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Tipiditappi

Sughero d'albero fatto a pezzetti,
tipi di tappi , quelli che vuoi.
Tagliali lunghi, tagliali stretti,
tipi di tappi, fatti da noi.
Taglialo bene, taglialo tondo,
tipi di tappi, quanti ne vuoi.
Tappi di sughero per tutto il mondo,
tipi di tappi fatti da noi.
(Cecchi-Tognolini, Filastrocche e Canzoni)

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PROVENANCE BEHAVIOUR IN THE CORK-OAK INTERNATIONAL NETWORK TRIALS FAIR 202

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The international network of provenance trials in cork-oak was established as a result of the EU Concerted Action FAIR 202, 1995-2000. 34 provenances were selected in the natural range of cork oak and trials were established in 1996/97 in France, Italy, Portugal, Tunisia and Spain. This study compares the behavior of provenances in the trials of Grighini (Sardinia), Monte Fava and Quinta da Nogueira (Portugal), Monfrague (Spain), Les Maures (France) and Tebabe (Tunisia). Observations on total height (Ht) and diameter at beast height (DBH) are used to compare and assess adaptation within sites and among sites. Climate at the provenance site seed collection and at trials sites is used to characterize the behavior of provenances. The results reveal that the provenances, ES 5 (1063 mm), IT16 (910 mm), IT12 (937 mm), 937, TU32 (948 mm), FR2 (958 mm, FR1 (963 mm, MA31 (970 mm), ES8 (993 mm) are able to adapt and show good growth under conditions of decrease of total annual rainfall and strong decrease in case of TU33 (1610mm), MA27 (1280 mm). On the other hand provenances coming from sites of low precipitation not always show relevant performance in sites of higher precipitation as IT14 (448 mm), ES10 (455 mm), MA29 (479 mm). These results are discussed in the impact climate change (CC) may have in adaptation and evolution of cork oak. Our results show that cork oak will not face serious threats if drought increases in the Mediterranean region, since some populations are showing capable to cope successfully with decrease of total precipitation. The ongoing results from the cork-oak international network trials FAIR 202 show the importance of this line of research and the need to establish harmonized criteria on data collection to enhance the comparability. As cork quality is a key issue on cork-oak economic sustainability it is critical to establish harmonized criteria in cork harvesting for further studies to compare cork quality with special reference for the assessment of the genetic control of cork production and heritability.

Keywords: *Quercus suber*, Climate Change, adaptation, selection, plasticity and epigenetics