

Forest management impact in Quercus sites (WP5)

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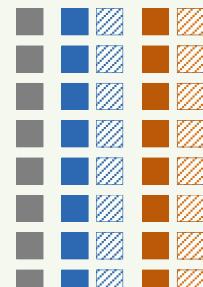
Objectives: to study **i)** the effects of forest management on biological (e.g. biodiversity and biological functioning) and physico-chemical parameters of soils; **ii)** the recovery of soils and ecosystem after forest disturbance; and **iii)** the effect of post-disturbance management (i.e., slash addition) on the recovery of forest soils.

STUDY SITES

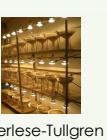
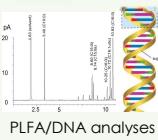
Litter input



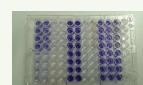
Common experimental design



Soil biodiversity



Soil chemistry and enzymes



Soil respiration and microclimate

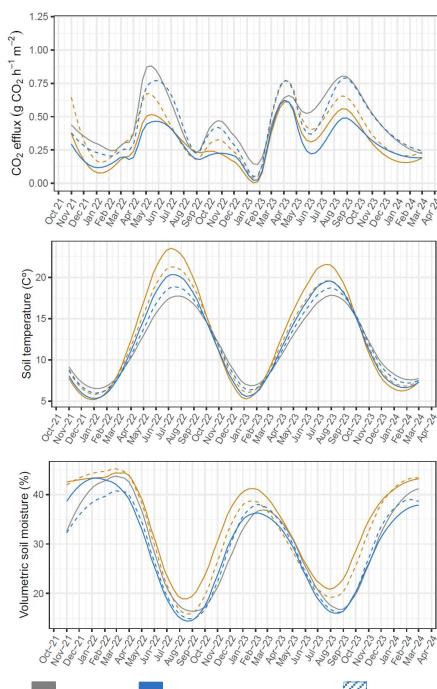


Litter decomposition

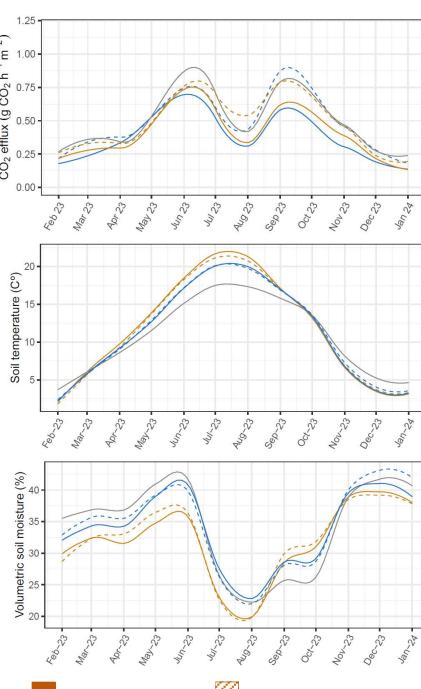


RESULTS

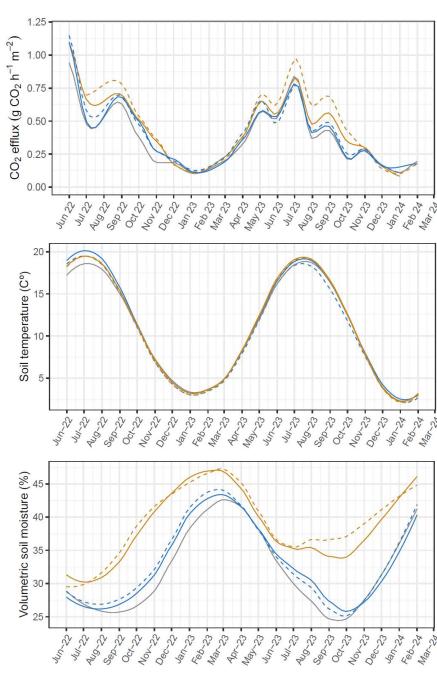
Gamiz (Spain)



St. Christol d Albion (France)



Codlea (Romania)



SUMMARY

Forest management differently affects soil respiration and microclimatic conditions on the three sites:

- In general, the addition of slash increases respiration, more evident in the Spanish site.
- Soil temperature increases in the clear-cut treatment, especially without slash in summer in the Spanish and French sites.
- Soil moisture is lower in the clear-cut treatment in the French site and higher in the clear-cut treatment in the Romanian site.