Universität Basel

Research Project

THE SOIL BIODIVERSITY AND FUNCTIONALITY OF MEDITERRANEAN OLIVE GROVES: A HOLISTIC ANALYSIS OF THE INFLUENCE OF LAND MANAGEMENT ON OLIVE OIL QUALITY AND SAFETY

Third-party funded project

Project title THE SOIL BIODIVERSITY AND FUNCTIONALITY OF MEDITERRANEAN OLIVE GROVES: A HOLISTIC ANALYSIS OF THE INFLUENCE OF LAND MANAGEMENT ON OLIVE OIL QUALITY AND SAFETY
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Project start 01.01.2023
Probable end 31.12.2026
Status Active

After more than fifty years of intensive agriculture application, the environmental situation for many olive groves across the Mediterranean Region is quite dramatic in terms of land degradation, biodiversity impoverishment, functionality loss, which may have already impacted on the quality and safety of olive oil, one of the most important commodities produced in Europe. Through the implementation of a series of multidisciplinary and interdisciplinary WPs, this project will perform the first rigorous diagnostic of the environmental situation of olive groves soils at a broad scale, considering the most important areas of olive production at the Mediterranean Region and its relationships to olive oil quality. Soil O-live aims (i) to analyze the impact of pollution and land degradation on soils from olive groves in terms of multi-biodiversity, ecological function at different levels of organization and scales; (ii) to investigate the relationship of soil health status with quality and safety of olive oil; (iii) to implement effective soil amendments and ecological restoration practices that promote manifest soil biodiversity and functionality enhancements in permanent Mediterranean olive orchards across its native range of distribution, that should be translated to improvements in olive oil quality and safety; (iv) to define rigorous ecological thresholds that allow to implement future clear norms and regulations in order to design a novel certification for healthy soils in European olive orchards.

Financed by
Commission of the European Union