Vacancy for two Master theses in 2020

Strip cropping for biodiversity and associated services

Cropland diversification can be an important driver of biodiversity and associated ecosystem functioning and may be as effective as conversion to organic farming or setting aside natural habitat, as recent research results suggests (Sirami et al. 2019, PNAS; Rosa-Schleich et al. 2019, Ecol Econ.).

In a large-scale and highly replicated experiment on up to 15 farms, we will diversify cropping patterns per field. We will compare strip cropping, using strips of oilseed rape alternating with strips of wheat, with crop monocultures. Further, spillover from crop fields to surrounding field boundaries may be analyzed.

This costly experiment is carried out in collaboration with farmers and an economist to identify best economic-ecological, i.e. profit-biodiversity trade-offs. Field studies for the Master theses are between April and July 2020 and include surveys of plant, insect and bird diversity as well as ecosystem functions (pollination, herbivory, biological control).

Students in agriculture, biology or biodiversity are welcome and may contact:

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