



FE 8: Complex arable-ley rotation in organic farming

Mid-term trial in Fislisbach, Switzerland, Start: 2018



Fig. 1: Trial design

Research question

Does an increased complexity in an organic rotation helps to improve biodiversity, weed suppression and nutrient management?
 Is it economically attractive?

Site description

Rotation: organic, arable-ley rotation of a dairy farm
Site: Ackermatthof, field "Rückerfeld" in Fislisbach, 422 m a.s.l.
Climate: mean annual temperature 10.3°C, precipitation 1064 mm
Soil: sandy loam, pH (H₂O) 7.0, SOC 1.7%

Scientific analyses

- Soil characteristics
- Yield and other agronomic parameters including detailed management description
- Transfer of N fixed by legumes
- Insect biodiversity
- To be discussed: belowground biodiversity

Experimental design

- **S = Reference:** Simple organic arable-ley rotation
- **D = Diversified rotation:** Complex organic arable-ley rotation with intercropping, undersown green manures, high share of legumes
- **M = Negative control:** Maize monoculture with rye catch crop

Spatial replication: 4

Temporal replication: none

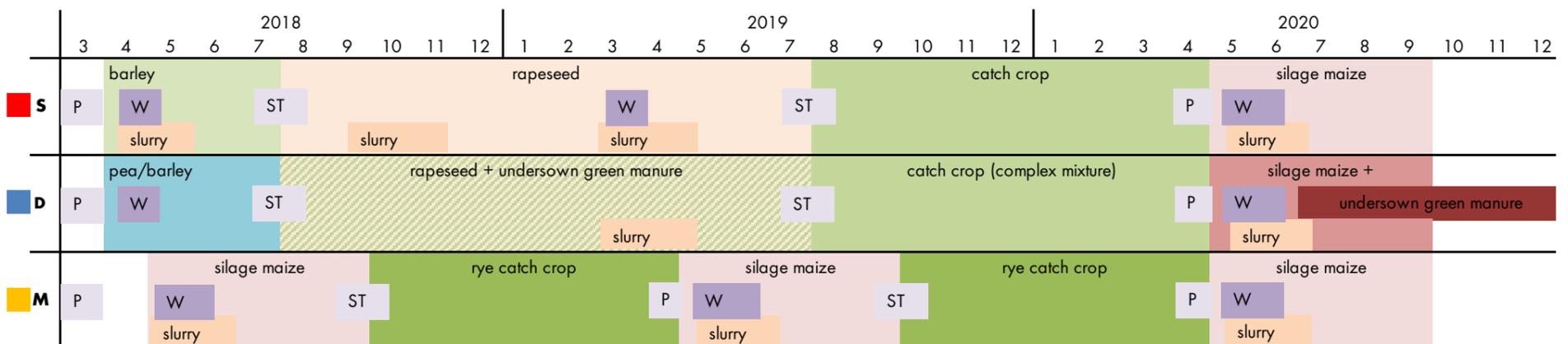


Fig. 2: Time plan

