

Combining Grazing Management and Targeted Soil Amendments in Montado systems

Problem encountered and objective

Grazing animals play a central role in land management, but soil degradation and nutrient imbalances remain common challenges. In many cases, grazing management alone is not sufficient to improve soil health, particularly when soil conditions are not well understood. The objective is therefore to assess soil conditions through sampling and laboratory analysis, and to use these results to guide more targeted and effective soil management decisions.

Main Results and Outcomes

Soil samples were collected and analysed for key parameters such as pH, organic matter content and nutrient levels. The results showed specific limitations, including nutrient deficiencies and imbalances that could not be solved through grazing management alone. Based on these findings, soil corrections were selected in a targeted way, addressing the identified limitations instead of applying standard products.

Practical recommendations

The combined approach of soil analysis followed by tailored interventions proved essential to support more informed decision-making. Grazing contributes to biomass control and nutrient redistribution, while soil corrections help address underlying soil limitations identified through laboratory results. This integration allows farmers to optimise inputs, avoid unnecessary costs, and adapt management practices to sitespecific conditions.

The results highlight the importance of using soil analysis as a first step in decision-making. Interpreting laboratory data enables the selection of appropriate amendments and the adjustment of grazing strategies, such as stocking rates or timing, in order to minimise soil compaction and improve soil functioning. Regular monitoring is also crucial, as soil improvements occur gradually over time and require continuous evaluation and adaptation.

Overall, this work demonstrates that linking soil analysis with practical management decisions is key to improving soil health in grazing systems and increasing the efficiency and sustainability of interventions.



ABOUT SOILVALUES

SoilValues is a Horizon Europe project that will contribute to the development of successful soil health business models across the EU to improve soil quality and provide land managers with the necessary incentives.

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USEFUL LINKS

 <https://soilvalues.eu/>

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 <https://zenodo.org/communities/heuropesoilvalues>

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