

# PhD in Plant-Herbivore Interactions

Erb Laboratory, Institute of Plant Sciences

University of Bern, Switzerland

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**Application Deadline:** Position open until filled

**Start date:** Flexible

**Website:** <http://www.ips.unibe.ch/content/interactions/>

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## Qualifications

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We look for an enthusiastic PhD student with strong interests in plant-herbivore interactions. Applicants should have a firm background in one of the following fields: Molecular biology, biochemistry, plant physiology, analytical chemistry, entomology, ecology. All our projects are highly integrative and require willingness to embrace multiple disciplines within the domain of plant-environment interactions. Excellent University grades at the MSc. level are expected. Fluent spoken and written English are prerequisites for this position.

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## Description

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Herbivores and their natural enemies have a profound impact on plant growth and yield. A major aim in plant biology is, therefore, to understand the factors that influence herbivore damage and predation by higher trophic levels in order to improve ecosystem management and pest control strategies. This project investigates the dynamics of plant herbivore natural enemy interactions in the rhizosphere, with a focus on plant toxins and climate change. The successful candidate will work on the interaction between maize, its most important herbivore pest *Diabrotica virgifera* and entomopathogenic nematodes as promising biocontrol agents. Using analytical, molecular and ecological approaches, he/she will investigate how plant secondary metabolites influence the interaction, and how soil abiotic factors that are likely to be altered by climate change affect the different players of the system. The PhD project is closely associated with the Oeschger Centre for Climate Change Research (OCCR), a world-leading institution in climate science.

We offer an inspiring research environment, including state-of-the art research facilities, intensive supervision and an exciting project of considerable fundamental and applied relevance. The institute of Plant Sciences is located at the shore of the river Aare, close to the vibrant centre of the city of Bern. The PhD student is paid according to University standard rates and will benefit from the courses offered by the Graduate School of the OCCR ([www.climatestudies.unibe.ch/graduate](http://www.climatestudies.unibe.ch/graduate)).

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## Application

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Send a single pdf including a letter of motivation, a CV with University grades and the names and addresses of two referees to [matthias.erb@ips.unibe.ch](mailto:matthias.erb@ips.unibe.ch). The position is available immediately and will remain open until filled.

Submit applications and further questions to:

**Contact:** Prof. Matthias Erb, Institute of Plant Sciences, University of Bern, Altenbergrain 21, 3013 Bern, Tel. +41 31 631 86 68, [matthias.erb@ips.unibe.ch](mailto:matthias.erb@ips.unibe.ch).