How do insect pests and pathogens impact on trees?

220417 Forest Health

This subject covers the ecology, impact and management of insect pests and pathogens in forests, woodlands, plantations and urban environments. An understanding of the dynamics of pest and pathogen populations is essential in order to determine the risk they pose and to determine appropriate management actions. The increasing globalization of trade also requires a thorough understanding of biosecurity protocols for the protection of trees in the landscape from exotic incursions and for maintaining overseas access for timber-based products.

Topics covered

- Insect pests and plant pathogens impacting on native forest ecosystems and plantations
- Factors that predispose forests and plantations to insect pest and disease outbreaks, including an understanding of their impact on associated biodiversity issues
- The economic impacts of outbreaks, and the design of strategies to prevent and manage outbreaks
- Design and evaluation of forest health surveillance programs that monitor pest levels and meet certification standards
- Examination of the fundamentals of national and international forest health biosecurity framework and the importance of quarantine to trade for maintaining market access for forest products

Course coordinators

- Mr Nick Collett (ncollett@unimelb.edu.au)
- Mr Ian Smith (ismith@unimelb.edu.au)

THE UNIVERSITY OF MELBOURNE

220417 Forest Health and Protection

2009 study dates and location

- Intensive teaching over 10 days from October 5th – 16th at the Creswick Campus and various field sites in Victoria
- Study materials available on the Learning Management System from mid-September
- Subject assessments due by mid-November.

Teaching plan

- Lectures and some practical sessions will be conducted at Creswick over the 10 teaching days, interspersed with day trips and visits to native forests and plantation sites in Victoria.
- The first week of teaching will cover issues concerning forest entomology including major insect pest groups, modes of attack and lifecycle and generation studies while the second week will cover forest pathology including major pathogens and their outbreak dynamics. Issues common to both study disciplines will be covered across both weeks including control principles, biodiversity, biosecurity and international trade, and forest health surveillance.

Student costs, travel and accommodation

In addition to subject tuition costs accommodation at Creswick Campus is approximately $150 - $170 for two weeks.

Enrolment options

- This subject is normally offered through the Master of Forest Ecosystem Science but is available to students from other courses subject to their Course Coordinator's approval.
- The subject may also be taken as an individual subject through the University's Community Access Program (CAP). This may be in assessed or non-assessed mode. For further information see: http://www.unimelb.edu.au/community/access/ or email forests-info@unimelb.edu.au

Further information

Information about this subject and the Master of Forest Ecosystem Science is available at: http://www.forests.unimelb.edu.au