

Master thesis opportunity

Can different amounts of flower fields in a landscape enhance pollination services in oilseed rape?



In the project KOOPERATIV we investigate the effects of landscape scale availability of perennial flower fields on biodiversity and ecosystem services. In 2022/23 we have established a landscape experiment in which we sowed 0-13 ha of flower fields in 38 landscapes (1km²). The aim of this master thesis is to study the abundance and diversity of pollinators in oilseed rape fields in these experimental landscapes. We will investigate how many flower fields are needed to increase pollinators in oilseed rape fields and whether these translate into enhanced yield due to pollination services.

Methods to be applied in the master thesis:

- conduct transect walks to record pollinators in oilseed rape fields during their blooming (April/May 2024)
- investigate pollinator performance within an exclusion experiment, where net cages exclude individual plants from pollinating insects
- harvest oilseed rape plants from each study field
- count the number of pods and seeds produced by oilseed rape plants and measure seed weight
- statistical analysis with R



Requirements: You should be **interested in field work** and have good data management skills with Excel. For conducting field work you need a **driving license**. Experience with the identification of pollinators and knowledge of R are an asset. Furthermore, you should be willing to write in English, as well as be able to work independently.



The project: With this master thesis you will contribute important data to the project KOOPERATIV which is an inter- and transdisciplinary project to investigate the effects of flower fields and landscape diversity across different taxa and on several ecosystem services. We collaborate with a large number of farmers who have established the flower fields in the district of Northeim. For more information on the project, please visit the website: www.uni-goettingen.de/kooperativ/project.

Period: 03/2024 – 08/2024

If you are interested, please contact us for further details:

Dr. Annika Haß

Phone: 0551 / 39-28268

ahass@uni-goettingen.de

Functional Agrobiodiversity – DNPW, Georg-August-University Göttingen



Funded by: