

Candidate Brief

PhD Researcher
Entomology
CABI West Africa Centre

March 2015



CABI BACKGROUND

CABI (www.cabi.org) is a not-for-profit development-led organization supported by a solid scientific research base and a world class publishing service. Our mission is to improve people's lives worldwide by providing information and applying scientific expertise to solve problems in agriculture and the environment. Our work increases food security and protects biodiversity.

We have over 450 staff based in 16 countries. We have offices in Brazil, China, India, Kenya, Malaysia, Pakistan, Switzerland, Trinidad & Tobago, the UK and the USA.

CABI is an intergovernmental organization that can trace its origins back to 1910. Our mission and direction are influenced by government representatives from our 46 member countries who help guide the activities we undertake. These include scientific publishing, development projects and research, and microbial services. We are also leading a major new initiative, Plantwise, which aims to improve food security and the lives of the rural poor by reducing crop losses.

Publishing

We produce key scientific publications, including CAB Abstracts – the world-leading database covering agriculture and environment and Global Health - the definitive bibliographic database for public health information. We also publish multimedia compendia, books, ebooks and full text electronic resources aiming to further science and its application to real life. Behind each of our products is a team of subject specialists committed to delivering the most relevant and authoritative information to researchers worldwide.

Development projects and research

Our staff research and find solutions to agricultural and environmental problems. We use science, information and communication tools to help solve issues of global concern. Our work is arranged around four core themes:

- Commodities we work to enable smallholder commodity farmers to compete in global markets. We diagnose and control plant pests and diseases, and help farmers get a better price for their crops. We work on crops such as coffee, cocoa, wheat, rice and cotton.
- Invasive species we are helping to reduce the spread and impact of invasive weeds such as Japanese Knotweed, water hyacinth and insects such as coffee berry borer and cocoa pod borer. We also advise countries at a policy level about agriculture, trade and the environment.
- Knowledge for development we work with farmers, extension workers, researchers and governments to deliver agricultural knowledge and develop communication strategies and systems.
- **Knowledge management** we use information and communication technologies to provide farmers, researchers and policy makers with the information they need to make informed decisions and to lift people out of poverty.

Microbial services

We manage one of the world's largest genetic resource collections, the UK's National Collection of Fungus Cultures. We conduct microbiological identifications, provide cultures for sale, and offer preservation and consultancy services. We are also screening our collection, looking for natural products such as antibiotics, vitamins and enzymes.

Plantwise

Plantwise aims to increase food security by providing knowledge. It helps poor farmers in developing countries improve their livelihoods by losing less of what they grow to plant health problems. This will be achieved through expansion of the plant clinic network which CABI has already begun to establish, supported by the creation of a global knowledge bank of information on plant health, pests and diseases. Plantwise will be a global programme, comprising an integrated set of projects and activities. www.plantwise.org



THE ROLE

Job title: PhD Researcher in Entomology, West Africa Centre

(3 year initial contract with possibility of extension)

Salary range: Negotiable but commensurate with skills, abilities and experience

Grade: HAY Band 2

Reporting to: Regional Co-ordinator, West Africa Centre

Direct reports: Technicians and MSc. Students

Key peer group: Plantwise Country Co-ordinator; Office Manager

Location: West Africa Centre, Ghana, CSIR Campus

Purpose of the role

The incumbent will carry out a wide variety of research related to insect production technologies, and build understanding of the social context as part of the project on **Sustainable use of insects** to improve livestock production and food security in smallholder farms in West Africa to be referred to by its short title Insects as Feed in West Africa (IFWA). The research work will lead to meeting the requirements for the award of a PhD at one of the Ghanaian Universities by the successful candidate

Key Accountabilities

- Conduct comprehensive literature search and review in the production of insect larvae, insect anatomy and biochemistry as well as the use of insects a protein source in animal feed.
- Design and manage field and laboratory trials in the subject area leading to:
 - Development of efficient & locally adapted fly larvae production systems
 - Optimised methods for production & use of termites as animal feed
 - Nutritive value & feed quality of insects evaluated
 - Safety and environmental sustainability of production methods assessed
 - Economic viability of insect production assessed at farm level and in small-scale enterprises
 - Understanding and engagement with local communities, and social impact assessment
 - Validated technologies disseminated to stakeholder community
- Planning and organization of meetings, workshops and conferences
- Ensure safe keeping of project assets and maintenance of an updated asset log
- Complete the requirements for the award of PhD degree at a Ghanaian University in 40 months.



CANDIDATE PROFILE

- Intuitive with strong organisation and analytical skills
- Meticulous and good attention to details
- Proven skills in the design, implementation and write up of academic experimentation with an MPhil in a related area of study.
- Knowledge of methods in both natural and social sciences to support research work in insect ecology and of statistical methods for data analysis.
- Excellent spoken and written skills in English; French will be an advantage,
- Team player with experience in multi-cultural teams
- Self-starter, capable of working with minimal supervision
- Masters Degree in Entomological studies is desirable; Undergraduate degree in Agriculture, Natural Resource Management, Biological Sciences or related studies
- Relevant practical experience, minimum of 2 years' experience in research design and implementation
- Proven experience in writing and editing technical and official documents
- Good working knowledge of standard internet applications and ability to learn and keep up to date with advancing information technologies
- Excellent interpersonal skills with ability to develop and maintain constructive and cooperative working relationships with others and maintain positive attitude

NOTE

This job description is not intended to be exhaustive. It is expected that the post holder and CABI will adopt a flexible attitude and accept that the duties may have to be varied according to circumstances, in particular changing corporate requirements and individual development needs.



EQUAL OPPORTUNITIES

CABI is an equal opportunities employer and welcomes applications from candidates irrespective of age, gender, race, colour, nationality, ethnic or national origin, disability, religion, sexual orientation or marital status. No applicant will be disadvantaged by conditions which cannot be shown to be justified and selection will be based on merit.

By taking the <u>CABI Equal Opportunities Survey</u> you will be helping us to follow best practice recommendations that employers should monitor selection decisions to assess whether equality of opportunity is being achieved. Please follow the link to take the survey.

(If the link does not work please cut and paste the following URL into your web browser http://www.surveymonkey.com/s/CABI_Equal_Opportunities_Survey)

The information in the survey will be treated as confidential and used for statistical purposes only, forming no part of the selection process. This information will be received separately from your application.

HOW TO APPLY

To apply please send the following to **recruitment@cabi.org** quoting Job Reference 27/2015 and state where you saw this advertisement:-

- 1. A covering letter describing in full how you meet the candidate profile, and to include synopses of previous research work conducted;
- 2. A full Curriculum Vitae;
- 3. The names and contact details of three referees, at least one of whom must have supervised your research work referees will not be contacted without your prior permission.

Please note closing date for receipt of applications is Midnight BST 10th April 2015