From January 1, 2020 onwards, the **Crop Science Group** at the University of Bonn seeks to employ, for **up to 4 years, max. until December 31, 2023**

1 Doctoral Student (65%) (TV-L 13)

The successful candidate will be involved in the Cluster of Excellence "PhenoRob: Robotics and Phenotyping for Sustainable Crop Production" (http://www.phenorob.de/) funded by the Deutsche Forschungsgemeinschaft. The approach of PhenoRob is characterized by the integration of robotics, digitalization, and machine learning on one hand, and modern phenotyping, modeling, and crop production on the other.

Specifically, the research will contribute to the Cluster by observing and modelling root and shoot growth under different environmental and management conditions within the Core Project CP3 ("Putting the Soil-Root Zone into Sustainable Crop Production using Sensor Data and Analytics Algorithm"). The main tasks of the successful candidate will be to 1) conduct measurements of states of soil and root on different sites and 2) to model crop growth using a 1D crop growth model informed by a 3D model of root architecture and function (DuMux-CRootBox).

Your tasks:	• Support the planning, organization and implementation of a field experiment at the rhizotron facility Selhausen (FZJ). Gathering and analyzing data from this experiment
	• Regular observations in the field experiment (e.g. leaf area index, shoot biomass, harvest)
	• Publishing results in peer reviewed journals and presenting them at conferences
	• Collaborating with colleagues involved in the Cluster of Excellence
Your profile:	• An excellent Master degree in agriculture, ecology or related disciplines, with a focus on crop science and/or crop modelling
	• Experience in field experimentation
	• An interest in interdisciplinary and collaborative research
We offer:	• Participation in the international research hub *The Cluster of Excellence "PhenoRob"*
	• An open, stimulating and interdisciplinary work environment where good ideas are encouraged and supported
	• The opportunity of conducting research towards a PhD and of receiving the support necessary to do this successfully
	• Enrolment in the Theodor Brinkmann Graduate School of the Agricultural Faculty
	• 65% TVL E13 on the salary scale

Applicants please submit (1) A letter of motivation including your specific research interest (max. 2 pages), (2) a curriculum vitae including a list of publications, (3) a copy of your Master degree, (4) the names and contact details of two referees (position, professional address and e-mail).

The University of Bonn is committed to diversity and equal opportunity. It is certified as a family-friendly university and aims to increase the number of women employed in areas where women are under-represented and to promote their careers. To that end, it urges women with relevant qualifications to apply. Applications will be handled in accordance with the *Landesgleichstellungsgesetz* (State Equality Act). Applications from suitable candidates with a certified disability or equivalent status are particularly welcome.

If you are interested in this position, please submit your **complete application documents as a single pdf by November 3, 2019** to Dr. Sabine Seidel, reference "**Phenorob CP3.5**".