The **Crop Science Group** at the University of Bonn seeks to employ, for **3 to 4 years,** beginning earliest in **autumn 2023**

1 PostDoc (100%) (TV-L 13)

The successful candidate will be involved in the project "smartMaN$_2$agement: Site-specific modelling of N dynamics for the reduction of gaseous N emissions and further N losses in crop production" supported by funds of the Federal Ministry of Food and Agriculture (BMEL), Germany.

The focus of the project is on the reduction of N_2O and NH_3 emissions as well as N leaching through predictable, informed and site-adapted management in crop production. Data from four selected long-term experiments for informing a crop model covering the most important management measures in a crop rotation incl. catch crops, tillage, mulching of crops that have high amounts of N, as well as mineral and a wide range of organic fertilisation levels. In order to obtain a comprehensive picture of the N cycle including gaseous N losses, N uptake and yield, data from previous years of the selected long term trials will be complemented by field data collected during the project period. These data form the basis for the modelling.

The PostDoc will take over the modelling of the experiments using the SIMPLACE model platform as well as the model-based regionalisation of the results. Well-founded statements on the influences of the different farming systems, crop rotations, soil tillage and fertilisation events adapted to the respective location and the respective farming system are to be derived from this evaluation, regionalised to the federal territory and processed for agricultural practice and consulting.

Your tasks:
- Support the planning and organization of one field experiment
- Using an agroecosystem model to estimate crop performance and N dynamics
- Publishing results in peer reviewed journals and presenting them at conferences
- Collaborating with colleagues in the project

Your profile:
- PhD in agriculture, ecology or related disciplines, with a focus on crop science and/or modelling of soil and crop growth processes related to nutrients
- Strong experience in crop modeling, preferably including N dynamics modeling, is an absolute requirement
- Experience in field experimentation and data analysis is welcome

We offer:
- An interest in interdisciplinary and collaborative research
- Participation in the research project and collaboration with four partners all over Germany
- An open, stimulating and interdisciplinary work environment where good ideas are encouraged and supported
- 100% TVL E13 on the salary scale for at least three (and 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 and Ph.D. degree, (4) the names and contact details of at least 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** to Sabine Seidel (Email**: sabine.seidel@uni-bonn.de**), Email reference "**PostDoc_smartMaN$_2$agement**".