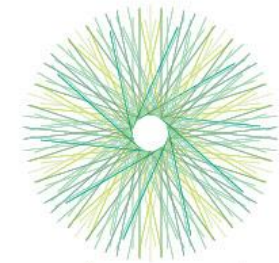


# EIP-AGRI Workshop Cropping for the future

4-5 June 2019 – Almere, the Netherlands



eip-agri  
AGRICULTURE & INNOVATION



funded by  European Commission



# Programme

**TUESDAY 4 JUNE**

#EIPAgri  
#croprotection  
#cropdiversification



08:00-09:00 Registration

## Introduction to the workshop

### 09:00-09:15 Welcome by the host and by DG AGRI

- *Martijn Weijtens, Ministry of Agriculture, Nature and Food Quality, the Netherlands*
- *Anikó Seregélyi, Unit B2 – Research and Innovation, DG AGRI, European Commission*

### 09:15-10:30 Getting to know each other & setting the scene

Introduction of the programme and getting to know each other (Impromptu Networking)

- *Niels Rump, EIP-AGRI Service Point*



# Programme

**TUESDAY 4 JUNE**

#EIPAgri  
#croprotonation  
#cropdiversification



## Setting the scene and preparing interaction

- *Edoardo Costantini, EIP-AGRI Service Point*
- *Bhim B. Ghaley, ERA-NET 'FACCE SURPLUS' project 'SustainFARM'*
- ***Paolo Mantovi, Operational Group 'Agroecological Cover'***
- *Roberto Garcia-Ruiz, PRIMA project 'SUSTAINOLIVE'*
- *Judith Treis, Operational Group 'Organic vegetables'*

## Networking for crop rotation & crop diversification

10:30 – 11:15 **Discovering diversity** – getting familiar with projects represented at the workshop

Sharing projects with a cup of coffee – interactive session (Project Mesclun)

11:15 – 12:30 **Building common ground**

Looking for shared challenges and opportunities – interactive session (World Café)



# Operational Group Agroecological cover

*Paolo*

*Mantovi*

FCSR



Fondazione CRPA Studi Ricerche

# Problem and objective

## Problem

- ✓ Soil organic matter decrease over time
- ✓ Weeds increasingly hard to control

## Objective

To develop innovative conservation tillage systems for farms in the Po river Valley, based on the use of cover crops...

...to take advantage of agroecological functions, such as:

organic matter production, nutrient recycling, soil protection, competition with weeds, others.



# What we do

Spring-summer crops (maize, soybean) have been cultivated after autumn-winter cover crops kept on the soil surface.

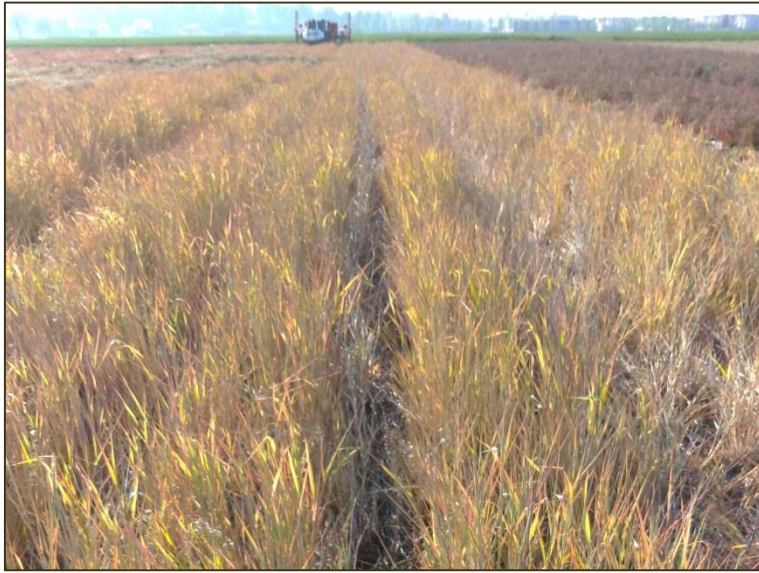
The proposed agronomic paths are 'pioneering' in our region.



The effects on soil quality (organic matter, structural stability, earthworms and microarthropods, nitrogen dynamics, etc.), economic sustainability and carbon footprint are evaluated.

# Results so far

The new cropping system is viable but... some technical difficulties in the management of the cover crops (termination) and the crop protection (slugs).



Productions obtained in the first two years:

*Grain maize (2017) ~ 10 t/ha*

*Soybean (2018) 2-3 t/ha*

# Results so far

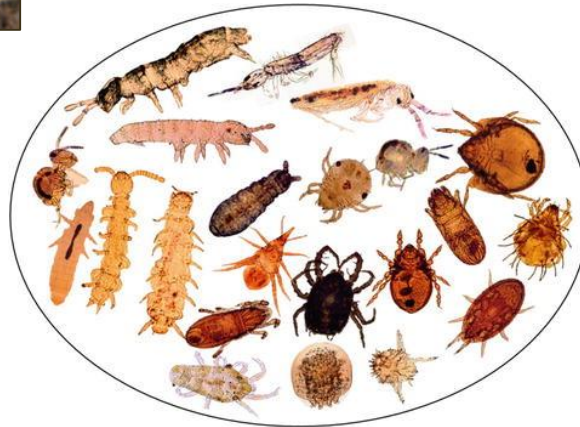
Overall, the soil quality appears to be increasing from year to year.



Earthworms:  
+28%



Water aggregate stability  
+48% in 0-5 cm layer



QBS-ar index: +4%



# Perspectives

To define the most suitable cover crops for use in the soil and climate conditions of the Emilia-Romagna, and the best management methods for these, such as...

rye



mustard



phacelia



clover



The agronomical trial will be continued within the **H2020 Circular Agronomics**, where the conservation tillage system will partly return conventional (ploughing) to compare the two.