LIÈGE université
Gembloux
Agro-Bio Tech

PhD Fellowship Offer in Crop Phenotyping

Research context

This PhD project contributes to a collaborative research program in a context of food security. The program aims at characterising the growth dynamics of varieties of winter wheat resistant to different biotic and abiotic stress by means of a proximal multimodal phenotyping system. The objective is to develop a platform for crop phenotyping in variety trial fields by combining data obtained from different types of sensors and cameras.

PhD project

In the frame of this collaborative program, we are looking for a PhD candidate to link plant morphology and physiology under different stress in natural conditions with images acquired by combined technologies (spectroscopy, multispectral vision …). The measurement of morphological and physiological traits and their time evolution during the whole growing season will be related to the health status at the scale of leaves and ears as well as the resistance to lodging by using machine learning techniques. The candidate will be involved in different tasks of sensing system design, experiment design, in-field data collection, data treatment and scientific communication.

Profile

The ideal candidate will be expected to work with a dynamic team of sensing scientists, crop scientists, computer programmers, and technicians in mechatronics. The successful candidate will be motivated, have excellent writing skills, and work well within a collaborative research environment. The candidate must have a Master degree in bioengineering or equivalent with a large interest for technology and plant physiology. Experience in working with complex datasets and computer programming skills are highly preferred.

Conditions

The PhD fellowship is available immediately for 2 years, with the potential for renewal in order to pursue a 4-year PhD project. The grant is funded by the Walloon Public Service of Belgium. The working language can be French or English. The main workplace is in Gembloux, Belgium.

Contact

For more information contact Prof. B. Mercatoris (benoit.mercatoris@uliege.be). Application including cover letter and curriculum vitae can be sent to B. Mercatoris before 15 February 2019.