

## GENETIC VARIABILITY IN SICILY POPULATION OF *QUERCUS SUBER*

R. TUPONE\*, A. DE CARLO\*\*, G. EMILIANI\*, D. PAFFETTI\*, C. VETTORI\*\*, L. SAPORITO\*\*\*,  
R. GIANNINI\*\*\*

\*) Department of Environmental and Forestry Technology and Sciences, University of Florence, Via San Bonaventura 13, 50145 Firenze, Italy

\*\*) Institute of Plant Genetics – CNR, Research Division Florence, Via Madonna del Piano 16, 50019 Sesto Fiorentino (FI), Italy – cristina.vettori@igv.cnr.it

\*\*\*) Regione Siciliana, Azienda Regionale Foreste Demaniale, Via della Libertà 97, 90143 Palermo, Italy

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Sicily is a region with an elevated biodiversity but there is a high risk to lose it in consequence of population reduction and fragmentation of the natural distribution of several forest tree species. This is particular true for those species as *Q. suber* which distribution is fragmented and restricted to specific areas.

Therefore, it results necessary to investigate how the genetic variability is distributed among and within the populations. Particularly interesting could be to study the situation of this species in the Mediterranean islands as these are particular ecosystems in which conditions as geographic isolation, and genetic drift could influence the genetic variability and therefore the genetic structure of the populations.

The aim of the present study is to investigate the genetic variability of Sicily populations by nuclear microsatellites.

Five Sicily populations distributed from west to east, one Sardinia population, one Tuscany populations, and one France population (Esterel) are analysed. The results on genetic variability are reported and the data are discussed considering the conservation priority for this species.

Preliminary results, obtained by the analyses of two microsatellites, indicates that the allelic pool of Sicily populations is also present in the other populations analysed, and that the genetic haplotypic variability within Sicily populations is comparable to that found in the other populations.

These data indicates that it is extremely important, in future conservation strategies, to maintain the actual genetic variability present within Sicily populations.