



Position for PhD candidate:

Remote sensing of invasive insect pests in *Eucalyptus* plantations

A PhD position is available to study the impact of invasive insect pests on *Eucalyptus* plantations. Invasive insect pests together with climate change pose a significant threat to the sustainability of the forestry industry. *Gonipterus* is one of the most significant insect pests of *Eucalyptus* globally. The accurate monitoring of their population dynamics and damage is critical for developing precision pest management tools. Developments in remote sensing techniques holds much promise to improve current monitoring and application of pest management tools. The study will investigate the use of satellite data and drone images to monitor and quantify the presence and damage caused by *Gonipterus*, linked to its phenology and population dynamics. The position will include both field work and computer data analysis, and provide an opportunity to develop and apply remote sensing skills. The project forms part of the newly established remote sensing satellite laboratory in collaboration with the University of Ghent. FABI and the satellite laboratory bring together world class expertise in tree health biotechnology and remote sensing to create a unique multidisciplinary research environment developing next-generation research leaders in precision pest management and sustainability.

Required qualifications: M.Sc. or equivalent degree, in Entomology, Ecology, Plant pathology, or a related field; demonstrated analytical/statistical abilities and writing skills; experience in computer science or remote sensing will be advantageous; ability to work independently and as part of a team; good communication skills.

Where: The successful candidate will be based at the Forestry and Agricultural Biotechnology Institute (FABI, www.fabinet.up.ac.za) and registered in the Department of Zoology and Entomology, at the University of Pretoria.

Compensation: A full scholarship is offered for a three-year period.

Application Process: Email the following documents to Dr Michelle Schröder (michelle.schroder@fabi.up.ac.za) and Prof. Brett Hurley (brett.hurley@fabi.up.ac.za): (1) A cover letter that includes your research interests (2) CV, including contact information for three references.

The deadline for application is **31 December, 2020**. The applicant will be expected to start in January 2021 or as soon as possible.