



With funding from the:



Federal Ministry
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BioDiv
Systematic Botany



MSc Thesis Opportunity: Does crop diversification improve plant health?

Description: Agricultural systems face multiple challenges to adapt to climate change or to mitigate their influence on biodiversity loss. To do so, more resilient crop systems are necessary. The project **DCrops4OneHealth** is testing diversified crop rotations to improve the health of the microbiome, flora, fauna, and humans.

Part of this study is to test different **varieties of rye**. Diverse rye cultivars will be sown in experimental plots once, as a rye mixture and in monoculture. In your thesis, you will test which cropping system leads to **higher plant fitness** in the individual rye plant using indicators like seed production, severity of fungal infections, and other fitness-related plant functional traits.

Start date:

- Sampling in the field will start in March 2026 in Marquardt
- A later start is also possible

Requirements:

- Ideally, prior participation in the course “Ecology and Diversity of Terrestrial Plants” and a driving license

Tasks:

- Field and laboratory work to assess plant functional traits etc.
- Statistical analysis with modern methods of functional plant ecology (in R)

What we offer:

- Work in an international research network
- Participation in an interdisciplinary agricultural project (DCropS4OneHealth)

You are interested or have questions? Please contact:

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