

## **Call for application: PhD fellowship on Feasibility Study for Biological Control of Fall Armyworm (FAW)**

The Norwegian Institute of Bioeconomy Research<sup>1</sup> (NIBIO) has an opening for a PhD fellowship within the Division of Biotechnology and Plant Health, on Feasibility Study for Biological Control of Fall Armyworm (FAW). The fellowship is in collaboration with the International Institute of Tropical Agriculture (IITA), the Norwegian University of Life Sciences (NMBU), and the National University of Agriculture (UNA-Benin). The PhD-student will be enrolled at NMBU in Ås, Norway, and receive supervision from NIBIO, NMBU, IITA and UNA. Field- and lab-work will be conducted in Benin.

### **Background**

The noctuid *Spodoptera frugiperda*, commonly known as fall armyworm (FAW), has recently become a new invasive species on the African continent. It is already having severe impacts on a wide range of graminaceous plants including important crops and particularly on maize. In West and Central Africa, outbreaks were recorded for the first time in early 2016. Introduction pathways and period are not certain, but DNA-analyses demonstrate that there is likely to have been more than one introduction. Whereas the pest continues to spread on the African continent it already exacerbates food insecurity and jeopardizes the economies of 29 invaded countries thereby affecting millions of vulnerable communities relying on maize both as subsistence crop as well as a source of household income. In Benin, the government has established a task force of national and international experts to combat FAW and reduce its impact on agriculture. Therefore, an alliance including UNA, NIBIO, IITA and NMBU has been formed to contribute to the Government of Benin's efforts to mitigate the impact of FAW. Thereby, NIBIO will provide funds to a highly qualified PhD candidate from Benin for four years, with the specific aim of increasing insights on the invasive nature of FAW, its amenability to biological control, and also to increase collaboration in West Africa particularly with UNA and IITA (Benin). The program is expected to generate reliable data towards assessing and modeling yield losses due to FAW. The diversity and host range of local natural enemies will also be examined along with host selection of exotic parasitoids using chemical ecology and molecular biology tools.

### **Training conditions**

The successful candidate will be affiliated to the Norwegian University of Life Sciences (NMBU). He/she will work on the biological control of FAW and adaptation of FAW to the climate and agroecology in West-Africa. He/she will conduct field- and lab-work in Benin and will partly be based at IITA-Benin and partly at NIBIO/NMBU. He/she will take courses at NMBU according to PhD regulations at the University. The PhD-student will work under a supervisory team from NMBU, UNA, NIBIO and IITA.

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<sup>1</sup> The Norwegian Institute of Bioeconomy Research (NIBIO) was established 1 July 2015 and is one of Norway's largest research institutes. NIBIO's activities lie within agriculture, food, climate and the environment. The Institute conducts research and management support, and provides knowledge for use in national preparedness, governmental and district management, industry, and the society at large. NIBIO has approximately 700 employees present in all parts of the country. Its main office is located at Ås in Akershus. NIBIO is owned by the Ministry of Agriculture and Food.

## Eligibility

The candidate must:

- be holder of a Master of Science (M.Sc.) or other equivalent master degree in agricultural entomology, with a good molecular biology background
- have good oral and writing communication skills in English
- have a very good understanding of biological control of insect pests
- have the ability to work efficiently and deliver reliable scientific data with minimum supervision.
- Experience in conducting research in laboratory and field will be an additional advantage.

## Application

For more information, please contact **Dr. Georg Goergen** (E-mail: [G.Goergen@cgiar.org](mailto:G.Goergen@cgiar.org); Telephone: +229 97397747). Potential candidates are invited to submit an application electronically to Dr. Georg Goergen, with only ONE pdf file attachment combining a:

- ✓ CV including names and contacts of three professional references
- ✓ Certificate of Master of Science or equivalent in agricultural entomology, including grade transcripts
- ✓ Letter of motivation written in English.

The application deadline is September 15, 2017.

Only short listed applicants will be contacted and interviewed.