

PhD in Plant Volatile Interactions

Background: Plants can perceive and respond to volatiles emitted from stressed neighbors. Yet, if and how stress volatiles influence groups of plants is largely unknown. Our group takes an interdisciplinary approach to fill this gap of knowledge and study how population level volatile dynamics modulate plant-herbivore interactions. The current PhD project aims at developing a next-generation volatile screening platform to characterize volatile dynamics across groups of maize plants and to combine it with molecular manipulation and phytochemical analysis to elucidate the significance of volatile-mediated interactions between plants at the field scale.

We look for an enthusiastic and ambitious PhD student with a strong interest in plant environment interactions. Applicants should have a firm background in one or more of the following fields: molecular biology, biochemistry, plant physiology, analytical chemistry, entomology, and ecology. All our projects are highly integrative and require a willingness to embrace multiple biological disciplines. Fluency in English is a prerequisite for this position. A MSc Degree or Diploma with competitive grades is required.

We offer an inspiring and dynamic research environment, including state-of-the art research facilities, extensive supervision, and an exciting project of considerable fundamental and applied relevance. Specific project tasks can be tailored to the interests and training priorities of the student. The Institute of Plant Sciences is located at the shore of the river Aare, close to the vibrant city center of Bern. PhD students are paid according to University standard rates and have the possibility to join the graduate programs in Molecular Life Sciences or Ecology and Evolution. More information about our current activities can be found here: https://www.ips.unibe.ch/research/interactions/index_eng.html.

How to apply: Send a *single* pdf including i) a letter of motivation, ii) a detailed CV, iii) copies of University grades, and iv) the names and addresses of two referees to matthias.erb@unibe.ch. The position is available from January 2024 and open until filled.