VACANCY ANNOUNCEMENT

Research Fellow, Microbial Associations

Bioversity International is a global research-for-development organization. We have a vision – that agricultural biodiversity nourishes people and sustains the planet.

We deliver scientific evidence, management practices and policy options to use and safeguard agricultural biodiversity to attain sustainable global food and nutrition security. We work with partners in low-income countries in different regions where agricultural biodiversity can contribute to improved nutrition, resilience, productivity and climate change adaptation.

Bioversity International is a CGIAR Research Centre.

For further information on Bioversity International, consult our Web page at:
www.bioversityinternational.org

Context

The research fellowship is aimed at developing local capacity for molecular analysis of microbiome communities in the rhizosphere of banana plants in smallholder highland banana systems. The Research Fellow is therefore expected to register and pursue a PhD out of the thematic activities executed. He/she will study the root exudates-pathogen interactions in the rhizosphere of Foc-Race1 susceptible and resistant banana plants and how the knowledge could be used to strengthen Integrated Management Fusarium Wilt disease of banana in different production systems and agro ecologies; characterize the molecular and functional properties of exudates in the rhizosphere and develop strategies for utilizing the information to manage Foc wilts in mixed cultivar cropping systems. The position will also include collection and establishing pathogen accessions, detailed data analysis, research papers, briefs, reports, and presentations in different research projects and studies.

The Research Fellowship will be executed in close collaboration with NARO-Uganda and the incumbent will hence be located at NARO’s National Agricultural Research Laboratories at Kawanda and linked with Bioversity International’s office in Kampala, Uganda.

Main Responsibilities

Under the combined supervision of Bioversity’s Regional Coordinator, Uganda, the registering University, and NARO-Uganda, the appointee will carry out the following research activities:

- Map the distribution and incidence of Foc Race 1 in key production systems and agroecologies in Uganda, and establish collections/accessions of the disease for future reference.
- Conduct biochemical analysis/characterization of the root exudates from Foc race 1 - susceptible and resistant banana cultivars and hybrids.
- Analyze the morphological and biochemical changes in the root tips of resistant and susceptible plants in the presence and absence of Foc race 1.
- Analyze the development behavior of Foc race 1 in susceptible and resistant banana cultivars.
- Conduct a bioassay assessment of the potential as biocontrol agents against Foc race 1.
- Prepare a field/screen house demonstration of the potential of root exudates in the management of Foc race 1 in mixed cultivar cropping systems.
Qualifications and competencies

Essential qualifications & competencies:

- Master’s degree in biological / agricultural sciences from a recognized university.
- Familiarity with molecular-based approaches especially PCR, gene cloning and DNA sequencing.
- Knowledge of microbiology techniques, pathology, especially working with banana disease pathogens.
- Knowledge on how to conduct and screen field and greenhouse trials, pathogen diagnostics and characterization.
- Excellent command of the English language, both verbal and written.
- Good analytical and synthesizing skills including the ability to write scientific documents clearly and concisely.
- Well-developed skills with personal organization and priority setting.
- Ability to work with a high degree of independence within assigned areas, complemented by sound judgment and initiative, flexibility and adaptability.
- Strong teamwork, interpersonal and communications skills; courtesy, tact and the ability to establish and maintain effective working relationships with people of different cultural and national backgrounds.

Desirable qualifications and competencies:

- Experience in an active molecular laboratory.
- Experience with qualitative and quantitative research methods and statistical analysis of databases.

Eligibility: This position is only open to candidates who have completed their Master’s degree studies and want to pursue a PhD, and who are Ugandan Citizens.

Terms and conditions: Bioversity offers an attractive stipend, inclusion in Bioversity insurance schemes, and leave provisions. Bioversity will also cover tuition costs to a local / regionally recognized university, research expenses, including local /regional travel. This is a 2-year full time Research Fellowship opportunity, renewable subject to funding availability.

Applications: Please apply online through Bioversity Job Opportunities web page ([http://www.bioversityinternational.org/jobs/](http://www.bioversityinternational.org/jobs/)) by clicking the “Apply” button, completing the online application and attaching the required information, or through postal systems (P. O. Box 24384, Kampala, Uganda) or by hand at Plot 106, Katalima Road, Naguru, Kampala, Uganda. Please note that in the application you are required to provide the contact details (address, telephone number and e-mail address) of at least three referees, which Bioversity will contact for short listed applicants. The application deadline is 30 November, 2016.

Bioversity is an equal opportunity employer and strives for staff diversity.