



iDiv

German Centre for Integrative
Biodiversity Research (iDiv)
Halle-Jena-Leipzig

TreeDi



External Job Announcement
Reg.-Nr. 4-11526/23-D

Modern, interconnected, conscious of tradition: Martin Luther University Halle-Wittenberg (MLU) is the oldest and largest university in the State of Saxony-Anhalt with a history dating back more than 500 years. Today more than 20,000 students are enrolled at the university. MLU's core research areas are in the nanosciences and bio-sciences, the Enlightenment, as well as in social and cultural research. The university is also home to a range of small disciplines, some of which can be found nowhere else in Germany. The university has excellent national and international ties, and works closely together with leading research institutes, industry, and more than 250 universities around the world.

The Martin Luther University Halle-Wittenberg, in cooperation with the DFG-funded International Research Training Group GRK 2324 "TreeDi - Tree Diversity Interactions: The role of tree-tree interactions in local neighbourhoods in Chinese subtropical forests" (www.treedidi.de) and the German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig, invites applications for the following position, starting 01 June 2024, limited to 3 years:

Doctoral Researcher (m/f/d) on the project **"Bottom-up and top-down drivers of herbivory" (P4G-3)**

as part-time employment (65%).

The salary will be up to Entgeltgruppe 13 TV-L if the personal requirements and tasks are fulfilled.

The research topic:

Insect herbivores are important moderators of ecosystem structure and functioning. Recent work in the BEF-China project has shown that insect herbivory increases with increasing tree diversity in biodiverse subtropical forests. Local tree interactions might explain the observed community-level associations among herbivores, their enemies, and tree diversity, but are likely modified by the wider tree neighbourhood. However, the relative importance of potential bottom-up (plant-mediated) and top-down (enemy-mediated) mechanisms underlying such associational effects, and their scale-dependence, remain unclear. The aim of the project is (1) to jointly study causes and effects of insect herbivory by (2) analysing the functional composition of, and interactions among, herbivore communities, their natural enemies, and their host trees using (3) observational and experimental approaches based on taxonomic and molecular methods in the field and in the lab. The project is supervised by Prof. Dr. Andreas Schuldt (andreas.schuldt@forst.uni-goettingen.de; <https://www.uni-goettingen.de/en/588022.html>). The doctoral researcher will be integrated into the working group of Prof. Andreas Schuldt.

Tasks:

- Task 1: to estimate the leaf area damaged by insect herbivores and to study the effect of herbivory on tree productivity
- Task 2: to identify insect herbivores and their natural enemies to develop a functional characterization of key trophic interactions
- Task 3: to experimentally manipulate predator and herbivore communities (e.g. predator attraction, herbivore exclusion experiments).

The doctoral researcher will team up with the fellow on the Chinese side, who will study in parallel herbivore-parasitoid interactions and the phylogenetic framework of trophic interactions. Supervision and assistance will be provided by a Joint German-Chinese PhD Advisory Committee (PAC), combining empirical and theoretical expertise. All TreeDì fellows will have to submit their PhD thesis as a cumulative thesis, comprising at least three chapters in the form of first author papers in international peer-reviewed journals, of which at least one paper has to be accepted or published at the time of thesis submission. TreeDì fosters early experience in autonomous research, and thus, encourages to become engaged in synthesis, making use of available data from previous projects. Moreover, the work will also include scientific exchange with other working groups, participation in the TreeDì qualification programme, and presentations at international conferences.

Requirements:

- A completed scientific University degree (Diploma/ M.Sc.) in a project-related field (e.g. ecology, environmental sciences)
- Very good ecological knowledge and great interest with regard to forest biodiversity research
- Good quantitative and statistical skills in R are essential
- Experience in insect ecology and arthropod identification are advantageous
- Fluency in English (writing and speaking)
- A clear drive to do science
- Motivation to be a proactive team player in an international research consortium
- Flexibility and good organizational skills, hands-on mentality
- Applicants must be prepared to spend substantial time (approx. 2-4 months per year) in China for fieldwork, lab visits and courses
- Willingness to work under subtropical field conditions; Fieldwork experience would be advantageous

The Martin Luther University Halle-Wittenberg gives priority to applications from severely disabled candidates with equivalent qualifications. Women are particularly encouraged to apply. Applicants with a degree that was not obtained at a German higher education institution must submit a Statement of Comparability for Foreign Higher Education Qualifications from the Central Office for Foreign Education (Zentralstelle für ausländisches Bildungswesen) to prove equivalence. This Statement can also be submitted after successful completion of the hiring process.

Queries concerning the application process should be directed to Dr. Stefan Trogisch (stefan.trogisch@botanik.uni-halle.de), for project-related questions, please contact Prof. Andreas Schuldt (andreas.schuldt@forst.uni-goettingen.de).

Please submit your full application dossier in English with registration number 4-11526/23-D by 3 January 2024. Applications should be submitted on the website <https://apply.idiv.de>. Application portfolios submitted by post will not be returned, application costs will not be reimbursed. Selected candidates will be invited to a recruitment symposium taking place at iDiv in Leipzig on 4-5 March 2024.

All applications should include:

- Cover letter in English describing motivation for the project, research interests and relevant experience
- Complete curriculum vitae including names and contact details of at least two scientific references
- Digital copy of MA/BA/Diploma certificates

This announcement is subject to possible budgetary restrictions.

iDiv is committed to establishing and maintaining a diverse and inclusive community that collectively supports and implements our mission to do great science. We will welcome, recruit, develop, and advance talented staff from diverse genders and backgrounds.