UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

FABI

Position for MSc candidate:
Remote sensing of *Teratosphaeria* in *Eucalyptus* plantations

The forestry industry is threatened by the presence of invasive pathogens such as *Teratosphaeria* leaf blight, caused by *T. destructans* and *T. nubilosa*. Leaf spots vary in size from small round spots to irregular shaped lesions, that coalesce as they mature. Management for this disease relies on the use of resistant genotypes. The project aims to develop remote sensing techniques that can be used to detect infested trees in the field as part of a larger monitoring system for this disease and its spread and development in the field. The project will form part of a larger project that is focused on characterizing the spectral reflectance of *Teratosphaeria* infected *Eucalyptus* leaves to develop screening methods for identifying and developing resistant genotypes. 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 remote sensing satellite laboratory in plant health in collaboration with the University of Ghent, Belgium. FABI and the satellite laboratory bring together world class expertise in tree health biotechnology and remote sensing to create a unique multidisciplinary research environment to develop next-generation research leaders in precision pest management and sustainability.

Required qualifications: BSc Honours or equivalent degree, in Entomology, Ecology, Plant pathology, or a related field; demonstrated analytical/statistical abilities, computer science and writing skills; experience in 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 two-year period.

Application Process: Email the following documents to Dr Michelle Schröder (michelle.Schroder@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 **12 February, 2023**. The applicant will be expected to start in March / April 2023.