



Conserving - Exploring - Exploiting

The [IPK](#) is one of the world's leading international institutions in the field of plant genetics and crop science. Its research program and services contribute significantly to conserving, exploring and exploiting crop diversity. Its research goals are driven by the need to ensure an efficient and sustainable supply of food, energy and raw materials, thereby addressing a major global ecological challenge.

PhD student (f/m/d) in the field of Plant Nutrition and Physiology

The [Molecular Plant Nutrition](#) research group investigates the transport and metabolism of minerals and their role in physiological and morphological adaptations of plants to stress or agricultural production conditions.

We are looking for a doctoral Scientist (f/m/d) for a research project with focus on "sugar reduction in food using a natural sugar flavor enhancer from hydrangeas"

Your tasks:

- Screening for dihydroisocoumarin using LCMS in breeding populations of Hydrangea plants, approximately 10000 plants
- Development of PCR markers with identified phenylpropanoid pathway genes
- Elucidation of dihydroisocoumarin biosynthetic pathway through testing of labelled and un-labelled phenylpropanoid pathway intermediates for single reaction analysis
- Bioinformatic search for possible candidate genes/metabolites of dihydroisocoumarin biosynthesis
- LCMS analysis of dihydroisocoumarin biosynthesis intermediates
- Selecting candidate genes based on biochemical analysis and developing PCR markers
- Breeding population testing of the newly developed PCR marker

Your qualifications and skills:

- You have a master degree in plant nutrition, physiology, biochemistry, genetics, agriculture or any related field.
- You have practical experiences in all related above fields including LCMS, PCR marker development and bioinformatics.
- You own solid English skills, as they are a prerequisite for effective work in our multicultural environment.
- You have good communication skills and will to collaborate with researchers from different disciplines.
- You have problem solving skills.

You fit to us:

- If you have a strong interest in plant physiology and ornamental plants.
- If you have strong scientific curiosity and motivation.
- If you are able to work autonomously and in a team.

We offer you:

- A working environment with a wide range of personal and professional development opportunities.
- Excellent infrastructure with modern laboratory equipment and phenotyping facilities.
- A stimulating research environment in one of the top crop research institutes in Europe with frequent exchange with other researchers and support from qualified colleagues.
- Access to in-house high-performance computing clusters
- A good infrastructure and welcoming work environment.
- A project position limited to 3 years.
- Remuneration and benefits according to the German Public Service regulation (TV-L) up to 65 % E13 TV-L.
- An entry from 1st June 2024.

If you need further information feel free to contact **Dr. Mohammad-Reza Hajirezaei** Tel.: +49 (0) 39482 5266.

What you need to know:

For us, your qualifications and strengths count. Therefore, everyone is welcome – independent of gender, origin, age, or disability. The IPK is striving to increase the proportion of women in sectors where they are underrepresented and, therefore, explicitly encourages qualified women to apply. Our institute has been certified for Career and Family (“berufundfamilie”), and we offer family-friendly working conditions and flexible working hours. The IPK has set a goal to employ more people with disabilities. Qualified applicants with a disability will be given preference.

Your application:

We are looking forward to receiving your online-application (<http://www.ipk-gatersleben.de/en/job-offers/>) by **08.05.2024**. If you have questions or require more information, please contact **Kerstin Schweigert** (jobs@ipk-gatersleben.de). Please indicate the reference number **27/03/24** in your correspondence.

Foreign qualifications must carry out an equivalence test in Germany, which is subject to a fee. This must be presented in the event of a later hiring: <https://www.kmk.org/zab/central-office-for-foreign-education/statement-of-comparability-for-foreign-higher-education-qualifications.html>