

PhD Studies opportunity: Genetic analysis of resistance to Fusarium wilt in banana

Background

The International Institute of Tropical Agriculture (IITA) invites applications for a PhD Fellowship under the project, '**Improvement of banana for smallholder farmers in the Great Lakes Region of Africa**'. This call is for citizens of EAC countries, with preference given to Tanzanians. The research is about studying the genetics of banana resistance to Fusarium wilt in a diploid mapping population.

The PhD candidate will be expected to:

- 1) Write a full proposal on genetic analysis of resistance to Fusarium wilt in banana
- 2) Set up and run phenotyping experiments
- 3) Collect data related to Fusarium resistance and agronomic data
- 4) Collect leaf samples, and prepare DNA for genotyping
- 5) Cure SNP makers from GBS genotyping platform
- 6) Run statistical analysis on the phenotypic data
- 7) Construct linkage maps and do QTL analysis
- 8) Interpret the results
- 9) Write and publish papers in peer-reviewed journals
- 10) Complete the academic requirements as defined by the University of Stellenbosch for the award of a PhD degree

Qualifications

The candidate should fulfill the following conditions:

- Hold a M.Sc. degree in Plant Breeding, Molecular Biology or Quantitative Genetics from a renown university
- Knowledge and skills in designing experiments, running field experiments, data analysis and reporting findings
- Experience working with molecular markers, and QTL analysis
- Ability to take initiative and work under minimum supervision
- Excellent computer literacy, including at least one statistical package
- Capable of writing and publishing in peer-reviewed journals
- Native from Tanzania, Uganda or one of the East Africa Community countries
- Fluency in English
- Some previous research on banana would be an advantage



General information

The Position is for a maximum of four years. The person will be paid a monthly stipend and applicable allowances as per IITA policy. The **candidate will be enrolled at the University of Stellenbosch in South Africa and conduct her/his research in Arusha, Tanzania.** The retained candidate should be able to start the program by early April 2015.

Application Procedures

Completed application should be forward to IITA-TrainingUnit@cgiar.org. All applicants are required to include:

- 1) Completed application form;
- 2) Curriculum vitae;
- 3) Letter of interest
- 4) University official transcripts;
- 5) Three reference letters including names and contact information of the referees.

Closing Date

The deadline for application to IITA is February 28th, 2015 (close of business).

IITA is an equal opportunity employer and particularly welcomes applications from women candidates. All applications will be acknowledged, but only short listed candidates will be contacted.

For more information about IITA, visit: www.iita.org