



**iDiv**

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

**TreeDi**



**External Job Announcement**  
**Reg.-Nr. 4-15037/20-D**

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) invites applications for the following position, starting on 01 June 2021 and limited to 3 years:

## Doctoral Researcher (m/f/d) on the project "Bottom-up and top-down drivers of herbivory" (P4G-2)

65 percent of a full-time employment

The salary will be up to Entgeltgruppe 13 TV-L, if the personal requirements and tasks are fulfilled. Work place will be located at Georg-August-Universität Göttingen.

### 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 neighborhood. 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](mailto:andreas.schuldt@forst.uni-goettingen.de) (Georg-August-Universität Göttingen; [andreas.schuldt@forst.uni-goettingen.de](mailto:andreas.schuldt@forst.uni-goettingen.de))

### Tasks:

- Estimate the leaf area damaged by insect herbivores and to study the effect of herbivory on tree productivity
- Identify insect herbivores and their natural enemies to develop a functional characterization of key trophic interactions
- 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 TreeDi 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. TreeDi 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 the TreeDi qualification programme and presentations on international conferences.

**Requirements:**

- Master or equivalent degree in a project-related field (e. g. ecology, environmental sciences)
- Very good ecological knowledge and great interest in forest biodiversity research
- Good quantitative and statistical skills in R are essential
- Experience in insect ecology and arthropod identification (including molecular methods) is advantageous
- Fluent in English communication in writing and speaking. Knowledge of German and/or Chinese is an advantage
- A clear drive to do science
- Motivated to be a proactive team player in an international research consortium
- Flexible and well organized, 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. Field work 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.

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

**Submission deadline is 14 February 2021.** Selected candidates will be invited to the online joint recruitment symposium taking place in March 2021 (22-23 March 2021).

**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

Kindly send your application, quoting the reference number 4-15037/20-D, via our application portal at <https://apply.idiv.de>

While we prefer applications via this portal, hard-copy applications may also be sent to: *German Centre for Integrative Biodiversity Research – iDiv (Halle-Jena-Leipzig), HR Department, Puschstr. 4, 04103 Leipzig.*

The position is offered with reservation of possible budgetary restrictions. Application portfolios will not be returned, application costs will not be reimbursed.

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.