Background and Aim

In the traditional silvopastoral systems of the Portuguese montado, operational practices oriented to the tree, crop or animal management may influence several ecosystem components.

• Annual cork growth correlates with precipitation (e.g. Caritat et al. 2000, Oliveira et al. 2016).

• No significant effects of shrubs presence on tree radial growth (Caritat et al. 1999).

OUR HYPOTHESIS:
Different understory management options have impact on cork annual growth.

Material and Methods

Dendometric tree variables (e.g. dbh) were measured and cork samples were taken at each cork debarking year: 2003 and 2012. For each sample, cork thickness and complete annual cork rings were measured with the image analysis software ImageJ (Ferreira & Rasband, 2010).

Results

Cork thickness decreased from 2003 to 2012, irrespectively of the treatment. This may be related to a decrease of total precipitation.

Conclusions

It remains unclear if the differences are due to a positive effect of the lupine application or a negative effect of the understory presence. As different results were obtained in the two blocks, it suggests soil characteristics should be considered in further research.

References:

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