

Supplementary material

Questionnaire. Survey on agroecological practices in olive groves.

The following section outlines a series of agroecological practices applicable to traditional olive groves farms. These practices are anticipated to yield both environmental and economic benefits for farms in the medium to long term. The relative importance of these practices will vary depending on the specific evaluation criterion. For each criterion (presented in a column), please assign a score out of 100 on each column. A practice scoring 40 points, for instance, is considered twice as beneficial as one scoring 20 points in relation to that particular criterion. An additional practice not listed may be included if deemed relevant.

Pr.	Description	Conservation and improvement of biodiversity	Soil structure and quality improvement	Climate change mitigation	Minimization of water pollution	Provision of cultural ecosystem services (e.g. aesthetic values, tourism, cultural heritage, etc.)
1	Implementation of living plant covers (well sown or spontaneous)					
2	Implementation of plant covers from pruning remains					
3	Minimal mechanical alteration of the soil (no tillage)					
4	Carry out agricultural operations following contour lines					
5	Balanced fertilization. Fertilize according to soil deficiencies and crop needs					
6	Use of organic fertilizer					
7	Use of phytosanitary products according to an integrated pest management strategy					
8	Use of precision agriculture technologies (e.g.,					

	tractor and/or machinery guidance)					
9	Implementation of multifunctional margins and buffer strips (buffer zones) with diversity of plant species (e.g., on plot edges or rocky outcrops)					
10	Build retention structures to reduce the impact of erosion and runoff					
11	Mitigation of point sources of contamination by phytosanitary products (establish areas for filling and cleaning machinery)					
12	Carry out optimized waste management (packaging, effluents, emptied pesticide containers, etc.)					
Total=		100	100	100	100	100

Next, we ask you to assess the economic impact of adopting the practice on the profitability of farms, as well as the technical difficulty of its adoption, using the following scale:

Scale	Profitability	Technical difficulty of adoption
1	Zero or very reduced impact on profitability, without support from the Administration	Minimal implementation difficulty, the producer can implement without external help
2	Reduced impact, would need some support from the Administration	Low difficulty, the producer may require some technical advice
3	Moderate or high impact, requires significant support from the Administration	Moderate or high difficulty, adoption could require specific training or external outsourcing of some task

Pr.	Description	Reduced profitability	Technical difficulty
1	Implementation of living plant covers (well sown or spontaneous)		
2	Implementation of plant covers from pruning remains		
3	Minimal mechanical alteration of the soil (no tillage)		
4	Carry out agricultural operations following contour lines		

5	Balanced fertilization. Fertilize according to soil deficiencies and crop needs		
6	Use of organic fertilizer		
7	Use of phytosanitary products according to an integrated pest management strategy		
8	Use of precision agriculture technologies (e.g., tractor and/or machinery guidance)		
9	Implementation of multifunctional margins and buffer strips (buffer zones) with diversity of plant species (e.g., on plot edges or rocky outcrops)		
10	Build retention structures to reduce the impact of erosion and runoff		
11	Mitigation of point sources of contamination by phytosanitary products (establish areas for filling and cleaning machinery)		
12	Carry out optimized waste management (packaging, effluents, emptied pesticide containers, etc.)		

Finally, indicate the importance of the criteria that, in your opinion, agroecological practices should seek, again distributing 100 points:

Agroecological practice's purpose	Purpose value
Conservation and improvement of biodiversity	
Improvement of soil structure and quality	
Climate change mitigation	
Minimization of water pollution	
Provision of cultural ecosystem services (e.g. aesthetic values, tourism, cultural heritage, etc.)	
Other purpose (indicate):	
Total=	100

If you wish, you can include any comments on any additional practices not included in the list and/or on what type of incentives should be implemented to encourage the use of agroecological practices in the olive grove.

Thank you very much for your cooperation in this study!