Vacancy for student assistants

Faba bean (*Vicia faba* L., German: Ackerbohne, Dicke Bohne, Saubohne) is a grain legume that produces high protein seeds. It has a positive effect on pollinators and soil fertility and provides optimal soil conditions for the following crop. The German government's protein crop strategy aims to increase the share of protein crops, especially legumes, in crop rotations. However, faba bean suffers from abiotic stresses that affect yield levels and yield stability. Combined heat and drought stress during flowering has a negative impact on yield – a scenario that is likely to become more common with climate change. Despite its high yield potential, faba bean is currently not sufficiently attractive and increased breeding efforts are needed to develop climate-resilient faba bean varieties.

As part of the multidisciplinary FABALOUS project (expected start: April 2025), we will grow 24 genotypes of faba bean under irrigated and drought stress conditions, and simultaneous heat stress, in rainout shelters.

We are looking for several motivated student assistants to support us in these activities:
- Assessment of agronomic traits, physiological traits and stress-related traits
- Measurement of stomatal conductance and photosynthetic efficiency
- Measurement of soil moisture
- Phenotyping of reproductive traits, determination of flower abortion rate
- Pollen collection and sample preparation, measurement with impedance flow cytometer

The fieldwork (4-8 h per day) will take place at the experimental station Reinshof, 4 km south of Göttingen. We will use company cars or you can go by bike for more flexibility.

Opportunities: You will gain experience in fieldwork with assessing relevant plant traits and high-throughput phenotyping, and be part of an interdisciplinary project.

Requirements: Ability to work at least three days per week in late May and June.

Time period: May and June 2025 at flowering. To a lesser extent August and September 2025 after harvest.

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