



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

FABI

Position for M.Sc. candidate:

Use of entomopathogens in integrated pest management of forest insects pests

A M.Sc. position is available to investigate the use of entomopathogens for the control of insect pests in plantation forests. The use of entomopathogens as biopesticides has been effective in controlling various insect pests of economic concern. Entomopathogens, such as *Beauveria bassiana* are known to have a broad host range. Different strains of *B. bassiana*, however, vary in their virulence against target species. It is thus important to assess different strains of entomopathogenic species against the target pest to select the most effective strain. The diversity of *B. bassiana* in South Africa is not well understood and its impact on insect pests in forestry are not known. The interaction between entomopathogens and the natural enemies of these pests also requires investigation.

The study aims to characterize the diversity of *B. bassiana* and other entomopathogens in South Africa and determine their efficiency against selected insect pests of plantation trees. In addition, different application methods will be evaluated and the effect on relevant biological control agents will be assessed.

Required qualifications: Honours or equivalent degree, in Entomology, Ecology, Microbiology, or a related field; demonstrated analytical/statistical abilities and writing skills; 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 two-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 **30 October, 2020**. The applicant will be expected to start in January 2021.