

The mission of the Leibniz Centre for Agricultural Landscape Research (ZALF) as a nationally and internationally active research institute is to deliver solutions for an ecologically, economically and socially sustainable agriculture – together with society. ZALF is a member of the Leibniz Association and is located in Müncheberg (approx. 35 minutes by regional train from Berlin-Lichtenberg). It also maintains a research station with further locations in Dedelow and Paulinenaue.

The working groups “Fungal Interactions” and “Provisioning of Biodiversity in Agricultural Systems” are seeking for a motivated **Master Student (f/m/d)** for the interdisciplinary

Master Thesis (Masterarbeit)

“Kettle holes affect the insect-mediated dispersal of plant-pathogens”

Background

Phytopathogenic fungi like *Fusarium* and *Alternaria* cause immense economic losses in crop production worldwide and pose a human health risk. Semi-natural habitats, like kettle holes, could be a source habitat for phytopathogenic fungi but are also relevant hotspots for arthropods that disperse into adjacent crop fields. Previous studies showed frequent transportation of *Fusarium* and *Alternaria* fungi by the ground-dwelling carabid beetles.

Therefore, we seek to better understand the role of carabids as dispersal mechanisms for phytopathogenic fungi and the role of semi-natural habitats.



What can you expect?

You will quantify fungal DNA from samples of different carabid species that were collected at semi-natural habitats in different crop fields and are already determined to species level. You will develop your own hypothesis and analyze the data to find patterns explaining the distribution of the fungal load and identify the role of the semi-natural habitats for the dispersal of the fungi.

You can also compare the different carabid species and identify traits affecting the fungal load of the beetles. The laboratory work will be conducted at the ZALF institute in **Müncheberg**.

Your qualifications:

- Bachelor degree and Master studies in nature science
- Highly motivated
- Able to work independently
- Some statistical skills
- Some experience in laboratory work



We offer:

- Supervision and guidance the entire time, especially during laboratory work
- An overview of carabid taxonomy, collecting methods and fungal morphology and taxonomy, if desired
- A flexible workplace for the analytical and writing part
- Supervision meetings in Berlin

Women are particularly encouraged to apply. Applications from severely disabled persons with equal qualifications are favored. Please send your application preferably by e-mail with the usual documents until **10 January 2022** to: nadja.heitmann@zalf.de.

If you have any questions, please do not hesitate to contact us:

Nadja Heitmann, nadja.heitmann@zalf.de .

Marina Müller, mmueller@zalf.de.

We look forward to receiving your application!

For cost reasons, application documents or extensive publications can only be returned if an adequately stamped envelope is attached. If you apply, we collect and process your personal data in accordance with Articles 5 and 6 of the EU GDPR only for the processing of your application and for purposes that result from possible future employment with the ZALF. Your data will be deleted after six months.

You can find further information at: www.zalf.de/en/ueber_uns/Pages/Datenschutzerklaerung.aspx