

PROGRAMME



34th ANNUAL MEETING OF THE TREE PROTECTION CO-OPERATIVE PROGRAMME (TPCP) AND THE DSI-NRF CENTRE OF EXCELLENCE IN PLANT HEALTH BIOTECHNOLOGY (CPHB)



Venue: Future Africa Auditorium, University of Pretoria

TUESDAY, 9 MAY 2023

08:00-08:15 **Sign-in and systems check**

Session 1: Partnerships for a competitive forestry sector

08:15-08:20 Welcome and setting the scene for the day

Prof. Emma Steenkamp, Director of the CPHB, FABI, University of Pretoria

08:20-08:30 Reimagining public-private partnerships for impact at the University of Pretoria

Prof. Sunil Maharaj, Vice-Principal Research, Postgraduate Studies and Innovation Support

08:30-08:50 A current perspective on the state of Forestry in South Africa

Mr Michael Peter, CEO of Forestry South Africa

08:50-09:05 The TPCP in 2022

Prof. Bernard Slippers, Director of the TPCP and FABI

09:05-09:15 Discussion

09:15-10:00 **GROUP PHOTO & COMFORT BREAK**

Session 2: Biosecurity / Global change – Biosecurity, Climate change

10:00-10:15 Precision Pest Management of forest plantations on a global scale

Prof. Irene Barnes, University of Pretoria

10:15-10:35 **Guest speaker:** Forest health in a changing world

Prof. Jonas Oliva, University of Lleida, Spain

10:35-10:55 **5 minute speed talks**

Dr Mesfin Gossa: Tree health in Africa – the ACIAR project in Ethiopia

Dr Trudy Paap: *Phytophthora* as a threat in nurseries and beyond

Mr Nam Pham: An update on *Elsinoe necatrix* in Indonesia

Prof. Jolanda Roux / Mr Siphephelo Phungula: The emergence of *Elsinoe masingae* in South Africa

10:55-11:00 Questions and discussion

11:00-11:30 **TEA**

Session 3: Data science, engineering and the future of tree health management

11:30-11:50 **Opening talk:** Biochemistry and sensors: Viewing biochemistry precisely from a distance

Prof. Almuth Hammerbacher, FABI, University of Pretoria

11:50-12:05 The promise of remote sensing in forestry

Prof. Bruce Talbot, Stellenbosch University

12:05-12:20 Building ICFR-FABI links around GIS, data science and remote sensing

Dr Ilaria Germishuizen, ICFR

12:20-12:50 **6 minute speed talks**

Dr Michelle Schroder: LoraWan in nurseries and microclimates influencing pests

Mr Phumlani Nzuza: Building bridges for remote sensing: The *Gonipteris* sp. 2 starting point

- Mr Lihan Esterhuizen:** Early detection of root disease through hyperspectral sensing of root disease in leaves of *Eucalyptus*
Mr Hannes Strydom: Connecting data, creating information – A live demonstration of the Information Hub digital twin
- 12:50-13:00 Questions and discussion
- 13:00-14:00 **LUNCH** (Future Africa Dining Hall)
- Session 4: Applied tree health management: Biological control, diagnostics and extension**
 14:00-14:20 Building on the TPCP foundation to implement a national pest and disease system
Prof. Brett Hurley, FABI, University of Pretoria
 14:20-14:40 **Guest speaker:** Biological control of *Eucalyptus* pests in Portugal
Prof. Manuela Branco, School of Agriculture Forest Research Centre, University of Lisbon, Portugal
 14:40-14:55 *Fusarium circinatum*: From basic genetics to applied solutions
Prof. Emma Steenkamp, FABI, University of Pretoria
 14:55-15:20 **5 minute speed talks**
Ms Marizanne Jones: Entomopathogenic fungi for the management of *Gonipterus* sp. n. 2
Mr Innocent Rakubu: Entomopathogenic nematodes for forest pest management
Ms Amy Collop: *Anagonia*: A new biological control agent for *Gonipterus* sp. n. 2?
Dr Lieschen de Vos: Parallel pathogen diagnostics: Learning from grain research
Mr Harris Keetse: Growth and economic impacts of eucalypt defoliating insects
- 15:25-15:30 Questions and discussion
- 15:30-16:00 **TEA**
- Session 5: Biotechnology platforms for plant health management tools**
 16:00-16:20 **Opening speaker:** Genomics tools for pest and pathogen management
Proff. Tuan Duong, Cobus Visagie and Brenda Wingfield, FABI, UP
 16:20-16:35 Progress in understanding and applying the genetics of tree-pathogen interactions
Prof. Sanushka Naidoo, University of Pretoria
 16:35-16:50 **Dr Gudrun Dittrich-Schröder:** Progress with developing gene editing tools for pest management
 16:50-17:10 **5 minute speed talks**
Mr Christoff Joubert: Biochemistry of the *Gonipterus* sp. n. 2 - *Eucalyptus* – *Anaphes* interaction
Ms Lente van Zyl: *Fusarium circinatum* does not like *Pinus* resin
Ms Myriam Solis: Towards marker assisted breeding: the role of phenotyping *Teratosphaeria destructans* infection
Ms Elmarie van der Merwe: Rearing and transforming *Sirex noctilio*
- 17:10-17:15 Questions and discussion
- 17:15 **Cocktails** (Future Africa gardens)
 18:00-late **Dinner and evening activity** (Future Africa Dining Hall)

WEDNESDAY 10 MAY 2023

- Session 6: Climate change and the future of plant health management**
08:15-08:35 **Guest speaker:** Climate change and forestry in South Africa
Prof. Mary Scholes and Dr Yolandi Ernst, Global Change Institute, University of the Witwatersrand
- 08:35-08:55 **5 minute speed talks**
Mr Harmen Barten: *Gonipterus* sp. 2 and *Anaphes nitens* fluctuations over time
Dr Michelle Schröder: Climate change and forestry pests in South Africa: current state and future projects
Ms Izette Greyling: Mondi observations of the impact of climate change on tree production in South Africa
Arne Schreuder and Hannes Strydom: Using the Information Hub to connect data on biotic and abiotic influences on plantations
- 08:55-09:15 Panel discussion – Climate change and the future of plant health
Prof. Mary Scholes, Global Change Institute, University of the Witwatersrand
Prof. Jonas Oliva, University of Lisbon, Spain
Dr Ilaria Germizhuizen, ICFR
Dr Michelle Schröder, FABI, University of Pretoria
Prof. Mike Wingfield, FABI, University of Pretoria
- 09:15-09:30 Questions and discussion
09:30-10:00 Closing of the meeting and final discussions
- 10:00-10:30 **TEA**
- 10:30-14:30 **TPCP Board meeting** (Future Africa Conference Room 2)
- 10:30-13:00 **FABI facilities tours**