

MSc Thesis Opportunity: Enhancing Botanical Garden Research with a Naturalness Index

Description: Botanical gardens serve as crucial hubs for biodiversity research. These gardens span various biogeographical regions and phylogenetic groups, with consistent maintenance conditions. **However, for comparative studies across botanical gardens – e.g. on plant phenology – the naturalness of plant populations' growth conditions needs to be known.**

To address this, a collaborative effort between the University of Potsdam (Biodiversity Research/ Systematic Botany) and the University of Jena aims to develop a novel index to quantify the degree of naturalness within garden populations. Using functional traits which reflect plant-environment interactions, this index will compare so-called trait spaces of plant populations grown in botanical gardens to those of plant populations living in their natural habitats. **Ultimately, the thesis will also help to bridge the gap between garden-based research and research in natural ecosystems.**

Collaboration:

Requirements:

- Prof. Dr. Christine Römermann, Plant Biodiversity, Friedrich-Schiller-University Jena
- Ideally, prior participation in the course "Ecology and Diversity of Terrestrial Plants"

Tasks:

- Field and laboratory work
- Statistical analysis with modern methods of functional plant ecology
- Utilize ecological databases

What we offer:

- Work in an international research network
- Collaboration with a second master student with complementary topic at the University of Jena
- Data collection 2024 in the Botanical Garden Potsdam

You are interested or have questions? Please contact:

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