

# MICRO- AND NANO-PLASTICS IN AGRICULTURAL SOILS:

Sources, environmental fate and impacts on ecosystem services and overall sustainability

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Project at a glimpse

• 20 partners from 12 EU Member States countries

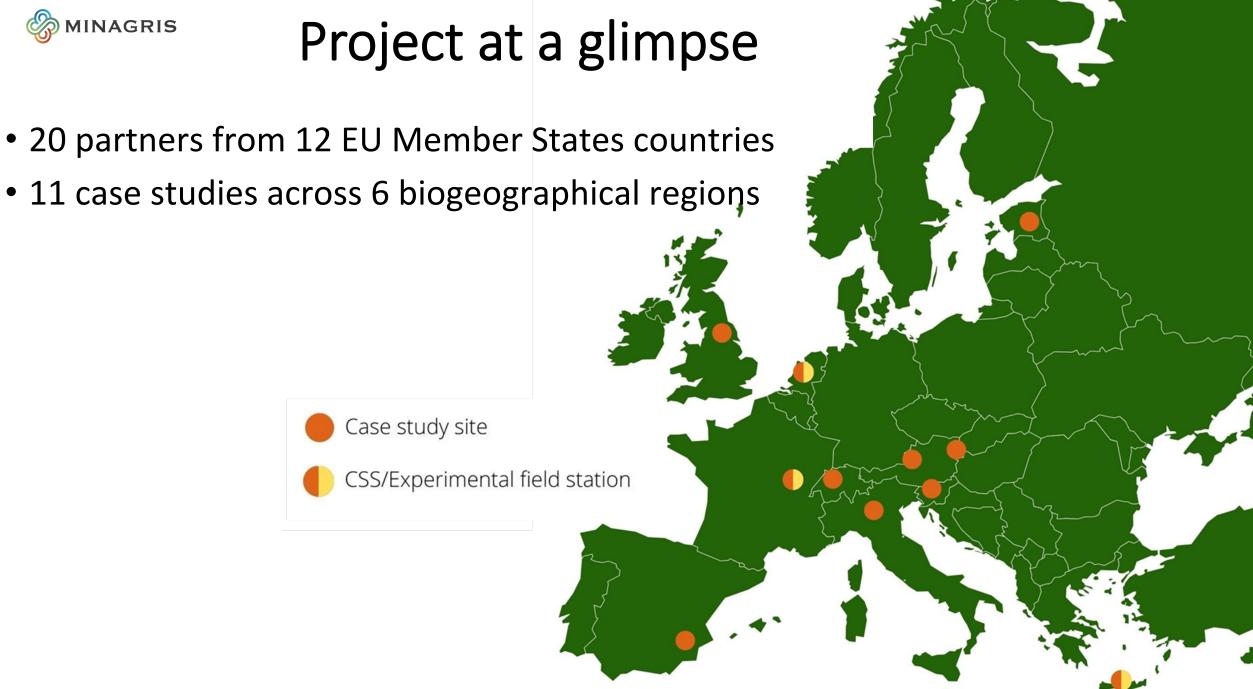


MINAGRIS partner organisations

- 1. Wageningen University (NL)
- 2. University of Bern (CH)
- 3. FiBL Switzerland (CH)
- 4. University of Thessaly (GR)
- 5. University of Ljubljana (SL)
- 6. Università Cattolica del Sacro Cuore (IT)
- 7. FiBL Austria (AU)
- 8. University of Gloucestershire (UK)
- 9. Freie University Berlin (DE)
- 10. INRAE (FR)
- 11. Polytechnic of Turin (IT)
- 12. CHQ Technologies (PC) (GR)
- 13. Technical University of Denmark (DK)
- 14. Austrian Agency for Health and Food Safety (AU)
- 15. NOVAMONT (IT)
- 16. Wageningen Food and Biobased Research (NL) (same as 1)
- 17. Euroquality (FR)
- 18. Camposeven (ES)
- 19. Spotteron (AU)
- 20. Estonian University of Life Sciences (EN)







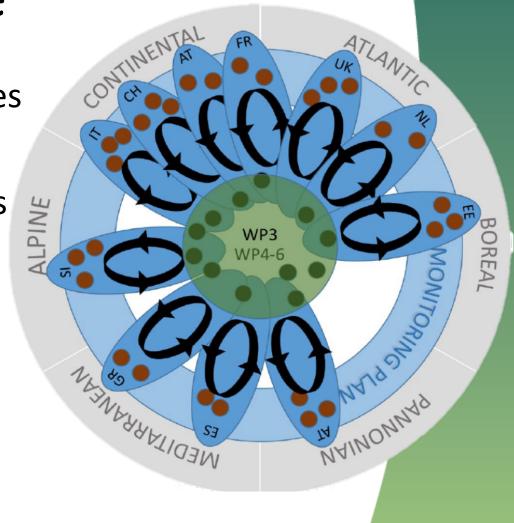


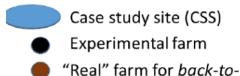
## Project at a glimpse

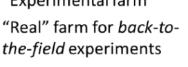
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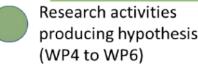
• 11 case studies across 6 biogeographical regions

- Multi-actor approach to
  - engage stakeholders and identify their needs
  - link field assessment and lab experiment
  - disseminate the results to a large audience





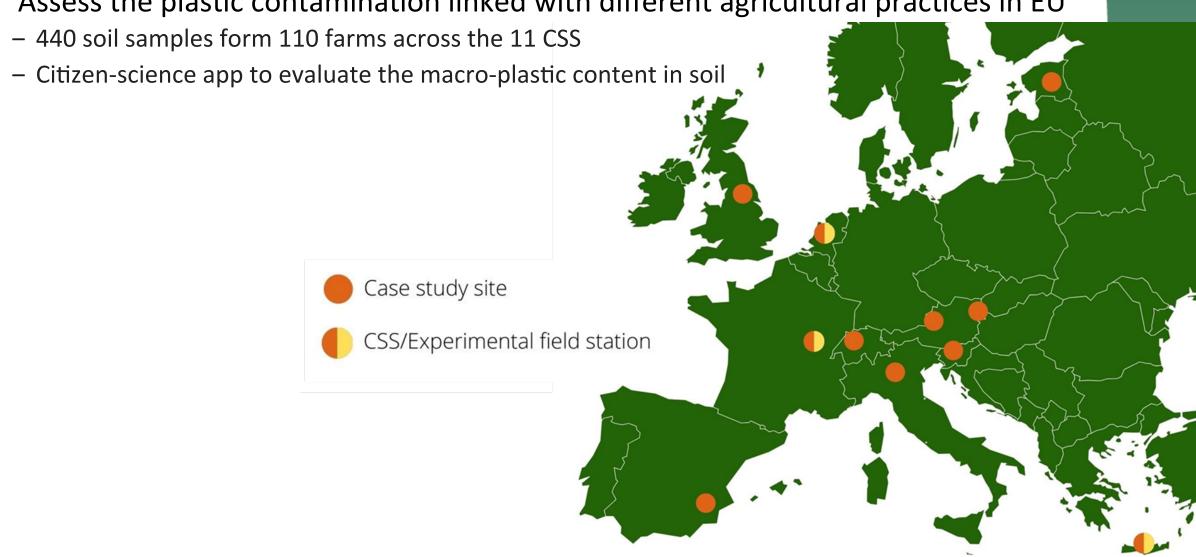








Assess the plastic contamination linked with different agricultural practices in EU





- 2. Study the effects of plastic contamination in controlled soil, mesocosm and field experiment
  - Effects on soil physicochemical properties
  - Effects on organisms: crops, microorganisms, earthworms, bees
  - Synergies with other soil contaminants: pesticides and veterinary drugs

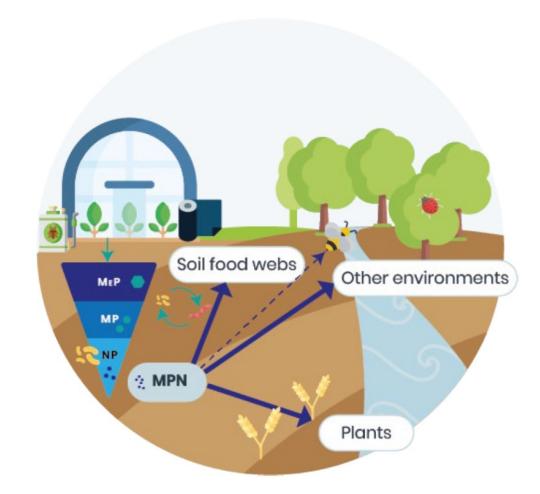






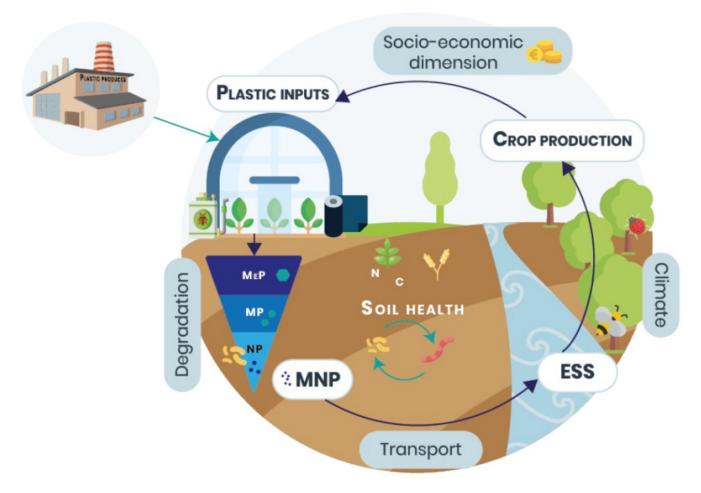


- 3. Assess the plastic debris transport and degradation in the environment
  - Transport and degradation in the soil
  - Transport and degradation along the food-chain





- 4. Evaluate effects of plastic use and contamination at the farm level:
  - Effects on the ecosystem services and farm socio-economic indicators
  - Decision support tool for farmers





Join the stakeholder network, email: coordination@mail-minagris.eu

Keep informed, Website: <a href="http://minagris.eu/">http://minagris.eu/</a>

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THANK YOU FOR YOUR ATTENTION!



- 1. Assess the plastic contamination associated with different agricultural practices in EU
  - 440 soil samples form 110 farms across the 11 CSS
  - Citizen-science app to evaluate the macro-plastic content in soil
- 2. Study the effects of plastic contamination in controlled soil, mesocosm and field experiment
  - Effects on soil physicochemical properties
  - Effects on organisms: crops, microorganisms, earthworms, bees
  - Synergies with other soil contaminants : pesticides and veterinary drugs
- 3. Assess the plastic debris transport and degradation in the environment
  - Transport and degradation in the soil
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- 4. Evaluate effects of plastic use and contamination at the farm level:
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