



Master Thesis

Start: March / April 2024 or later



Effects of Ploughing on Soil Fauna Biomass

Flower strips are a popular instrument for promoting biodiversity in the agricultural landscape by providing valuable foraging resources and nesting grounds. At the end of the funding period (1-5 years), these areas are usually tilled. The question of how ploughing up the soil affects the soil-nesting fauna (such as bees, wasps, flies...) remains largely unanswered. As part of the work, you will systematically collect biomass data using emergence traps (see image) on flowering areas of different ages on farms around Freiburg. The fields are partially ploughed this spring. The data collected will allow you to analyze effects of field age and ploughing on soil fauna biomass. A dataset from 2023 can be incorporated to account for year effects.

If you are interested, you can also take a closer look at individual functional insect groups within the samples collected or focus on the effect of landscape complexity.

Methods: Fieldwork between March/April and July on farms around Freiburg accessible by bike or car; Processing of samples in the lab; Statistical analysis

Requirements: Interest in applied ecology; Motivation for field- and lab work, data analysis and perhaps insect identification or geodata analysis.

Interested?

Please contact Christopher Hellerich (christopher.hellerich@nature.uni-freiburg.de)