



## **Associate Scientist, Cowpea Molecular Breeder (Ref: DDG-R4D/AS/CMB/02/19)**

**Background:** The International Institute of Tropical Agriculture (IITA) invites applications for the internationally recruited position of **Associate Scientist, Cowpea Molecular Breeder**.

The International Institute of Tropical Agriculture (IITA) is a not-for-profit institution that generates agricultural innovations to meet Africa's most pressing challenges of hunger, malnutrition, poverty, and natural resource degradation. Working with various partners across sub-Saharan Africa, we improve livelihoods, enhance food and nutrition security, increase employment, and preserve natural resource integrity. IITA is a member of CGIAR, a global agriculture research partnership for a food secure future. Please visit <http://www.iita.org/> for more information on IITA.

Cowpea is one of the six important African food crops on which IITA carries out research towards enhancing their productivity leading to increased availability to consumers and then income and food security. Several abiotic and biotic stresses still depress the yield of cowpea in sub-Saharan African farmers' fields. Genetic improvement through exploiting the diversity existing in the more than 15,000 germplasm lines maintained by the Institute has the potential to ameliorate the adverse effects of many of these yield limiting factors.

### **Position Responsibilities:**

The Associate Scientist – Cowpea Molecular Breeder will contribute to the activities of the project titled “**Accelerated Varietal Improvement and Seed Delivery of Legumes and Cereals in Africa (AVISA)**” under direct supervision of the Project Leader. More specifically, he/she will:

- Contribute to genomic resource development and deployment for cowpea genetic improvement.
- Participate in molecular breeding and genetic analyses, including genome mapping, QTL detection/mapping and validation, whole genome prediction and field experimentation.
- Identify key variations for traits of interest in collaboration with key scientists (entomologist, pathologist etc.).
- Implement the development of improved cowpea cultivars and populations for grain and/or fodder uses in the sub-region through the use of adapted and introduced germplasm, and in collaboration with the Senior Cowpea Breeder.
- Conduct quality research on the genetics of key traits including resistance/tolerance to biotic and abiotic stresses.
- Collaborate with advanced research labs in the areas of gene/marker discovery and trait capture techniques with the aim of deploying comparative and functional genomics approaches to enhance the efficiency and effectiveness of cowpea breeding.
- Develop strategies to translate information from sequencing and genotyping systems and the corresponding data management and analytical methods to enhance cowpea improvement.
- Supervise field technicians, and postgraduate students.
- Assist the Project Leader in implementing key activities in the project target countries.
- Contribute to resource mobilization and strengthening of NARS partners' capacity in molecular breeding.

### **Educational Qualifications:**

The candidate should have a PhD degree in plant genetics, molecular genetics, plant breeding, or related field.

### **Core Competencies:**

- Experience (at least 2 years post-PhD) in conducting molecular and field breeding activities.
- Knowledge of Marker-assisted Breeding (MABC, MARS), plant genetics, genomics, and bioinformatics.

- Experience with project implementation and monitoring.
- Good publishing skills in internationally recognized scientific journals.
- Ability to work harmoniously as a member of a multi-disciplinary team in a cross-cultural environment.
- Excellent communication and interpersonal skills.
- Information management skills and competence in computer software used to manage the breeding program, establish tests and analyze results.
- Excellent spoken and written English; ability to communicate in French is important.

**Duty station:** Kano, Nigeria

**General information:** The contract will be for an initial period of three years. IITA offers an internationally competitive remuneration package paid in US Dollars.

**Applications:** Applications must include covering letter which should address how the candidate's background/experience relates to the specific duties of the position applied for, curriculum vitae, names and addresses of three professional referees (which **must** include either the Head of the applicant's current or previous organization or applicant's direct Supervisor/Superior at his/her present or former place of work). The application should be addressed to the Head of Human Resources. Please complete our online application form using this link: <http://www.iita.org/careers>.

**Closing Date:** 28<sup>th</sup> February 2019

**IITA is an equal opportunity employer and particularly welcomes applications from women candidates.**

*Please note that only shortlisted candidates will be contacted.*