

2 PhD positions: **Unravelling Plant-Insect Communication for Sustainable Agroecosystems**

(Earliest starting date: 1st March 2025)

We are inviting applications for two PhD positions on studying chemical communication between plants and insects in agricultural ecological communities by combining both empirical and theoretical work. The 4-year PhD positions are fully funded at Prof. Pengjuan Zu's group at the University of Neuchâtel, Switzerland.

Job description

Agroecosystems, crucial for global food security, often undermine biodiversity and ecosystem stability. As climate change and environmental uncertainties escalate, the importance of sustainable agriculture has never been more critical. This innovative project addresses these challenges by studying how plant-insect communication can enhance ecosystem resilience while maintaining high productivity in organic polyculture farming systems. The project comprises both empirical studies and theoretical work. You will get involved in developing the project and are encouraged to branch out your side projects.

Your profile

We are looking for highly motivated PhD candidates who enjoy working on a cutting-edge and interdisciplinary project that involves chemical ecology and evolution, network ecology and information theory. Candidates should have a Master's degree (or equivalent) in ecology, evolutionary biology, chemical ecology, mathematics or a related field, and enjoy working both in field sites to collect empirical data and on computers to build mathematical models. Skills in plant metabolite analysis and and/or programming (e.g., in R, Python) are a plus. You are expected to have good communication and writing skills (fluent spoken and written English) and can work independently and also interactively with international collaborators and students.

Interested?

Applicants should submit **a single pdf file** to jobs@information-ecology.com containing:

- a 1-page **letter of motivation** detailing previous research experience and relevant skills in field, lab and/or theoretical work,
- a **CV** including publications, and
- the names, and contact information of **two academic referees**.

Please reference **PHD_SusAgr_UniNE** in the subject line.

We strongly encourage applicants to send their application **as soon as possible**. The evaluation of applications will start **December 1st, 2024** and will continue until the position is filled.

For any questions, please contact **Prof. Pengjuan Zu**, email [Pengjuan.zu@gmail.com].

For further information on the PI and research group, please visit our homepages:

<https://informationecology.github.io/research/>