

Faculty of Agricultural Sciences Department of Crop Sciences

We are hiring



At the University of Göttingen -Public Law Foundation-, DNPW - Abt. Agrarentomologie, there is a position as

PhD-student (all genders welcome) Entgeltgruppe 13 TV-L/65%

to be filled. Starting date is 4/1/2026. The position is limited to 03/31/2030.

Employment is subject to the final approval of project funding.

Topic: "Influence of single & dual abiotic stress on plant volatile emission, attraction of stem borer females & their parasitoids"

The candidate (m, w, d) will contribute to the DFG Research Unit "MultiStress" by experimentally assessing single and combined effects of drought, nitrogen deficiency and insect infestation on maize volatile emission, attraction of stem borer pests (*Ostrinia nubilalis*, *Busseola fusca*) and their natural enemies.

The DFG Research Unit "MultiStress - Concurrent multiple abiotic and biotic stress interactions in maize: impacts and mechanisms" (RU 6101, pending final approval on 11 December 2025) investigates how maize responds to multiple, interacting abiotic (e.g., drought, nitrogen deficit) and biotic (e.g., stem borer) stress factors. Through an integrated experimental–modelling approach with different maize cultivars, the project aims to improve our understanding and prediction of crop performance under complex stress environments. Parallel field experiments using rainout shelters will be conducted in Germany and Kenia and it will be your task to collect volatiles and assess stem borer infestation and parasitization rates in these experiments. Field data will be combined with behavioral trials and volatile collections under controlled laboratory conditions. Repeated research stays in Kenya will offer you valuable international experience within a globally relevant research context.

MultiStress brings together the expertise of several crop science departments in an interdisciplinary collaboration. You will work within an engaged, international team on scientifically and societally relevant questions to improve the stress resistance of maize – at the interface of plant physiology, entomology, and sustainable agriculture.

Main Tasks

- Working on multitrophic interactions between maize, stem borers and their parasitoids
- Managing inoculation trials and volatile collections in the field, greenhouse and climate chambers in Germany and Kenya
- · Monitoring natural stem borer infestation in the field
- Conducting behavioral assays with pests and parasitoids



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- Identification of main stem borer parasitoids in Kenya and Germany based on morphological and/or genetic traits
- Establishing of parasitoid rearing from field collected individuals
- Publishing your research in international peer-reviewed journals

Required Qualifications:

- Master's degree in agriculture, biology, or a similar field.
- Experience in plant-insect biology and chemical ecology
- Very good scientific writing skills in English
- Experience with statistic programs, preferably R

Preferred Experiences and Skills:

- Volatile collection and analysis (GC-MS)
- Behavioral assays with insects
- Proficiency in data analysis (anova, glm, glmm in R)
- Experience with molecular methods or insect identification would be a plus
- Enjoys traveling between Kenya and Germany
- Self-motivated and well-organized
- Ability to work in a large, international team
- Valid driver's license

We offer:

- A dynamic, interdisciplinary, internationally leading and pioneering research environment within the DFG Research Unit MultiStress, which consists of research consortium of ten universities /research organisations from Germany, Kenya, Italy (+ CIMMYT), representing all important disciplines of crop science
- Excellent supervision and training opportunities in chemical ecology, entomology, data analysis & interpretation, and scientific communication.
- The possibility to work in an interdisciplinary and international team, consisting of 13 PhD-students and numerous senior scientists from different disciplines
- Join specific project thematic workshops on a range of topics (e.g. statistical analysis, modelling, molecular methods and hyperspectral imaging)
- Opportunities for unique international collaboration around maize and participation in international conferences
- a four-year PhD position (65% TV-L E13)

The University of Göttingen is an equal opportunities employer and places particular emphasis on fostering career opportunities for women. Qualified women are therefore strongly encouraged to apply in fields in which they are underrepresented. The university has committed itself to



being a family-friendly institution and supports their employees in balancing work and family life. The University is particularly committed to the professional participation of severely disabled employees and therefore welcomes applications from severely disabled people. In the case of equal qualifications, applications from people with severe disabilities will be given preference. A disability or equality is to be included in the application in order to protect the interests of the applicant.

Please upload your application in one pdf file including the usual documents until 1/26/2026 on the application portal of the university using this link: http://obp.uni-goettingen.de/de-de/OBF/Index/76203. For more information get in touch with Ilka Vosteen directly via E-Mail: ilka.vosteen@uni-goettingen.de.



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Please note:

With submission of your application, you accept the processing of your applicant data in terms of data-protection law. Further information on the legal basis and data usage is provided in the <u>Information General Data Protection Regulation (GDPR)</u>