

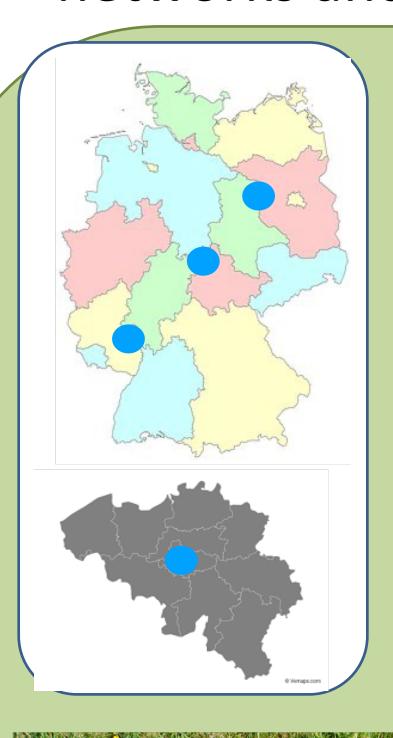




NutriB2: Nutrition as a critical link between biodiversity and bee health

Floral diversity and abundance underly bee nutrition which plays a major role for wild bee health and population dynamics. Understanding the interaction between diverse floral resources and bee health can guide ecosystem management, but requires an integrated approach, including bee and plant taxonomy, nutritional and chemical ecology, physiology and epidemiology. In our project, NutriB2, we focus on bees as key pollinators and see bee health as a multidimensional concept that starts with understanding pollination networks and bee diets.





Our strategy is the following:

- •We have 4 sites (3 Germany, 1 in Belgium), where we visit 9 or more plots. The plots are chosen based on a plant diversity and land use intensity data, so that we have a gradient.
- •We go from April to July twice to all sites, and visit each plot for 2 hours in the morning and 2 in the afternoon, each time. Start: 2020 - End: 2023
- •There, we do the following tasks:



Floral abundance



Specimen identification



Specimen collection

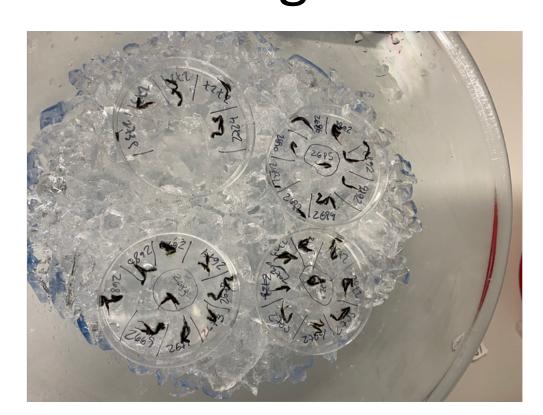




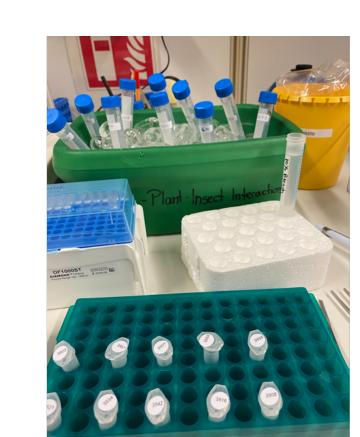
Observation records

Common fieldwork

Back in the lab we do barcoding and metabarcoding to identify pollinator networks

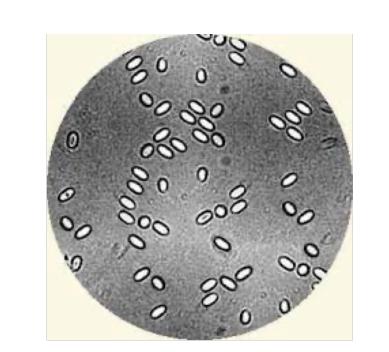


Barcoding for bee identification (legs)

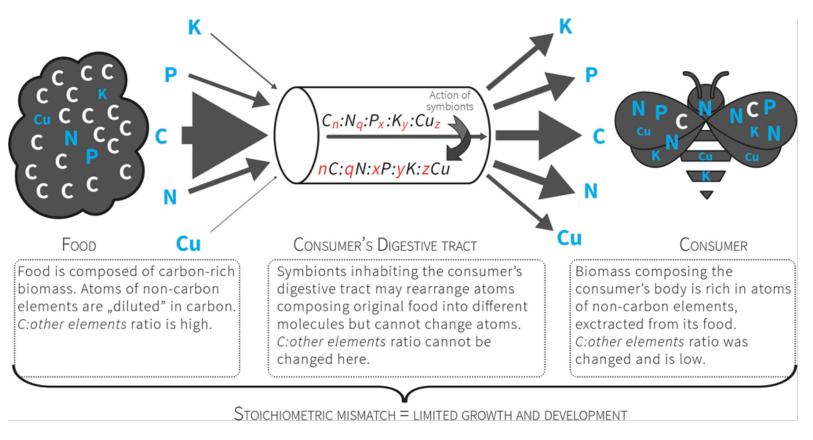


Metabarcoding of pollen

Future work:



Pathogen study



Filipiak et al. 2017

Physiological studies and Stoichiometry (Element composition)

