Universidad de Córdoba

FARMPERFORM

MINISTERIO DE CIENCIA E INNOVACIÓN

UNIÓN EUROPEA
FONDO EUROPEO DE DESARROLLO REGIONAL
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AGENCIA ESTATAL DE INVESTIGACIÓN

WEARE
Water, Environmental and Agricultural Resources Economics
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EXPERT´S OPINION ON AGROECOLOGICAL PRACTICES IN OLIVE GROVES

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Agroecology

Mitigate the negative impacts of intensive agricultural techniques and synthetic inputs (De Luca et al., 2023).

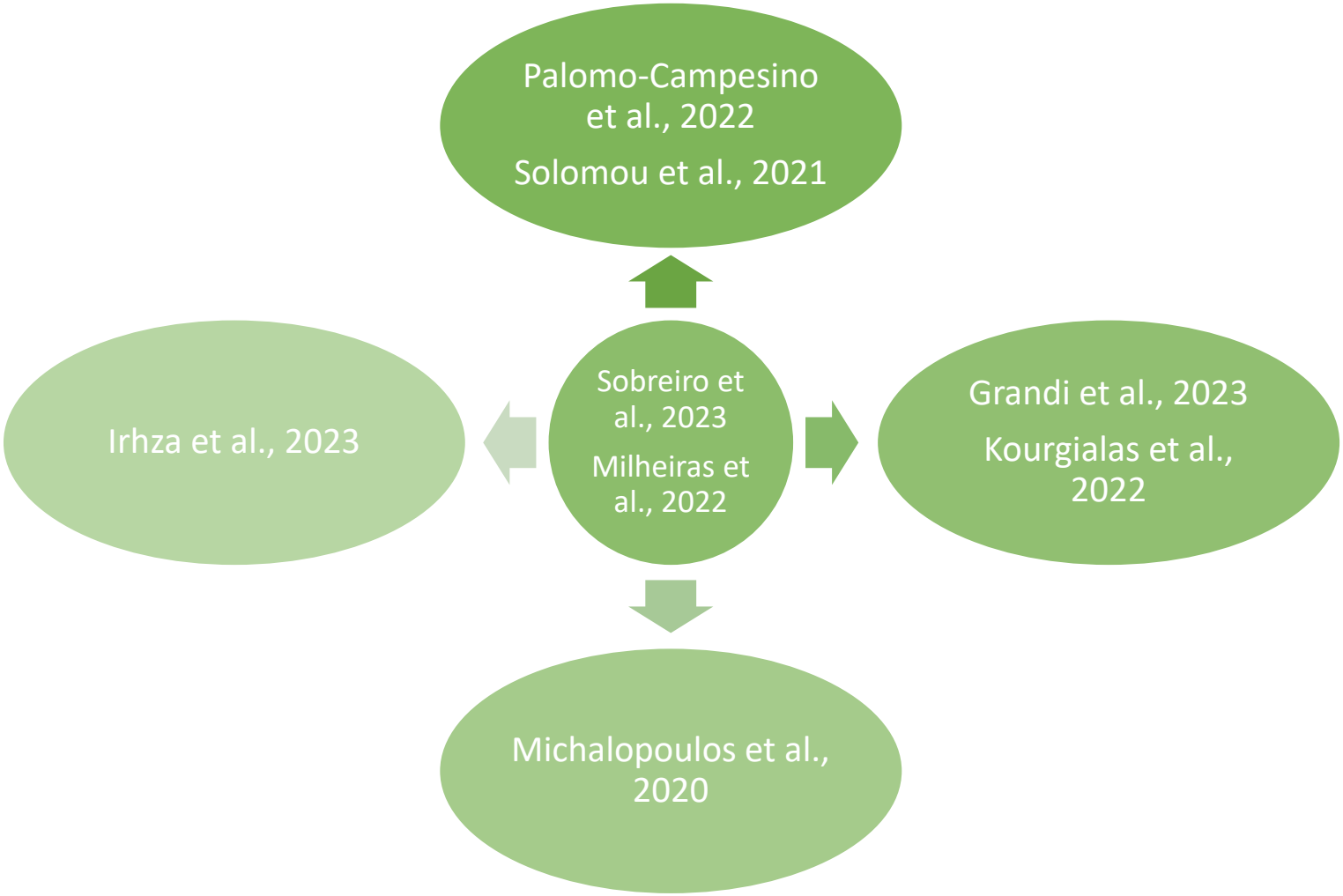
Problem

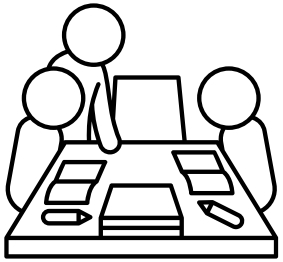
The numerous existing practices make it difficult to focus and to understand the adoption factors in olive groves.

Objectives

1. Analyze the best agroecological practices for the provision of ecosystem services
2. Assess the impact of these practices on the profitability of olive groves and the technical capacity required for their adoption.

WHAT DO WE KNOW?





Phase 1

12 agroecological practices are considered.

5 criteria

26 experts

Phase 2

Weighting of each practice according to the criteria.

Economic impact of the adoption of the practice (profitability & technical difficulty).

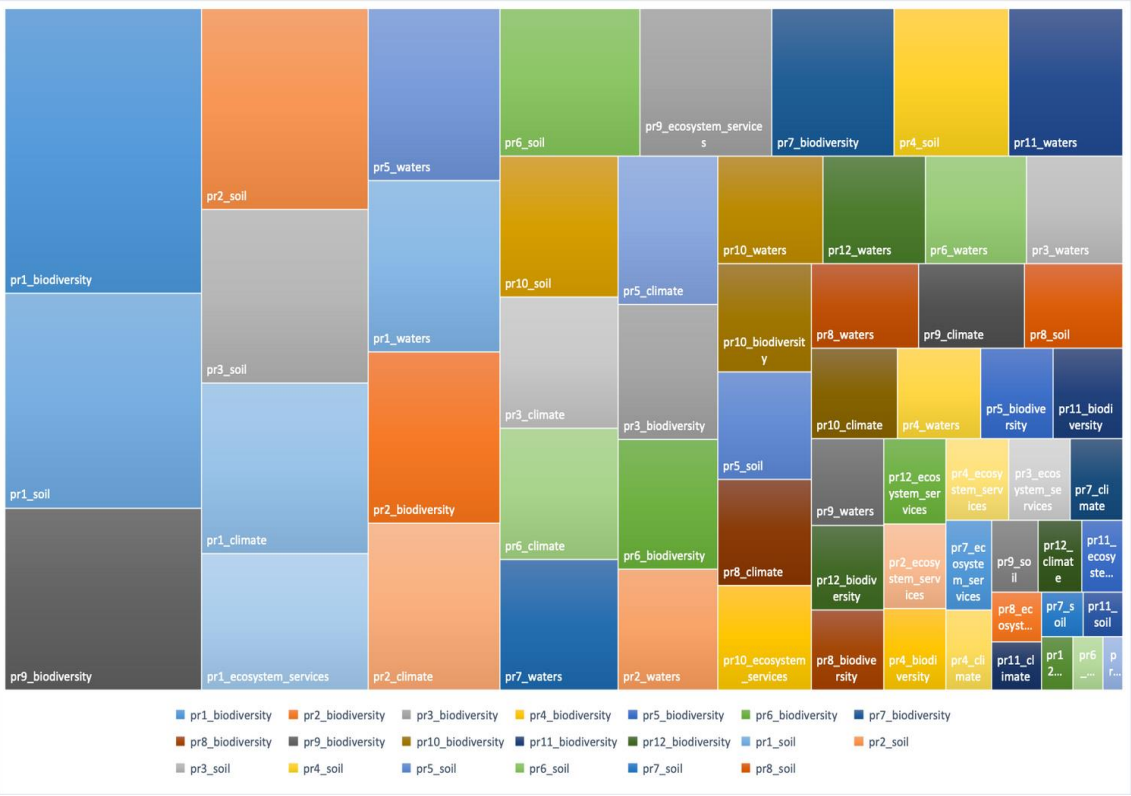
Importance of criteria.

Phase 3

Analysis of the implementation of the best practices on three olive groves sub-systems:

- Traditional rain-fed olive groves (TROG).
- Irrigated olive groves (IOG).
- Mountainous rain-fed olive groves (MOG).

1. Cover crops
2. Crop residues
3. No-till
4. Contour lines
5. Fertilize needs
6. Organic fertilizer
7. Integrated Pest Management
8. Precision technologies
9. Multifunctional Margins
10. Retention structures
11. Prevention phitosanitary
12. Optimized waste



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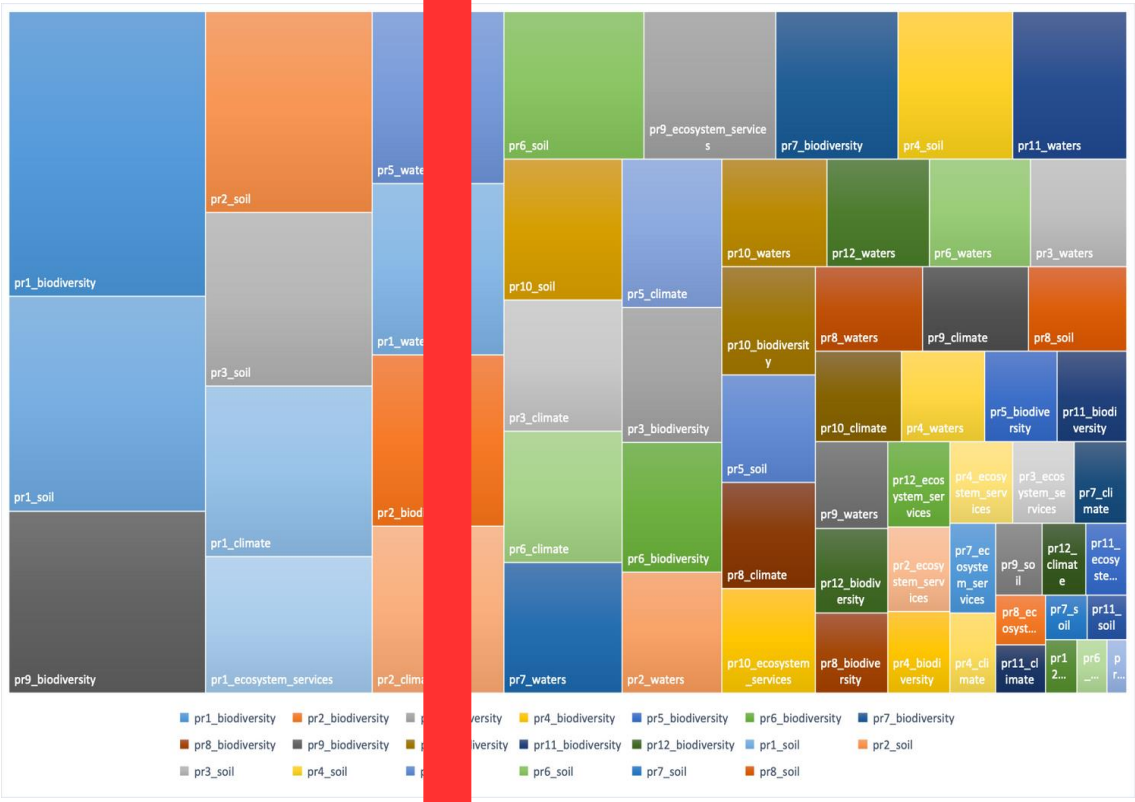

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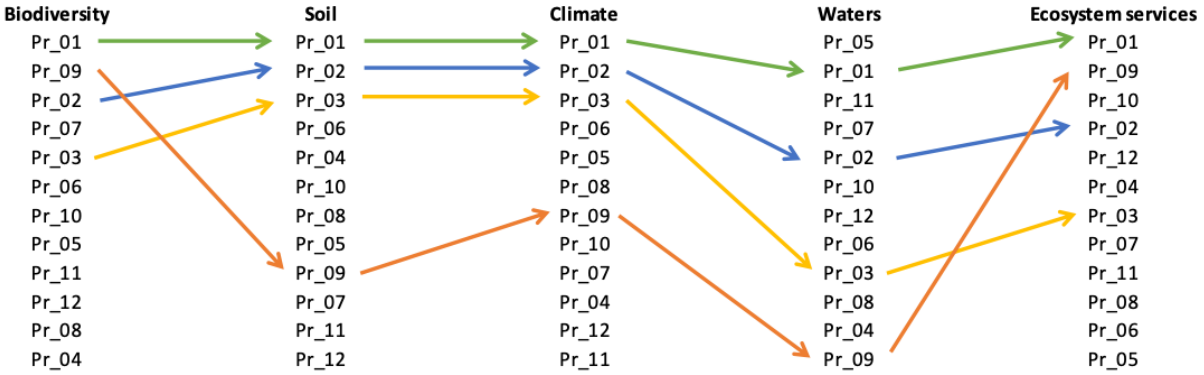

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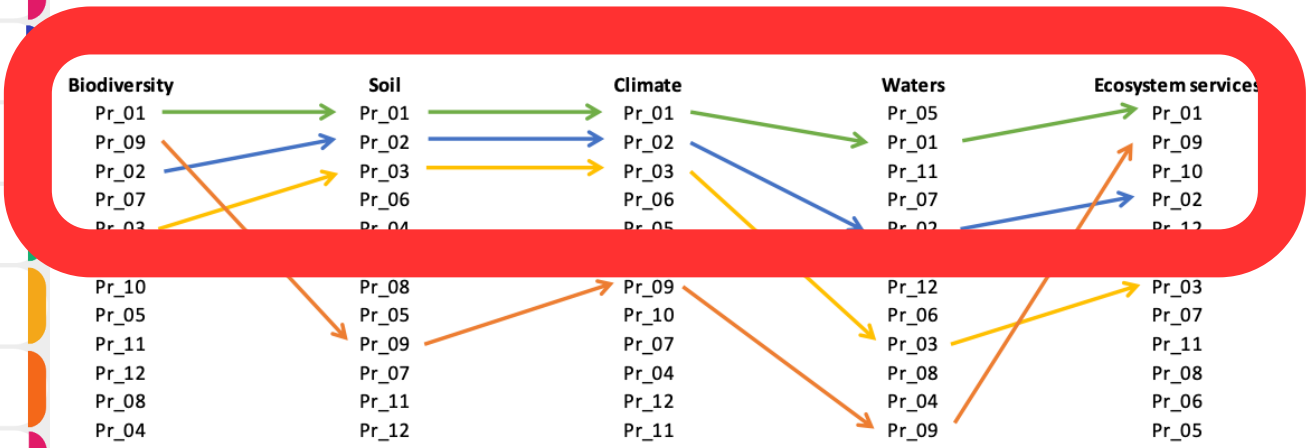

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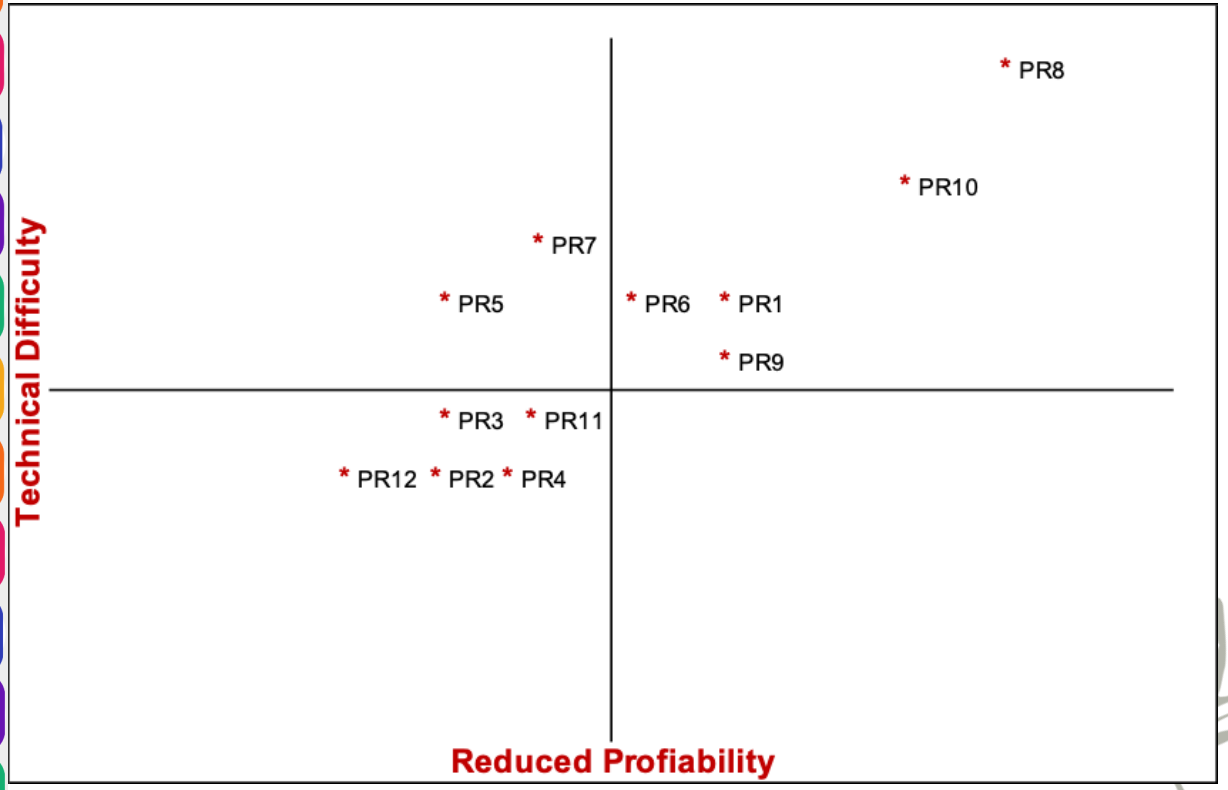

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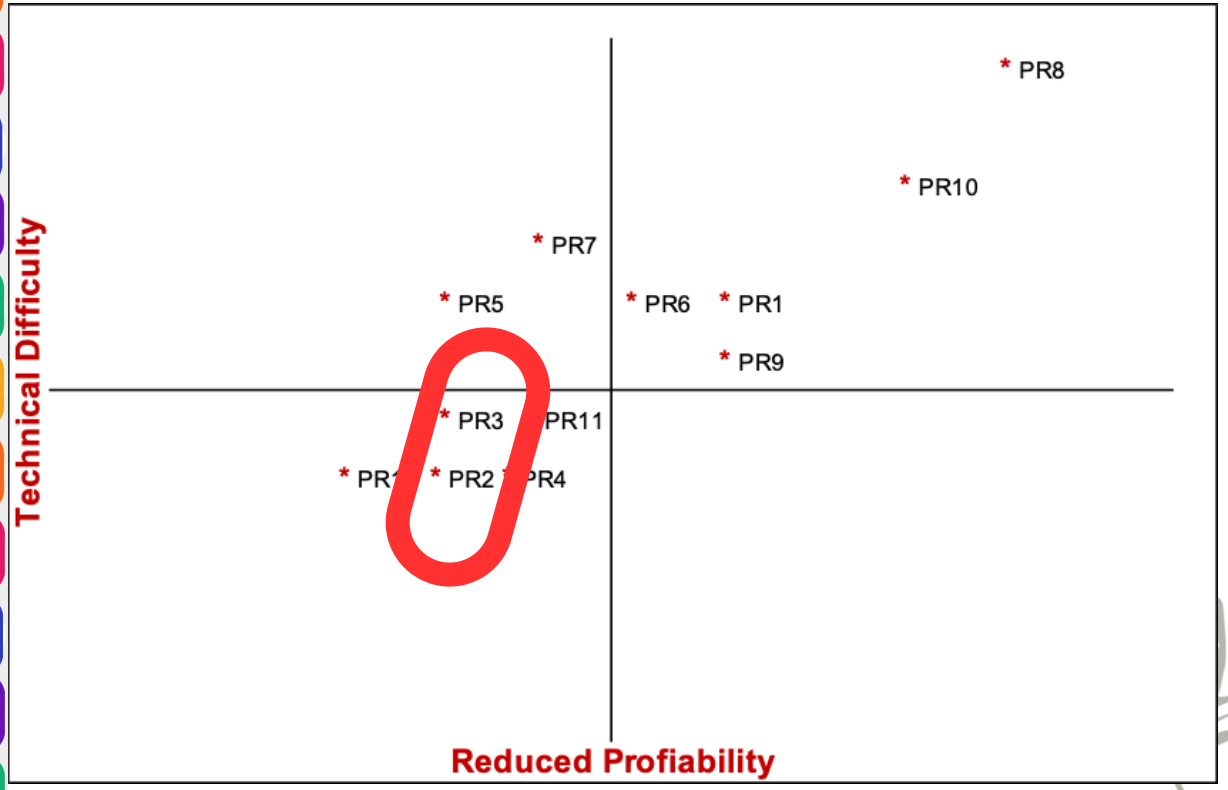

- There are three practices with the best scores in the rating according to the five categories evaluated.
- First, the use of cover crops from pruned plant residues. This practice is considered to have a neutral impact on profitability upon adoption and involves easy implementation.
- Then, the practice of minimizing mechanical soil disturbance (no-till cropping).

- Finally, although with a notable distinction, is the implementation of multifunctional margins and buffer zones with various plant species.
- This practice has a slightly reduced impact on profitability, as it requires minimal support from the public administration and poses a low implementation difficulty, however technical advisory support is needed.

FUTURE RESEARCH

- Further analysis will be conducted on the six top-rated practices, considering both rainfed and irrigated farming systems.
- A separate investigation will delve into the motivations behind the adoption of these selected practices.

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THANK YOU FOR YOUR ATTENTION

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