



Postdoctoral Fellow, Integrated Soil Fertility Management Scientist (Ref: DDG-R4D/PDF/ISFM/S/01/18)

Background: The International Institute of Tropical Agriculture (IITA) invites applications for the internationally recruited position of **Postdoctoral Fellow, Integrated Soil Fertility Management Scientist**.

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.

Project

CocoaSoils aims to build the knowledge base for sustainable intensification of cocoa production through a large public-private partnership that spans all cocoa growing regions of the tropics. Enhancing cocoa productivity and nutrient use efficiency requires a deeper understanding of the nutrient requirements of the cocoa tree and the roles and physiological responses to different nutrients. Integrated Soil Fertility Management (ISFM) recommendations will be developed based on medium- and long-term data from carefully planned and consistently managed nutrient response trials following agreed protocols and resource commitments. Specific ISFM and other productivity-enhancing recommendations will be delivered towards the sustainable intensification of cocoa production. CocoaSoils will be implemented through public-private partnerships with leading partners IITA and WUR in collaboration with CIAT, ICRAF, UNEP-WCMC, NARS (including CNRA, CRIG, CRIN, IRAD, and Universities), cocoa authorities, fertilizer industry partners, cocoa industry partners and IDH. A global network of long-term cocoa fertilizer trials across different environments and systems will be established by companies participating in the CocoaSoils consortium. The main objective of these trials is to collectively design and adopt fertilizer recommendations for cocoa growers, guidelines for recycling of cocoa husks, as well as guidelines to manage the risk of spreading diseases; and to develop a database on the efficacy and availability of organic resources.

Position Responsibilities

The postdoctoral fellow will undertake the following activities in Cameroon, Ivory Coast, Ghana and Nigeria:

- Establish a robust research design for the implementation, monitoring and dissemination of activities on nutrient recycling within cocoa plantations and the (re-)use of locally available (organic) nutrient sources
- Develop improved management practices including aspects of tree pruning, crop sanitation and nutrient management that will help reduce increased risk of disease and pest incidence as a result of recycling of cocoa husks and other organic residues in cocoa plantations
- Develop research activities on Core and Satellite trials, focusing on targeted fertilizer applications complemented by organic resources.
- Develop methodologies for the measurements of plant growth analysis (partitioning within the tree, tree growth, girth, leaf area index, flowering, pod set, pod yield, bean weight) and pest and disease incidence.

- Supervise activities of PhD and MSC students who are involved in the project in areas such as research design, field work and data analysis in a research for development context.
- Provide support for project management and be prepared for longer periods of field work in the project countries.

Educational Qualifications

The candidate should have a finalised PhD in Plant Sciences or related fields in agriculture.

Core Competencies

- Applied knowledge, and experience in food and agricultural sciences.
- Big data collection based on principles of Crowdsourcing and Citizen Science (ODK).
- Proven analytical, quantitative and qualitative research skills.
- Affinity with modeling and knowledge/field experience in cocoa are an advantage.
- Ability to work independently and in a team; pro-active attitude; good communication skills; ability to deal with high a work load; and capacity to work under challenging (field) conditions.
- Proven track record of scientific publications in high quality scientific journals.
- Proactive, innovative and independent problem solver, and excellent team player.
- Supervision of junior research team (research assistants, MSc-students, co-supervise PhD researchers).
- Experience in implementation, monitoring and reporting of research for development projects.
- Excellent communication skills, able to interact with a multi-cultural and interdisciplinary team of scientists and development partners in layman language.

Duty Station: Abidjan, Côte D'Ivoire.

General information: The contract will be for an initial period of two 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, Human Resources Service. Please complete our online application form using this link: <http://www.iita.org/careers>

Closing Date: 2nd March 2018

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

Please note that only shortlisted candidates will be contacted.