

Population Genetics and Genomics of Forest Trees: from Gene Function to Evolutionary Dynamics and Conservation

October 1st – 6th, 2006
Alcalá de Henares, Madrid. Spain

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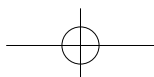


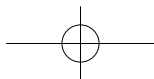
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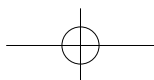
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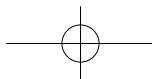
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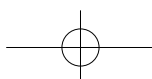
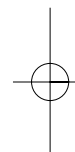
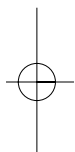
SUMMARY

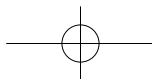
INTRODUCTION

SCIENTIFIC PROGRAMME

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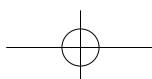
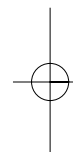
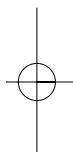




***Quercus suber* geographic variation: preliminary results of the Iberian Península provenance trials**

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Cork oak (*Quercus suber* L.) has a great social and ecological importance in the Iberian Peninsula. Yet, a large proportion of cork oak stands is old and natural regeneration is often problematic. During the last decade large areas were reforested with this species in the context of the Common Agriculture Policy (CAP) both in Portugal and Spain. Survival rates were often low due to inappropriate nursery and installation techniques, as well as to the use of unsuitable genetic material. In fact, the cork oak adaptability to environmental conditions is poorly understood; moreover climate change scenarios foreseen enhanced water deficits in the Mediterranean region. In order to allocate the most adequate seed sources to each set of climatic conditions in future afforestation activities and considering that an important source of variation in the characteristics related with adaptability may be at the provenance level, we evaluated inter-provenance variability and phenotypic plasticity for growth, survival, morphological structure and drought tolerance five years after plantation, in four test sites located across the Iberian Peninsula and covering a wide range of ecological conditions. Such trials are part of a multi-locality provenance test belonging to a Network that was brought up by Concerted action "European network for the evaluation of genetic resources of cork oak for appropriate use in breeding and gene conservation strategies" where 35 cork oak populations covering all the natural distribution area are represented.



NOTES:

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KEYWORDS:

oak, genetic variability, adaptability, phenotypic plasticity