



M2 Internship Agroscope

Position

Master student internship

Introduction

Developing practices that could contribute to a reduction in the use of pesticides and fertilizer is one of the priorities of Swiss public research in agronomy. In this context, Agroscope started the ICARO project (Identification of Constraints and Assets of frost-sensitive intercrop with Rapeseed in Organic and conventional production systems) in 2018 with the support of private companies UFA Samen, Nutriswiss and Florin and the scientific collaboration of ESA of Angers and INRA. This project aims to better understand the ecosystem services provided by frost sensitive companions plants (CPs) associated with oilseed rape (OSR).

One of the main ecosystem services provided by CPs is a better competition against weeds during the early growth stages of OSR. This will depend on the growing conditions during autumn, and on the choice of species used as CPs. Technologies such as images analysis will help to have a quick and non-destructive method to estimate soil cover dynamic and biomass indicators.

Your mission

You will contribute to the development of methods of image analysis, adapted to the evaluation of crop mixtures. You will quantify traits and responses of OSR and CPs, and use these data to assess the performances of various CP mixtures in a various environments and years.

Your main tasks will be :

- Image analysis to evaluate soil cover dynamic and other indicators
- Field measurements and sampling
- Data analysis

Key words: Phenotyping, intercropping, agroecology and weed competition

Your profile

- MSc student in Agronomy, Environmental Sciences or Biology
- Ability to work in an English and/or French speaking environment
- Interest for agronomy and research
- Curiosity, accuracy
- Interest in new technology for applied research
- Excel, R

Informations about Agroscope

Agroscope is an innovative research institute for agriculture and nutrition run according to the principles of New Public Management. Agroscope is part of the federal administration and is attached to the Federal Department of Economic Affairs, Education and Research EAER. It has research stations at a number of sites around Switzerland. The variety and crop management group is based in Nyon, in the Lemman Lake area.

We offer a stimulating work environment in a multidisciplinary research team as well as a close support throughout the project. Agroscope has excellent research facilities with well-equipped laboratories, greenhouses, climate chambers and sites for field experiments and field studies. You will profit from flexible working time.

This work will be under the supervision of Juan Herrera (Dr, in charge of digitalization project for Agroscope) and Xavier Bousselin (PhD Student)

Housing can be provided.



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| Place of work | 1260 Nyon (Changins) VD |
| Employment level | 100 % |
| Duration | 4 - 6 months |
| Start | January/February 2020 or as agreed |

Contact

If this challenge appeals to you and you meet the required profile, we look forward to receiving your e-mail application, in English or French to Xavier Busselin (xavier.busselin@agroscope.admin.ch , +41 58 467 61 07).

For further information, please feel free to contact Xavier Busselin.