

The Crop Science Group at the University of Bonn seeks to employ, for 4 years, begin earliest in November 2022

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

depending on the final approval of the funds by the donors. The successful candidate will be involved in the EU HORIZON project "INTERCROPVALUES: Developing intercropping for agrifood value chains and ecosystem services delivery in Europe and Southern countries".

In the project, the Crop Science Group is responsible to deploy activities that improve the understanding of the functioning of intercropping, evaluate performances and ecosystem services delivery and support the optimization of management practices. Dynamic models will be used to estimate intercrop performance for specific field designs (e.g. proportions, arrangements, sowing dates) and conditions (climate, soil).

The main tasks of the successful candidate will be to co-supervise an intercropping experiment at the research station Campus-Kleinaltendorf (University Bonn) and to link experimentation and modelling for an improved intercrop system understanding. The key experiments used for modelling purposes in the project will be (co-)supervised and the data will be provided in a "ready to use" quality for modelling and partly analyzed and published. The data collection and use for modelling activities will be organized as well as the simulation of scenarios and the analysis of simulation results. The use of a soil-crop-intercrop model, the model-based upscaling and the scenario runs (i.e. for climate change scenarios, N₂O emission) will be supported for selected soil-climate combinations in Europe.

Your tasks:	 Support the planning, organization and implementation of a field experiment, regular observations in the field (supported by a Technician) Gathering and analyzing of data from other intercropping experiments Using a soil-crop-intercrop model to estimate the intercrop performance Publishing results in peer reviewed journals and presenting them at conferences Collaborating with colleagues involved in the EU project
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, data analysis, and in crop modeling An interest in interdisciplinary and collaborative research
We offer:	 Participation in the international research project INTERCROPVALUES 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 for up to four years

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 August 24th, 2022** to Sabine Seidel (Email: <u>sabine.seidel@uni-bonn.de</u>), Email reference "INTERCROPVALUES".