

Planted Forests on the Globe *Renewable Resources for the Future*

3rd FAO INTERNATIONAL CONGRESS ON PLANTED FORESTS
16th-21st MAY 2013

Bordeaux Scientific Workshop Programme

Vulnerability and Risk Management in Planted Forests

16th-18th May



INRA, Forest-Wood Research Campus
Pierroton, 69 route d'Arcachon, 33612 CESTAS, France

Sponsors



Organisers



SCOPE

Though forests in general have always been exposed to a range of biotic and abiotic hazards, disturbances and subsequent damages to forests seem to increase world wide in a context of more extreme climatic events, changing land-uses and landscapes, and outbreaks of pests and diseases. Planted forests are no exceptions, and in various regions of the globe, their management and planning need to integrate multiple risks in order to improve overall resilience of planted forest systems to many threats. The ICPF Bordeaux workshop will focus on the different components of risks and their analysis for planted forests: hazards and damage assessment; vulnerability and effects of management and planning; integrated risk management including anticipation, prevention, and crisis management. Contributions from various scientific fields and domains including ecology, social sciences, economics, forest management, risk management, as well as relevant case study presentations and posters, will be presented, and conclusions and recommendations will be drawn to be reported in the ICPF plenary session in Lisbon on 20 and 21st May.

PROGRAMME

All abstracts are available on the event website:

16th May - INRA Bordeaux-Aquitaine - Pierroton

09:00 - 10:00 Registration and coffee

10:00 - 10:30 Opening of the Workshop by representatives from local hosts (INRA, EFI ATLANTIC, Forestry House of Aquitaine, Regional Council of Aquitaine, French Ministry of Agriculture and Forestry)

10:30 - 13:00 Session 1: RISK ASSESMENT AND PERCEPTION

Moderator: Jean-Michel Carnus

10:30 - 11:00 Key note presentation by Marc Hanewinkel (WSL, Switzerland)

11:00 - 13:00 Oral presentations:

- Manuela Branco, (Port): Economic impact of invasive alien species in forest plantations
- Philippe Deuffic (Fr): The social construction of natural risks: between claim-making and denial
- Raquel Diaz (Sp): Health status decline of the eucalyptus plantations in the South West of Europe and its impact in the forest economy
- Lisa Langer (NZ): Wildfires and communities: two way risks and vulnerabilities of planted forests in southern Europe and New Zealand
- Evgeny Romanov (Russia): The role of homogeneous stands in improvement of productive capacity and ecological potential of boreal forests in the Volga region
- Juan Picos (Sp) : Stakeholders perception of the evolution, potential impact and control measures of a Pine Wood Nematode outbreak in Galicia (Spain)

13:00 - 14:00 Lunch break

14.00 - 17:00 Session 2: VULNERABILITY TO BIOTIC AND ABIOTIC HAZARDS

Moderator: TBC

14:00 - 14:30 Key note presentation by Gillian Allard (FAO)

14:30 - 15:30 Oral presentations

- Kana Kamimura (Jap): Stability of planted Japanese larch against strong wind with tree growth
- Jean-Yves Fraysse (Fr): Influence of genetics and culture conditions in nursery on the cold hardiness of maritime pine seedlings
- Anders Taero Nielsen (Den): Root Architecture and Tree Stability Assessment on a 16 Year Old Norway Spruce

15:30 - 16:00 Coffee break and poster presentations

16:00 - 17:20 Oral presentations:

- Pascal Nzokou (USA): The effect of provenance susceptibility to cold temperatures for establishment in temperate afforestation programs for Turkish red pine (*Pinus brutia* Ten.) compared to American red pine (*Pinus resinosa* Ait.)
- Guillaume David (Fr), Dispersal capacities of *Monochamus galloprovincialis*, vector of the pine wilt disease measured by flight mill experiments
- Ana R. Reis (Port): Risk of damage by *Gonipterus platensis* in Eucalyptus forest in Portugal and potential use of less susceptible genetic materials
- Antoine Danquechin Dorval (Fr): Influence of reforestation techniques on architectural development of the root system and on toppling in *Pinus pinaster* saplings

17th May - INRA Bordeaux-Aquitaine - Pierroton

09:30 - 13:00 Session 3: RISK ANALYSIS AND MODELLING

Moderator: Hervé Jactel

09:30 - 10:00 Key note presentation by Barry Gardiner (INRA, France)

10:00 - 11:00 Oral presentations:

- Sophie Hale (UK) : A New Methodology for Wind Risk Modeling in Forest Plantations
- Céline Meredieu (Fr): Controlling and predicting the spread of *Heterobasidion annosum* in even-aged *Pinus pinaster* stands in South-West France
- Philip Taylor (UK): Assessment of the effect of global climate model uncertainty on the risk of future drought conditions in plantation forests in Europe

11:00 - 11:30 Coffee break

11:30 - 12:30 Oral presentations

- Margot Regolini (Fr): Implementing quantitative pest risk analysis in planted forests: the case study of the Pine processionary moth
- Tommaso Locatelli (UK) : Global Sensitivity Analysis on the ForestGALES wind-risk model: potential benefits and applications
- Axel Albrecht (Ger): Combining an individual-tree forest growth model with storm damage modeling - conceptual approach and results of different silvicultural scenarios

12:30 - 13:00 Poster presentations

13:00 - 14:00 Lunch break

14:00 - 18:00 RISK MANAGEMENT

14:00 - 14:30 Key note presentation by Eckehardt Brockerhoff (SCION, NZ)

14:30 - 15:30 Oral presentations

- Kristen Waring (USA): Artificial regeneration of five-needle pines of North America
- Dominique Piou (Fr): Can we decrease the health risk by the choice of resistant provenances? The case study of larch plantations in the Massif Central (France)
- John Moore (NZ): Managing Risks in New Zealand's Planted Forests

15:30 - 16:00 Coffee break

16:00 - 16:30 Key note presentation by Pierre Macé (GIPATGRI, Fr)

16:30 - 17:30 Oral presentations

- Lydia Hantsch (Ger), Effects of diversity, identity and density of local neighbour species and inter-annual variation in weather conditions on foliar fungal pathogens
- Bastien Castagneyrol (Fr): Mixing trees to reduce insect herbivory in plantation forest: resource availability and tree phylogeny matter
- R. Díaz (Sp): Research in Spain to fight against and control the pine wilt disease caused by *Bursaphelenchus xylophilus*

17:30 - 18:00 Concluding round-table

19:30 - 22:00 DINNER IN BORDEAUX

18th May - Field tour

08:00 Departure from Bordeaux

MORNING

- stop at forest fire memorial (Cestas)
- visit of conservation platform for wood damaged by storm
- visit of Nezer forest domain and wind research site (CDC, INRA)

Lunch and oyster tasting near Arcachon

AFTERNOON

- visit of forest fire prevention system (DFCI, Mios)
- visit of field experiment on role of tree diversity for pest control (INRA, Castillonville)

19:00 Return to Bordeaux

19th May - Flight to Lisbon