# Unit 7.02.00 - Pathology Newsletter



Coordinator: Jolanda Roux Deputy: Tod Ramsfield <u>www.iufro.ord</u> Au

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#### Message from the Coordinator

#### Jolanda Roux



Dear friends and colleagues,

The last week of June a few of us were fortunate enough to attend and participate in the 1<sup>st</sup> IUFRO-FORNESSA Regional Congress in Nairobi, Kenya. All of us have come away with many different impressions, but underlying all of

importance of networking, these. is the collaboration and communication. There were many examples of this in Nairobi, but a first for me personally was the immediate "Blog" updates of talks at the meeting. These were done by the International Institute for Sustainable Development (IISD) - Reporting Services Division that provide a range of multi-media informational resources, of coverage including daily international negotiations, analyses and photos. Within a matter of hours you could see yourself and comments you made on the web, and find numerous comments, from a range of people, on what we discussed at the meetina.

It is clear that "passive" dissemination of scientific results is becoming increasingly ineffective and that particularly Universities, need to relook at how they evaluate scientific output by their researchers. There was a strong call for Universities and other research organizations to reward the success in "uptake and adoption" of research results and not just "count" publications. The need to get research results more widely and effectively disseminated was also reflected in a number of talks pointing out the need for closer and more effective communication with policy and other decision makers. A recurring message of the Nairobi meeting was the fact that research has a key role to play in ensuring healthy forests and plantations, but, that it needs significant re-modelling to be effective. Scientists, particularly forest scientists, need to connect more closely with policy makers, businesses and people in the forest. We need to engage in "sustainable science" if we are to be effective.

What we as "members" of IUFRO working parties and research groups are trying to do is of great importance. The success of our networking and communication is up to each and everyone of We should, however, be careful not to only us. focus on communicating with fellow scientists, but work on ways in which we can make a difference beyond our own sphere of direct activity. Ensuring sustainable and healthy forests relies on us getting society as a whole informed and involved in keeping trees healthy. I encourage all of you to send information on your and other's efforts to do this to Tod Ramsfield or myself so that we can include this in our newsletters as examples to others of how we can increase the impact of our research. Also, share this information with your Working Party coordinators so that this can be uploaded on our webpages and shared widely.

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



Presentation of the Queen's Award for Forestry by Her Majesty Queen Elizabeth II to Prof. Jolanda Roux on December 13, 2011 at Buckingham Palace, London.

## **Congratulations Jolanda**

In December 2011, Prof. Jolanda Roux of the Forestry and Agricultural Biotechnology Institute (FABI) at the University of Pretoria and Coordinator of Div 7.02.00, travelled to Buckingham Palace to receive the Queen's Award for Forestry Majesty Queen Elizabeth II, patron of the from Her Commonwealth Forestry Association. The award recognizes outstanding and innovative contributions to forestry by a midcareer forester (http://www.cfa-international.org/ga.php). Jolanda is the first woman and first forest pathologist to receive the award. During her conversation with Queen Elizabeth II, Jolanda noted that "she was graceful, charming, amazingly well informed and sincerely interested in our work on trees and especially tree health". One component of the award is travel support and Jolanda was able to travel to Zimbabwe, Malawi and Mozambigue to assist her graduate students in these countries with the collection of material for their projects. On behalf of the forest pathology community, congratulations on this achievement Jolanda and thank you to the Commonwealth Forestry Association for recognizing the importance of our field.

## XXIV IUFRO World Congress 2014

The next world congress will be held in Salt Lake City, Utah, USA from October 5–11, 2014. The congress website is now live (http://www.iufro2014.com) information will be added as the meeting draws near. It is expected that the call for session proposals will be opened in January 2013 and the call for abstracts will be open in July 2013. It is planned that session proposals and abstracts will be submitted via a web portal. If you are interested in developing a session proposal, consider that participants in the congress will represent all divisions and sessions that incorporate multiple perspectives and reflect the IUFRO strategy will be looked upon favourably.

#### **Proceedings Published**

The proceedings of the meeting "Global change and forest diseases: new threats, new strategies" (IUFRO WG 7.02.02) held in the Monastery of Montesclaros, Cantabria (Spain), from 23–28 May 2011, have been published in the Journal of Agricultural Extension and Rural Development (JAERD) and are available at:

http://www.academicjournals.org/JAERD/contents/2012%20cont/14MayConf.htm

Currently, the hard copy of this Proceedings is "in press", and will be sent to the mail address of the participants during the next month. Additionally, research articles selected for the Forest Systems journal are also in press, and will be published in the special number of September.

For more information on this meeting and to view the Montesclaros Declaration, please visit <a href="http://www.iufro2011.com/">http://www.iufro2011.com/</a>

Julio J. Diez University of Valladolid

## IUFRO - FORNESSA Congress, Nairobi, June 25-29, 2012

This first IUFRO regional congress in Africa was jointly hosted by the World Agroforestry Centre (ICRAF) and the Kenya Forestry Research Institute (KFRI) in Nairobi, Kenya. The congress brought together over 350 scientists from throughout Africa, and the rest of the world, to focus on forest conservation, sustainable forest management and forest utilization in Africa. The six themes for the congress were: 1. Forests and climate change, 2. Forests and water, 3. Forest policy, governance and trade, 4. Forest biodiversity and conservation, 5. Agro-forestry, energy and food security, 6. Education, training and institutional capacity building. The congress also included the International Tropical Timber Organization (ITTO) / African Forest Forum (AFF) Forest Policy Day that addressed the science / policy interface for sustainable forest management in Africa.

There were 34 technical sessions, including "New Frontiers in Forest Health", "Invasive Alien Species: Economic and Environmental Impacts", "Forest Insects: New Challenges in Africa and the World", "Threats to Forest Biodiversity", "Climate Change: Mitigation and Adaptation" and "Forest Policies and Sustainable Forest Management" that were all relevant to forest health professionals. Communication of the congress was very good and readers are encouraged to view the daily web coverage and summaries that are available at <a href="http://www.iisd.ca/ymb/forest/iufrofornessa/c1/">http://www.iisd.ca/ymb/forest/iufrofornessa/c1/</a>.

At the close of the congress, the "Nairobi Resolution" was delivered. Congress participants commit to:

- adopt people-centered approaches to research and education;
- expand forest research and training;
- increase information sharing through regional cooperation;
- combine traditional knowledge with formal scientific research results;
- develop reward systems for successful uptake of research outputs;
- invest in science-society communication; and
- provide effective platforms for engagement of scientists, policymakers and stakeholders.

Governments are urged to:

- recognize local people as users and beneficiaries of forest and tree resources;
- provide for conflict resolution, equitable sharing of benefits and gender equity through adequate policies; and
- embrace and operationalize participatory forest policy formulation and forest management.

The Congress participants also call on African Union Heads of State and Government to fully implement their commitment to devote at least 1% of GDP to research and development, as endorsed by the Nairobi Ministerial Declaration of April 2012.



Delegates at the IUFRO - FORNESSA Congress on the steps of the World Agroforestry Centre, Nairobi.

#### **Communicating Forest Pathology Issues to a Broad Audience**

As professionals, we are all aware of the damage caused by forest pathogens in various parts of the world; however, members of the general public may not recognize the scope of a particular problem that is affecting their local forests. In recent years, forest diseases caused by pathogens in the genus *Phytophthora* have become increasingly visible to the general public as trees within recreational areas have succumbed to disease. Sudden oak death in California, kauri dieback in New Zealand and *P. cinnamomi* in Australia are three examples of disease involving *Phytophthora* that have had serious impacts. These are also good examples of how scientists and different levels of government have worked together to set in place research programs and communications strategies to understand the problems and raise public awareness in and attempt to reduce the spread of these pathogens.

Sudden oak death, caused by Phytophthora ramorum, has caused extensive mortality within California and Oregon in the USA, as well as the United Kingdom and Europe. In the USA, the California Oak Mortality Task Force, a non-profit group that was established in 2000, brings together research institutions, government agencies, other non-profit organizations and private individuals to minimize the spread of the disease, coordinate an integrated response and liaise with other groups. The group website <a href="http://www.suddenoakdeath.org">http://www.suddenoakdeath.org</a> provides a gateway for the general public to learn about sudden oak death and it is also frequently updated with new research findings. The Royal Horticultural Society in the UK and the Forestry Commission also provide information on the pathogen in the UK at <a href="http://apps.rhs.org.uk/advicesearch/profile.aspx?pid=329">http://www.forestry.gov.uk/pramorum</a>, respectively.

Kauri dieback is a serious disease of Agathis australis in the North Island of New Zealand, caused by a species of Phytophthora currently referred to as Phytophthora taxon Agathis (PTA). Kauri is an iconic New Zealand tree with special significance to Maori. Following the identification of the disease in the Waitakere Ranges Regional Park in 2008, a major research

and communications strategy was put in place to learn more about the disease and to prevent the spread of the pathogen outside of the affected area. The Kauri Dieback Programme is a multi partner endeavour that includes Maori, the federal government via the Ministry for Primary Industries and the Department of Conservation, as well as the regional councils of Auckland, Northland, Bay of Plenty and Waikato. Further information on the disease, information guides and the Kauri Konnect newsletter can be obtained from <u>http://www.kauridieback.co.nz</u>.

Phytophthora cinnamomi is widely distributed in Australia and is particularly damaging in Western Australia, which has been recognized as an international biodiversity hotspot. This pathogen has a very broad host range and is easily spread through the movement of soil. In 1996, the Dieback Working Group was formed, again uniting different levels of government, industry, natural resource management groups, catchment and landcare groups, community conservation groups and educational and research institutes. Further information on Phytophthora dieback can be accessed through <u>http://www.dwg.org.au</u> and <u>http://www.dieback.org.au</u>.

Forest Phytophthoras of the World is a recent web initiative that is directed at a broad audience and includes more detailed information on Phytophthora associated with forest trees. The website can be accessed at <u>http://forestphytophthoras.org</u> and it includes an interactive synoptic key, morphological descriptions with micrographs and other information necessary to make identifications, a "disease finder" and general information about the biology of Phytophthora spp. The website also has a link to the new online journal Forest Phytophthoras. Forest Phytophthoras of the World is an excellent resource and is a very good example of how the web can be used to make accessible foundational knowledge that is traditionally found in specialized publications which may be difficult for some researchers to access.

All three of the disease issues mentioned above provide very good examples of how stakeholders must work together to combat disease in these iconic and important regions. They also demonstrate how the web can be used as an information portal to educate and raise awareness to a broad audience, both of which are important components in preventing further damage from serious forest diseases.

#### **Position Announcement**

Scion in Rotorua, New Zealand, has a position available for an experienced forest pathologist. Scion, a New Zealand Crown Research Institute formerly named the New Zealand Forest Research Institute, has a long history in all aspects of forest-related research from forest science, through to manufacturing and bioproducts, and sustainable design.

For further information and to apply before September 3, 2012, visit:

https://scionresearch.careercentre.net.nz/Job/Forest-Pathologist/Rotorua/1413

## Forest Invasive Species Network for Africa (FISNA)

FISNA met in Kampala, Uganda, in February 2012 and released a statement following the meeting. Highlights from the statement are reproduced below (for full text and more information on FISNA, visit <u>http://www.fao.org/forestry/fisna/en/</u>):

The Forest Invasive Species Network for Africa (FISNA) aims to facilitate the sharing of information regarding forest invasive species, including insects, invasive plant species and microbial pathogens, on the African continent. Recognizing that knowledge and implementation of phytosanitary standards in forestry is essential to facilitate safe trade within and outside Africa, the executive committee of FISNA recently met in Kampala, Uganda, to discuss these and other issues related to forest and plantation health on the continent.

To limit the spread of insects and pathogens globally, the International Plant Protection Convention (IPPC) has, in consultation with various stakeholders and scientists, developed legislation to reduce the spread of non-native organisms globally. The IPPC is an international agreement between countries to manage pests and prevent their spread. More than 175 countries are signatories of this convention that has developed a number of International Standards for Phytosanitary Measures (ISPMs) to limit insect and pathogen spread, while still facilitating international trade.

A number of the 34 ISPMs are relevant to forestry. These include, for example ISPM No.15 which deals with the regulation of wood packaging material in international trade. Other ISPMs include ones on the use of biological control agents (ISPM No. 03) and living modified organisms (ISPM No. 11), to name a few. There are also specific ISPMs dealing with the reporting of new pests, which is usually driven through a particular country's NPPO (National Plant Protection Officer).

A number of key concerns affecting the forestry sector were identified during the FISNA meeting in Kampala. Key among them were:

- Lack of trained and experienced personnel in entomology and pathology to deal with tree health threats,
- Lack of trained and experienced personnel in entomology and pathology to deal with the development and implementation of management strategies against invasive pests,
- Limited access and sharing of vital tree health information available in the developed countries due to lack of the necessary infrastructure eg. reliable internet connectivity,
- Lack of interaction between institutions working in the forestry sector eg. forestry research organisations, community based organisations (CBOs) and NPPOs,
- NPPOs give more focus to the implementation of ISPMs that are related to the Agricultural sector leaving forestry vulnerable.

The FISNA executive gratefully acknowledges the FAO Forestry Department and partners for assistance in organizing the meeting in Kampala and particularly Dr. Gillian Allard, Shiroma Sathyapala and Beverly Moore for the training provided. It is recognized that the e-learning on good practices for forest health protection (<u>http://www.fao.org/forestry/en/</u>) and other training materials produced by the FAO will have immense impact on the forest sector and its partners. The US Forest Service is acknowledged for financial support of the workshop and FAO and MAF New Zealand for their valuable technical support.

## **Upcoming Meetings**

Division 7.02.09 6<sup>th</sup> Meeting of the IUFRO Working Party 7.02.09 Phytophthora in Forests and Natural Ecosystems, Córdoba, Spain, 2012-09-09 to 2012-09-14.

http://iufrophytophthora2012.org/

Division 7.02.07 The impacts of Climate Change to Forest Pests and Diseases in the Tropics, Yogyakarta, Indonesia, 2012–10–08 to 2012–10–10.

http://www.iufro.org/download/file/8686/2719/yogyakarta12-2nd-announcement\_pdf/

Western International Forest Disease Work Conference (WIFDWC), Lake Tahoe, California, USA, 2012-10-08 to 2012-10-12.

http://www.fs.fed.us/foresthealth/technology/wif/index.htm

Division 7.02.02 Shoot and Foliage Diseases, Brno, Czech Republic, 2013-05-20 to 2013-05-25

IUFROLAT 2013, Third IUFRO Latin America Congress, San José, Costa Rica, 2013-06-12 to 2013-06-15

10<sup>th</sup> International Congress of Plant Pathology, Beijing, China, 2013–08–25 to 2013–08–30

http://www.icppbj2013.org/

24<sup>th</sup> IUFRO World Congress, Salt Lake City, Utah, USA, 2014-10-5 to 2014-10-11.

http://www.iufro2014.com

#### **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/

#### 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: <u>http://www.iufro.org/science/iufro-mailing-lists/list-management/rg-702-forpath</u>

#### **Newsletter contributions**

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

## **IUFRO Forest Pathology Units**

Unit	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
7.020.10 - 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