

SoildiverAgro project

Adoption of new management practices to increase crop production and quality



THE WHAT AND WHY

Barriers and challenges for the application of sustainable farming practices in potato production under Mediterranean conditions.

Human life is supported by agricultural production, such as Potato (*Solanum tuberosum* L.) that is the fourth most important crop in the world, the development of European agriculture is being restricted by the environmental impacts associated with farming intensification and monocropping systems. To ensure potato production and prevent soil degradation, sustainable agricultural practices should be adopted by different stakeholders. In general, Mediterranean farmers are concerned about the difficulties in maintaining high crop yields due to soil nutrient depletion, pests and diseases. However, there is still lack of information about how the management sustainable agricultural practices can enhance the resilience of their farms and increase availability of nutrients and resistance to pests/diseases while decreasing the use of external inputs but maintaining the same yields. After identifying the relevant

agri-environmental problems and related end-users' needs by surveys, the most important barriers that stakeholders perceive are the lack of farmers' knowledge regarding the real effectiveness of practices, the lack of tradition among farmers and the need to have adequate technical advice due to the complexity of the implementation of some sustainable farming practices. In some cases, stakeholders are aware of the problems and challenges and, to a certain extent, of the solutions. Another positive aspect is that only a minority of stakeholders perceive more sustainable farming practices as unprofitable or difficult to implement if adequate technical advice is available. These results highlight the need for improved technical advice and legislative reforms to foster the adoption of more sustainable farming practices.



Potato (*Solanum tuberosum* L.) plantation in Mediterranean South region (Spain)

KEYWORDS

Potato production, Agricultural practices, Sustainable farming, Stakeholders' assessment, Multicriteria method (MCDM), Soil conservation.

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