

The German Centre for Integrative Biodiversity Research Halle-Jena-Leipzig – iDiv is a world-leading centre for biodiversity science and focuses on understanding biological diversity on our planet. Find more information on: [www.idiv.de](http://www.idiv.de).

### **Call for applications for a Master's Thesis**

We offer the following topic:

## **Generative Trait Variability of Cyperaceae Juss. in Context of Phylogeny and Plant Ecology**

### **What is it about?**

Working with grass-like plants and particularly sedges has always been a challenge in plant studies. In this thesis, you will explore the fascinating and unique world of this biodiverse and exceptional plant group! By assessing and analysing generative plant traits in a phylogenetic, ecological, and phenological context, you will gain cross-disciplinary experience and equip yourself with unique skills for your future career path.

### **Where?**

You will work in international, multi-disciplinary teams at the German Centre for Integrative Biodiversity Research (iDiv) ("Physiological Diversity"; Dr Thomas Hornick), the Senckenberg Institute for Plant Form and Function Jena (SIP), and Friedrich Schiller University Jena ("Plant Biodiversity"; Dr Sebastian Gebauer).

### **Tasks**

You will measure pollen traits using Imaging Cytometry (Hornick et al., 2025), female flower traits as well as relating general plant traits of Cyperaceae. Measurements will be performed with herbarium specimens, plant material from Botanical Gardens, and collected field samples. Further directions of the thesis that explore differences in phylogenetic and ecological context should be discussed individually, based on your specific interests and focus of study. You will learn how to measure unique plant traits, organise yourself in laboratory, collection-based, and field work, and how to explore and statistically analyse data to address specific scientific questions/hypotheses.

### **We gained your interest?**

Contact [thomas.hornick@ufz.de](mailto:thomas.hornick@ufz.de) and [sebastian.gebauer@uni-jena.de](mailto:sebastian.gebauer@uni-jena.de).

References: Hornick, T., Harpole, W.S., Dunker, S. (2025). High-throughput assessment of anemophilous pollen size and variability using imaging cytometry. *New Phytologist* 246: 1875–1888. DOI: 10.1111/nph.70070.