website and the printed proceedings can also be ordered.

Snieszko, R.A., Yanchuk, A.D., Klienjunas, J.T., Palmieri, K.M., Alexander, J.M., and Frankel, S.J. tech coords. 2012. Proceedings of the fourth international workshop on the genetics of host-parasite interactions in forestry: Disease and insect resistance in forest trees. Gen. Tech. Rep. PSW-GTR-240. Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture. 372 p.

Website: http://www.fs.fed.us/psw/publications/documents/psw_gtr240/



IUFRO Spotlight

Readers are encouraged to visit the IUFRO website and subscribe to the IUFRO Spotlight, a new initiative from IUFRO that highlights research work that is relevant to all IUFRO Divisions.

<http://www.iufro.org/publications/iufro-spotlights/>

Meeting of Working Party 7.02.09: “Phytophthoras in forests and natural ecosystems”. Cordoba, Spain, September 2012

Submitted by Prof. Clive Brasier, WP European Chair

The 6th meeting of WP 7.02.09 ‘Phytophthoras in forests and natural ecosystems’ was held at the University of Cordoba, Spain from Sunday 9 to Friday 14 September at the kind invitation of local organisers Esperanza Sanchez (Cordoba), Ana Perez Sierra (Valencia), Ana Cristina Coelho (Faro) and the European Scientific Committee.

Since 1999, when the first Phytophthora WP meeting was hosted in Oregon by Everett Hansen and Wendy Sutton, the WP has gone from strength to strength – more or less as the impact of introduced Phytophthoras on the world’s forests has increased. This latest meeting was no exception. Despite the growing pressure on travel budgets the Cordoba meeting was attended by 120 specialists from around the world. They were able to participate in some excellent science and also enjoy Cordoba’s unique blend of Roman, Moorish and Spanish history and culture.

A fine welcome reception was held at Cordoba City Hall on Sunday evening. From then on it was a very full and absorbing programme. Monday began with a morning field trip organised by Esperanza and colleagues to see management of local oak agroforestry systems and control of *Phytophthora cinnamomi* at a beautiful dehesa, ‘La Jarosa’. In the afternoon, after an opening ceremony led by the Governor of Andalucia and the leaders of the City and the University, the first of the many scientific sessions followed. With sixty oral presentations and ninety posters in the programme it is impossible to cover the scientific highlights fairly. Suffice it to say that significant advances were reported across many old and new forest *Phytophthora* problems. Details of the programme and the abstracts are available on the WP website (<http://iufrophytophthora2012.org>) plus eventually pdfs of many of the papers.



Participants at the forest *Phytophthora* meeting in front of their lecture hall at Cordoba University

WP 7.02.09 has usually aimed for informality and a focus on discussion. Three ninety minute Discussion sessions were held during the meeting, each one introduced by several short overview

papers. One covered 'Adaptation and evolution', another 'The nursery pathway' and the third 'Geographic origins of species'. Abstracts of the overviews can also be found on the WP website. On Wednesday, providing a break from the intensity of the paper sessions, we spent a day in the field to see some of the *Phytophthora* work being undertaken by Esperanza and colleagues. In the morning we visited the province of Huelva to see the heavy damage caused by *Phytophthora cinnamomi* to the ancient and widespread holm oak agroforestry systems in that area. In the afternoon we saw recent damage to wild olive stands near Seville caused by *P. megasperma* and *P. inundata*.

At the Conference dinner on Thursday evening we were treated to local Andalusian cuisine and a much appreciated flamenco performance at a traditional bodega in the heart of old Cordoba. When the wine was flowing freely enough I took the opportunity to pass the mantle of European Chair of the WP (which I have held for more years than I care to remember) jointly on to Thomas Jung and Andrea Vannini. I wish them every success. At noon on Friday after another paper session, a lively discussion on the pros and cons of publishing the proceedings we had a summing up by Joan Webber and Andrea and then the meeting was formally closed. It is planned that the Proceedings will be published online in 2013 on the Forest *Phytophthora* website: <http://www.forestphytophthoras.org/>.

Both a pre-conference and a post conference tour were also held. Again they were well attended. The pre-meeting tour, organised by Ana Cristina and colleagues, covered the heavy dieback of cork oak caused by *P. cinnamomi* in the Algarve (Portugal). The post meeting tour, organised by Ana Perez and colleagues, covered dieback of deciduous oak forest associated with a range of *Phytophthoras* in a national park near Valencia.

The next meeting of this WP is scheduled to be in Argentina in November 2014. Keep an eye on the WP website!

Meeting of Working Party 7.02.07: "The impact of climate change to forest pests and diseases in the tropics". Yogyakarta, Indonesia, October 2012

Submitted by Dr. Sri Rahayu, WP Coordinator

Changing climates can affect forest pests and the extent of the damage they cause by altering a range of processes and behaviors. These include (i) their development, survival, reproduction, distribution and spread; (ii) host physiology and plant defense; and (iii) relationships between pests and diseases and environment, and their natural enemies, competitors and mutualisms. To address these issues, IUFRO WP 7.02.07 organized an international conference on "The Impacts of Climate Change to Forest Pests and Diseases in the Tropics" in Universitas Gadjah Mada, Yogyakarta, Indonesia from October 8th - 10th 2012.

The aim of this conference was to update the status of pests and diseases in the tropics, and to foster close collaboration and links between interested parties. Approximately 116 participants from

Australia, Bangladesh, Fiji, India, Indonesia, Japan, Malaysia, Nepal, Thailand, and Vietnam participated in this conference. Forty three significant papers relating to the above topics were presented orally and as posters. Papers from these presentations are currently being reviewed and edited by Prof. Caroline Mohammed, Prof. Chris Beadle, Prof. Jolanda Roux, Dr. Sri Rahayu for a proceedings document.

This conference was financially support by international sponsors (APAFRI, APFISN, ACIAR), and national sponsors (I-MHERE Universitas Gadjah Mada (UGM), Faculty of Forestry UGM, Riau Pulp and Paper (RAPP), PERHUTANI, PT. Serayu Makmur kayuindo (SMK) and PT Dharma Satya Nusantara (DSN)).

At the close of the conference, the participants committed to developing collaboration on research and information exchange in the field of management of forests pests and diseases in the tropics. The next conference is planned to be held in Thailand or Malaysia.



Delegates at the conference IUFRO-WP 7.02.07 in front of Magister Management Building, Universitas Gadjah Mada, Yogyakarta.



Some of the conference participants of IUFRO-WP 7.02.07
on the steps of Universitas Gadjah Mada, Yogyakarta



Some of the conference participants of IUFRO-WP 7.02.07 in the
Falcataria moluccana plantation during the field trip

Forest Pathology at the 10th International Congress of Plant Pathology

The 10th International Congress of Plant Pathology (ICPP) will take place in Beijing, China, in August 2013. The congress will be of great interest to Forest Pathologists globally and we encourage as many of you as possible to attend the meeting. There are two sessions on "Management of Forest Diseases" and a post-congress Forest Pathology field tour.

The organizers have invited the forest pathologists listed below to present talks in the two forest health sessions:

Mike Wingfield – Plantation health management: challenges and opportunities

Angus Carnegie - Managing invasive pathogens: *Puccinia psidii* in Australia

Jason Smith - Current efforts to understand the biology of and manage laurel wilt in the USA

Paolo Gonthier - Population genetics and GIS based analyses as essential tools to model biological invasions: the case of *Heterobasidion irregulare* in Italy.

Jan Stenlid - Can genome sequencing transform our understanding of fungal forest pathogens?

Maui Mota - *Bursaphelenchus xylophilus*: opportunities in comparative genomics and molecular host-parasite interactions

Matteo Garbelotto - Linking genotypic information to phenotypic characterization to improve the prediction of emergent forest diseases

Giles Hardy - The role of climate change and woodland and forest decline syndromes in the South-west of Western Australia.

The Forest Pathology Field Tour will be held after the ICPP from 31 August to 3 September 2012. During the three day tour participants will be able to see a number of tree diseases in the greater Beijing area and spend time with Chinese forest pathologists who study these diseases. Some of the diseases include vascular wilt of smoke trees (*Cotinus coggygria*) caused by *Verticillium dahliae*, powdery mildew of smoke trees caused by *Uncinula vericiferae*, poplar canker caused by *Valsa sordida*, poplar anthracnose caused by *Colletotrichum gloeosporioides* and rust of *Populus sp.* caused by *Melampsora larici-populina*. During the field tour you will also have the opportunity to visit some iconic tourist areas including the Summer Palace and the Great Wall of China.

31 August, Saturday – Beijing City

Morning (8:00-12:00) - Visit Fragrant Hills. Vascular Wilt and powdery mildew of smoke trees (*Cotinus coggygria*) and other tree diseases. Fragrant Hills Park (Xiangshan Park) is a public park at the foot of the Western Mountains in the northwestern part of Beijing. It covers 1.6 km² (395 acres) and consists of a natural pine-cypress forest, hills with maple trees, smoke trees and persimmon trees, as well as landscaped areas with traditional architecture and cultural relics.

Afternoon (14:00-17:00) - Summer Palace. The summer palace is 15 kilometers from central Beijing. In December 1998, UNESCO listed the Summer Palace on its World Heritage List, declaring the Summer Palace "a masterpiece of Chinese landscape garden design. The natural landscape of hills and open water is combined with artificial features such as pavilions, halls, palaces, temples and bridges to form a harmonious ensemble of outstanding aesthetic value."

1 September, Sunday: Visit Great Wall of China and Badaling Forest Farm.

Morning (8:00-12:00): Badaling Forest Farm. Vascular Wilt of smoke trees, poplar rust (*Melampsora larici-populina*) and canker (*Valsa sordida*) and poplar anthracnose (*Colletotrichum gloeosporioides*), insect pests (*Hyphantria cunea*, *Dendroctonus valens*, *Cerambycidae*). Beijing Badaling National Forest Park covers a total area of 4.4 hectares with 539 plant and 158 animal species. Due to the high elevation (average 750 m), the ancient forests and the shelter of the Great Wall, the year-round temperature of the park is 5°C lower than that of the urban areas.

Afternoon (14:00-17:00): Great wall cultural visit

2 September, Monday: Visit Songshan National Nature Reserve of Beijing and see some forest diseases and pests. i.e. Rust of *Rhamnus globosa*, *Rhamnus arguta*, *Spiraea trilobata* and wood-rot fungi such as *Phellinus tuberculosus*, *Schizophyllum commune*, *Ganoderma applanatum*, insects such as *Gastrolina depressa*, *Semiothisa cinerearia*, *Closteria anachoreta*, etc.

Songshan is located in the Yanshan mountain range, just south of Dahaituo Mountain (2198 m), the second highest peak in Beijing. The reserve is rich in biodiversity with 713 known plant species, 29 species of mammals, 143 species of birds, 15 species of reptile, 2 amphibian and 12 fish species. It comprises of ancient pines and cypresses, winding brooks, grotesque rocks and cliffs and several waterfalls. The reserve contains the only natural *Pinus tabulaeformis* forest in Northern China as well as secondary natural broad-leaved forests, native to Northern China.

Upcoming Meetings

Div 7 and Div 8 “Vulnerability and Risk Management in Planted Forests” workshop will be held as a satellite of the Third International Congress on Planted Forests (ICPF 2013) (Website: http://www.efiatlantic.efi.int/portal/3rd_international_congress_on_planted_forests/). The workshop will take place from May 16–18 in Bordeaux, France. Website: http://www.efiatlantic.efi.int/portal/3rd_international_congress_on_planted_forests/scientific_workshops/

7.02.02 “Biosecurity in natural forests, stands and plantations, genomics and biotechnology for biosecurity in forestry”. May 20–25, 2013. Brno and Cerna Hora, Czech Republic. Contact Libor Jankovski. Webpage: <http://www.iufro2013.eu/>

7.02.04 “Virus and phytoplasma diseases of forest and urban trees”. May 29, 2013. Meeting within the 5th International Symposium on Plant Protection and Plant Health in Europe, May 27–29, 2013. Berlin, Germany. Contact Prof. Dr. Carmen Büttner. Webpage: <http://dpg.phytomedizin.org/de/plant-protection-and-plant-health-in-europe/>

IUFRO: IUFROLAT “Third IUFRO Latin America Congress”. June 12–15, 2013. San José, Costa Rica. Webpage: http://web.catie.ac.cr/iufrolat/iufroLat_ing.htm

10th International Congress of Plant Pathology, Beijing, China. August 25–30, 2013. Webpage: <http://www.icppbj2013.org/>

7.01.02 “Vegetation response to climate change and air pollution – unifying evidence and research from northern and southern hemisphere”. Rio De Janeiro, Brazil. September 1–6, 2013. Webpage: <http://www.iufro.org/science/divisions/division-7/70000/70100/70102/activities/unit/7.01.02/>

Western International Forest Disease Work Conference (WIFDWC), Waterton Lakes National Park, Canada. October 7–11, 2013.

7.03.12 Invasive Species in International Trade will be meeting with the International Congress on Biological Invasions (ICBI) and the International Forestry Quarantine Research Group (IFQRG) in Qingdao, China from October 23 to November 1, 2013.

7.02.05 “Rusts of Forest Trees” with 2.02.15 “Breeding and Genetic Resources of Five-Needle Pines” and “Strobosphere” Joint Meeting. Colorado, USA. June 2014. Contact Richard Snieszko. Webpage: <http://www.iufro.org/science/divisions/division-2/20000/20200/20215/>

24th IUFRO World Congress, Salt Lake City, Utah, USA. October 5–11, 2014. Webpage: <http://iufro2014.com/>

FORPATH list server

The FORPATH list server was initiated by Dale Berghdal in the early 1990s and is now hosted by IUFRO. FORPATH links the international forest pathology community by announcing meetings, jobs, graduate student positions and discussing forest pathology issues. To subscribe follow this link: <http://www.iufro.org/science/iufro-mailing-lists/list-management/rg-702-forpath>

Newsletter contributions

Newsletter contributions are welcome. If you would like to contribute to the newsletter, please contact Tod Ramsfield or Jolanda Roux at: Tod.Ramsfield@NRCan-RNCan.gc.ca or Jolanda.Roux@fabi.up.ac.za

IUFRO Forest Pathology Working Parties

Working Party	Coordinator	Deputies
7.02.01 - Root and butt rots	Matteo Garbelotto	Gregory Filip
7.02.02 - Foliage, shoot and stem diseases	Antti Uotila	Julio Javier Diez Castro Hatice Tugba Dogmus Lehtijarvi Glen R. Stanoz
7.02.03 - Vascular wilt diseases	Krystyna Przybyl	C. Mohanan
7.02.04 - Phytoplasma and virus diseases of forest trees	Carmen Büttner	
7.02.05 - Rusts of forest trees	Richard Hamelin	Pascal Frey Salvatore Moricca
7.02.06 - Disease/environment interactions in forest decline	Thomas Cech	Dusan Jurc
7.02.07 - Diseases and insects of tropical forest trees	Sri Rahayu	Didier Begoude Pal Bosu
7.02.09 - Phytophthora diseases on forest trees	Everett M. Hansen	Clive M. Brasier Giles Hardy
7.02.10 - Pine wilt disease	Thomas Schröder	Christer Magnusson Sang-Chul Shin
7.02.11 - Parasitic flowering plants in forests	Simon F. Shamoun	Brian W. Geils J. Renata Ochocka Nick Reid Marcelo Luis Wagner