

External Job Advertisement Registration number 5-14443/20-D

The Martin Luther University Halle-Wittenberg, Faculty of Science I, Institute of Biology, Geobotany and Botanical Garden offers the following position:

Doctoral Researcher (m-f-d)

(starting date: 01 April 2021, limited to 3 years, 65 percent of a full-time employment, salary will be up to Entgeltgruppe 13 TV-L if the personal requirements and tasks are fulfilled, work place will be located at Martin Luther University Halle-Wittenberg, Halle (Saale), Germany)

The doctoral researcher will work within the international research project "Mechanisms underlying the success and impacts on biodiversity and ecosystem functioning of range-expanding species under climate change (Range X)", funded by the BiodivERsA COFUND Call on "Biodiversity and Climate Change" (BiodivClim).

Research topic:

The doctoral research project will focus on the impacts of range-expanding species on plant biodiversity. In close collaboration with the Mountain Invasion Research Network (MIREN, www.mountaininvasions.org) we will analyze vegetation survey data from almost 30 regions worldwide for effects of range-expanding plant species (non-natives, natives in regions with time-series data) on taxonomic, phylogenetic and functional components of biodiversity, encapsulating impacts on both the local richness (alpha-diversity) and turnover across sites (beta-diversity) of resident species. To our knowledge, this will be the first global effort to test biotic homogenization due to global warming across multiple scales (i.e. from plot to intercontinental) using on-the-ground plant community data.

Work tasks:

- Taxonomic, functional and phylogenetic analyses to test if range-expanding species lead to homogenization at different scales
- Data management
- A total of approx. 10-12 weeks of field work on Tenerife in April/May 2021 and 2022 for the collection of soil samples and climate data (2021), and to repeat the standardized MIREN vegetation survey (2022), which is a joint sampling effort of all RangeX and MIREN partners
- Writing and publishing scientific papers in international peer-reviewed journals
- Presenting results at national and international conferences
- Participation in workshops etc. related to RangeX
- Short-term research stays in project partners' working groups are possible
- Participation in yDiv (<https://www.idiv.de/en/ydiv.html>), the graduate school of the German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig is possible

Requirements:

- Master or equivalent degree in a project-related field (e. g. ecology, environmental sciences)
- Very good ecological knowledge with a general interest in community ecology as well as theories related to plant functional traits and functional diversity
- Strong interest in invasion ecology



- Experience in functional ecology / trait-based ecology
- Experience in compiling phylogenetic trees is an advantage
- Botanical expertise and ability to identify plant species by using an identification key
- Experience in advanced statistics in R (uni- and multivariate analyses)
- Excellent oral and written communication skills and high motivation to be a team player in an international research consortium
- A clear drive to do science
- Fluent in English communication in writing and speaking. Knowledge of German is an advantage
- A standard driving license for field work on Tenerife is advantageous

The Martin Luther University Halle-Wittenberg gives priority to applications from severely disabled candidates with equivalent qualifications. Women are particularly encouraged to apply.

For queries about the research project, kindly contact Dr. Sylvia Haider, phone +49 345 55-26254, E-mail: sylvia.haider@botanik.uni-halle.de

Please submit your full application dossier in English with registration number 5-14443/20-D until 4th January 2021. Applications should be submitted as single PDF document via E-mail to sylvia.haider@botanik.uni-halle.de, Dr. S. Haider, Martin-Luther-Universität Halle-Wittenberg, Institut für Biologie, Geobotanik und Botanischer Garten, Große Steinstraße 79/80, 06108 Halle (Saale).

Applications should include (1) a cover letter in English describing motivation, research interests & relevant experience, (2) a curriculum vitae in tabular form, (3) certificates (BSc/MSc) and (4) contact information of at least two former professor(s)/ supervisor(s) who know the applicant.

Application portfolios will not be returned, application costs will not be reimbursed.