

Proposals for the realization of Master's projects on soil-plant relationships

1) Characterization of the soils under olive groves in the Somontano de Barbastro

The work consists on the description, sampling, analysis and diagnosis of the fertility of the soils under olive groves in the region of Somontano de Barbastro (NE-Spain). Soil profiles will be sampled under different soil-forming factors. Soil pits will be described according to FAO guidelines and the morphological characteristics of each soil horizon will be reported. Soil samples will be air-dried and sieved (mesh size 2 mm) to determine the percentage of gravel (> 2 mm) and fine earth (< 2 mm). Laboratory analyses were performed on the fine earth fraction by standard procedures. Soils will be classified according to the WRB (IUSS, 2015) and Soil Taxonomy (Soil Survey Staff, 2014) systems.

2) Impact of prescribed fires on soil properties and plant recovery in mountain areas

This research line pursues the following aim: to check the effects that prescribed fires produce on soil physical, chemical and biological properties. The research has also been focused on post-fire plant recovery and erosion mitigation measures. The studied environments include the mountains of the Iberian system and the Pyrenees, as well as the semi-arid landscapes of the middle Ebro basin.

See: <https://fuegosol.weebly.com/>

Contact data:

Dr. David Badía

badia@unizar.es

Department of Agrarian and Environmental Sciences

Technological College. Agri-food and Environment of Huesca

University of Zaragoza

Member of *The Institute of Research into Environmental Sciences of the University of Zaragoza*, (Instituto de Investigación en Ciencias Ambientales de la Universidad de Zaragoza (IUCA))