Workshop 4
Poster presentation
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Conservation of genetic diversity in artificially regenerated holm oak populations

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Reforestation with autoctonous species should take in account the control of the seed-lots origin in order to preserve variability and geographical structure of genetic diversity in forest species.
In order to provide empirical data, genetic composition of artificial populations of holm oak (*Quercus ilex* L. s.l.) and their natural seed-origin populations were analysed with six nuclear microsatellite loci. Populations have been selected from Andalusia (Spain) and Sicily (Italy).
We have measured a reduction of 25-30% in allelic richness in artificial stands compared with native ones. This is probably an effect of inappropriate forester seed collection strategy limited to a few trees.
In the Andalusia study case genotype assignment analysis showed that the regenerated stand has higher affinity with the seed-origin population compared to the natural population surrounding the forestation site. This result suggests a detectable genetic differentiation between the latter population and the seed-origin one, underlining the advisability of collecting reforestation material from the closest areas.