

### CASE STUDY:

9 – Italy, Veneto Region



### PRINCIPAL SOIL THREATS:

soil organic  
matter loss



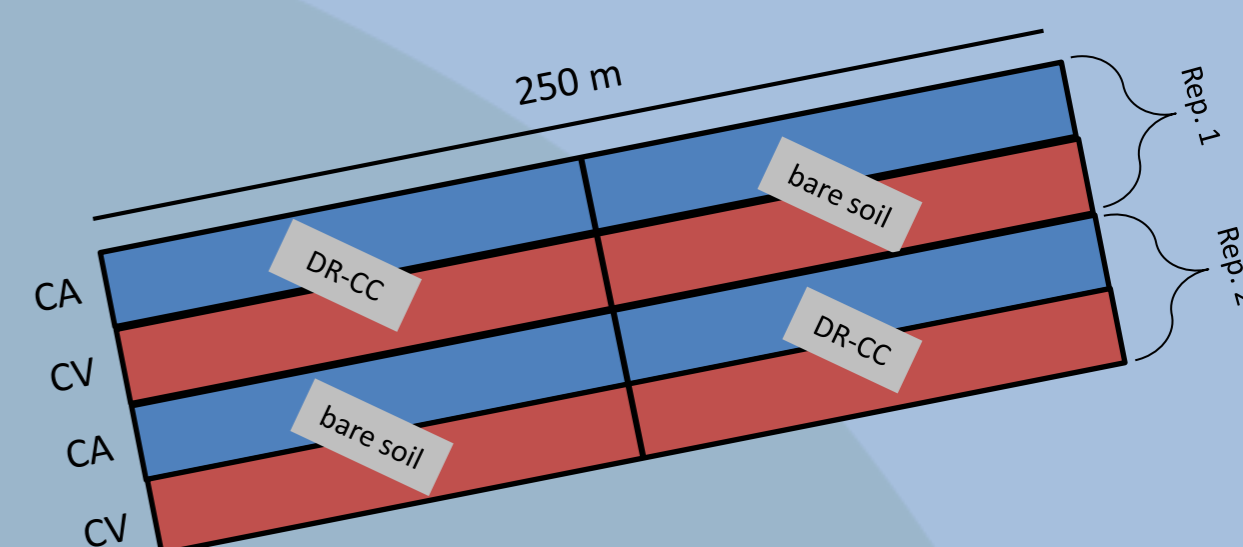
soil  
compaction

### SICS:

Combining conservation agriculture practices with deep rooting cover crop (e.g. tillage radish) to improve crop performances in NE Italy

### STUDY SITE:

- 2 agronomic managements
  - conventional tillage (CV), conservation agriculture (CA)
- 2 soil covering types
  - deep-rooting cover crop (DR-CC) vs bare soil
- 2 replicates (rep. 1, rep. 2)



- Main crop: maize

### WP3: STAKEHOLDER INVOLVEMENT

Main bullet points of discussion:

- Tillage radish establishment in silty soils: seeding and germination issues
- Tillage radish life cycle as related to maize one: obstacles and possible issues
- Challenges of no-tillage management adoption and weed control in sub humid climate: is it possible to apply no-tillage management without the use of glyphosate?



### WP4/5: ASSESSMENT METHODOLOGY AND MONITORING

- Soil organic carbon (SOC) → Modified Walkley-Black method
- Soil compaction (bulk density «BD», penetration resistance «PR»)
  - BD → core method
  - PR → digital cone-penetrometer
- Crop yield: at harvest
- Crop biomass: dry weight (1 m<sup>2</sup> estimation)
- Soil cover (photography, 1m<sup>2</sup>)

### WP7: POLICY ANALYSIS

- Interview (academic, regional and national policymakers)
- Contribution to local regulation review



### WP8: DISSEMINATION

The **SOILCARE** project is a 5 year project aimed at identifying and evaluating promising soil improving cropping systems and agronomic techniques increasing profitability and sustainability across scales in Europe.

The SOILCARE project consortium consist of 28 partner institutes from 10 European countries. The SOILCARE project is coordinated by ALTEIRA, Wageningen UR, The Netherlands.

• Starting date: March 1st 2016. • Ending date: February 28th 2020. • EU contract number: 677407

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This project is funded by the European Commission under the H2020 program