

The **Institute of Sugar Beet Research** (IfZ) associated with the Georg-August University is a nationally and internationally active research institution in Germany aiming to develop concepts for sustainable sugar beet production.



Within a scientific research project, funded by the Federal Ministry of Research, Technology and Space (BMFTR former BMBF) we are seeking in the Department of Phytopathology for a three-year fixed-term position a

## **Research Scientist (PhD-student) (m/f/d)**

In the project **“Generation of recessive resistance against aphid transmitted viruses in sugar beet using new breeding technologies – a case study for the establishment of precise genome modification in a multiuse crop- RecREdit”** with the possibility of a doctorate. Remuneration is based on the TV-L (EG 13, 65 %).

Using modern breeding technologies, a recessive resistance towards the polerovirus beet chlorosis virus was generated by knock-out of the susceptibility factor eIF(iso)4E in sugar beet. The aim of the project is the detailed characterisation of the host-virus interaction by means of protein-protein interaction studies and using new genomic techniques for targeted gene modification. The main focus will be on a reduction of fitness losses and a broadening of resistance to further virus species.

### **Your tasks:**

- Protein-protein interaction studies (YTH, BiFC, proximity labeling)
- Standard molecular biology techniques e.g., cloning of viral genes, virus infection assays, virus purification and quantitative detection
- Aphid transmission of plant viruses in greenhouse
- Writing of scientific manuscripts, project reports and presentation of the work on scientific conferences

### **Your profile:**

- Candidates must possess master's degree (or equivalent) in plant science, agricultural sciences, horticulture, biology or related disciplines and desirably in phytopathology and/or molecular biology
- Good knowledge of protein-protein-interactions
- Strong background in plant molecular biology, desirably plant molecular virology
- Advanced English language and writing skills
- German language skills are of advantage
- The ability to work independently, team-oriented and flexible is assumed
- Willingness to travel and a valid EU driver's license

### **We offer:**

- Collaboration in our dedicated scientific team and international network
- Interdisciplinary research and an intercultural working environment
- Well-equipped experimental infrastructure (laboratories, greenhouses)
- Flexible working hours with the possibility to work partly from home
- Living and working in the university city of Göttingen

The doctorate is accompanied by active participation in the doctoral program for agricultural sciences of the Georg-August-University.

Preliminary enquiries can be made to Prof. Dr. Varrelmann ([varrelmann@ifz-goettingen.de](mailto:varrelmann@ifz-goettingen.de)).

Please send your application to the Institute of Sugar Beet Research, Holtenser Landstraße 77, D-37079 Göttingen or as a PDF by e-mail to [bewerbung@ifz-goettingen.de](mailto:bewerbung@ifz-goettingen.de) by 31 May 2025