

**PA4.16 Poster****The stem growth of *Quercus ilex* subs. *ballota* (Desf.) Samp. and *Quercus suber* L. in the province of Huelva. Influence of clima, soil, silvicultural and spatial parameters**

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*Quercus ilex* and *Quercus suber* are two widely distributed species in the Mediterranean basin and are also the species with a bigger area in the Iberian Peninsula. In Southwestern these oaks are managed as a traditional agroforestry system called “dehesa”, created and maintained by humans, but with a high ecological and socioeconomical value. The objective of this study is to describe the pattern of stem growth of *Quercus ilex* subs. *ballota* (Desf.) Samp. and *Quercus suber* L. among and within years and to define the climatic, edaphic, spatial and silvicultural (soil and pruning treatments) that influence this model. In order to achieve this objective, we have established three experimental plots in different locations of the province of Huelva (SW Spain), where pruning and soil treatments have been applied.

The monthly growth of oaks for the period 2004–2008 has been measured in the plots, using band dendrometers; climatic parameters have been obtained from weather stations; continuous soil moisture has been measured with buried sensors and spatial data have been taken from a Digital Elevation Model.