

# PhD Student in Agroecology and Plant-Microbe Interactions (100%)

Entry in spring 2020

The Physiological Plant Ecology group (Prof. Dr. Ansgar Kahmen) of the Department of Environmental Sciences has an open position within a project funded by the Swiss National Science Foundation (SNF). We seek to establish "bioirrigation" in millet - legume intercropping systems as a new and cost effective tool to stabilize and increase millet yields of small holder farmers in dryland agriculture. Bioirrigation will be achieved by deep rooted legumes that redistribute water from deep soil layers to shallow and dry soil layers, from where it is transferred to shallow rooted millets via a common mycorrhizal network.

### Your assignments

The candidate will perform experiments with arbuscular mycorrhizal fungi in different legume – millet intercropping systems under controlled conditions in the greenhouse at the University of Basel and at the International Crops Research Institute of the Semi-Arid Tropics (ICRSAT) in Hyderabad, India. The goal of these experiments is to test the significance of a common mycorrhizal network for bioirrigation. The candidate is expected to participate for several weeks in field trials at the ICRISAT campus in India.

#### Your profile

We are looking for a dynamic, reliable and motivated student with a M.Sc./Diploma in biology, agriculture or related disciplines. Strong interest in microbial ecology, process-oriented research in physiological plant ecology and hands-on experiences with field work in tropical countries are required. Teamwork within the group and project partners requires spoken and written English language skills.

#### We offer you

The position will be based at the Physiological Plant Ecology group at the University of Basel (Prof. Dr. Ansgar Kahmen). We offer an interesting position in an international, interdisciplinary research environment at the University of Basel. The successful candidate will also have the opportunity to collaborate with partner institution in India (MSSRF (Chennai), ICRISAT (Hyderabad)). The position will be for 4 years, starting in the spring of 2020. Salary and social benefits are provided according to University of Basel rules.

## **Application / Contact**

We accept only online applications, use the link below to access the online application form. Please submit a letter of motivation, a CV, a documentation of academic degree and contact information of three potential referees. Application deadline is December 13th 2019. Further information can be obtained from Prof. Dr. Ansgar Kahmen (ansgar.kahmen@unibas.ch).

#### www.unibas.ch