

The mission of the Leibniz Centre for Agricultural Landscape Research (ZALF) as a nationally and internationally active research institute is to deliver solutions for an ecologically, economically and socially sustainable agriculture – together with society. ZALF is a member of the Leibniz Association and is located in Müncheberg (approx. 35 minutes by regional train from Berlin-Lichtenberg). It also maintains a research station with further locations in Dedelow and Paulinenaue.

We are offering a PhD position within the project “SugarClim – Projection of sugar yields in Germany, Europe and world-wide from sugar beet under changing climate”. The project aims at resembling knowledge on how sugar accumulation and beet growth respond to external factors. The project will deliver insights on how sugar yields will likely evolve in current production areas under climate change and how optimal environments for growing sugar beet will be defined in the future.

Subject to funding approval, we are offering a PhD position to be based within the ZALF Research Platform “Data Analysis and Simulation” in the working group Ecosystem Modelling

We are offering a position **for four years until April 01, 2022** at our location in **Müncheberg** as

## PhD student in Crop Modelling (m/f/d)

### Your tasks:

- Review existing literature and unpublished experimental data, and extract and process the data.
- Apply machine learning approaches to identify patterns in sugar beet yields.
- Improve an existing sugar beet simulation model and calibrate it using the newly acquired data
- Produce climate change impact scenarios for sugar yields using the model
- Contribute to the overarching goals of the research project team
- Publish the results in peer-reviewed scientific journals

### Your qualifications:

- Master of science agricultural, geo-, or environmental sciences
- Agronomy background, preferably on sugar beet
- First experience in using simulation models and machine learning techniques
- Good command of geo- and multi-variate statistics as well as script programming
- Excellent communication skills in English (German is not required, but considered useful)
- Good team work skills and willingness to collaborate across disciplines

### We offer:

- An interdisciplinary working environment that encourages independence and self-reliance
- Classification according to the collective agreement of the federal states (TV-L) up to EG13 with a 65% weekly working time (including special annual payment)

- Opportunity to collaborate within an international network on agro-ecosystem modelling (e.g. AgMIP, ISMC) and with the sugar industry
- Membership in ZALF's graduate program (incl. benefit from skill training courses)
- Strong institutional commitment to a good work-life balance
- A collegial and open-minded working atmosphere in a dynamic research institution

Women are particularly encouraged to apply. Applications from severely disabled persons with equal qualifications are favored. Please send your application preferably by e-mail (one PDF file, max. 5 MB; packed PDF documents, archive files like zip, rar etc. Word documents cannot be processed and therefore cannot be considered!) with the usual documents, in particular CV, proof of qualification and certificates, stating the **reference number 07-2022** until **February 15, 2022** to: [Bewerbungen@zalf.de](mailto:Bewerbungen@zalf.de).

If you have any questions, please do not hesitate to contact us: Prof. Dr. Claas Nendel, Tel. +49 (0) 33432/82-355, [claas.nende@zalf.de](mailto:claas.nende@zalf.de).

For cost reasons, application documents or extensive publications can only be returned if an adequately stamped envelope is attached.

If you apply, we collect and process your personal data in accordance with Articles 5 and 6 of the EU GDPR only for the processing of your application and for purposes that result from possible future employment with the ZALF. Your data will be deleted after six months.

You can find further information at: [www.zalf.de/en/ueber\\_uns/Pages/Datenschutzerklaerung.aspx](http://www.zalf.de/en/ueber_uns/Pages/Datenschutzerklaerung.aspx)