PhD position on faba bean pest biocontrol – available immediately

The research project aims to contribute to the development of fava bean seeds for human food. This involves the implementation of alternative solutions to deal with infestations by *Bruchus rufimanus* Boheman 1833. The tools available to farmers to deal with this endophytic pest are very limited. Indeed, the effectiveness of conventional treatments has proven to be obsolete and new alternatives must be proposed to allow quality standards in the human food industry. Several control approaches are developed in order to implement innovative agronomic ways to deal with the bean pest: (i) the selection of most adapted varieties, (ii) the use of semiochemical releasers, (iii) the development of bio-pesticides based on entomopathogenic fungi.

The candidate will integrate the current project and ensure the continuity of the research undertaken within the different levels. Different activities will be carried out in the laboratory and in the fields, including:

- The evaluation of different associations of kairomones and entomopathogenic fungi on the behavior and survival of *B. rufimanus* and associated entomophagous beneficials;
- The analysis of data’s obtained during field trials aiming at evaluating the varietal effects and different methods of application of plant protection products on *B. rufimanus* infestation rates;
- The extraction and analysis of non-volatile organic compounds associated with bruchid egg laying in order to identify potential repellents;
- The implementation and monitoring of field research activities;
- The writing of scientific reports and papers promoting the research results.

**Job profile for a PhD position**

- You have a master’s degree in Bioscience Engineering, biology or equivalent;
- You have outstanding academic study performances;
- You have a strong interest in entomology, plant protection and biological control;
- Excellent English writing and communication skills are mandatory;
- You want to work in a multi-disciplinary, international and intellectually challenging environment in Gembloux campus;
- You are solution oriented, flexible, responsible and able to work independently as well as in team.

**How to apply**

Please submit a cover letter in which you specify why you are interested in the position and why you consider yourself a suitable candidate (one page max), a full CV, a full transcript of records to date (degrees and grade list) and a list of contact persons (with name, e-mail, address, phone number) for letters of reference to Professor Frédéric Francis at frederic.francis@uliege.be