

Exploring global change effects on grassland biodiversity

Department: Copernicus Institute of Sustainable Development

Research group: Environmental Sciences

Supervisor: Jerry van Dijk & Annegreet Veeken

Email address: J.vanDijk2@uu.nl, G.A.veeken@uu.nl

Project description

Natural and semi-natural grasslands are an important ecosystem type in the world for safeguarding biodiversity and providing several ecosystem services. However, the species composition of grasslands is changing. Among the most notable drivers for this change in species composition is nutrient enrichment by fertilization and nitrogen deposition. In the Biodiversa+ funded project [DiviN-P](#) we try to understand the vulnerability of grasslands to nutrient enrichment and its interplay with other global change factors, such as invasive species and climate change.

In this Bright Minds Assistantship, you will join the DiviN-P team and contribute to pivotal research that can shape management strategies and policies for the protection of grasslands in Europe. You will have the opportunity to work with a unique, new dataset containing over 4000 observations of grassland species composition and nutrient status worldwide. This dataset offers many exciting research possibilities to help us understand how nutrient enrichment interacts with global change drivers and how this matters for biodiversity, species conservation and ecosystem functioning. Research directions that can be explored by the assistant, in collaboration with the supervisors, include for instance the role of climate change, invasive species and species traits.

The assistant's activities will include:

- Assisting with lab analysis of biomass samples collected during the 2024 field season, directly contributing to the extension of the database.
- Contributing to data analysis, including data collection from open databases, for information such as species traits, conservation status, and invasiveness.
- Opportunity to contribute to writing a scientific paper as a co-author, depending on your contribution.

Job requirements

We are looking for an enthusiastic student with an interest in ecology and conservation. Tasks will include lab work and data analysis in R. Experience in this is not necessary, willingness to learn these skills is.