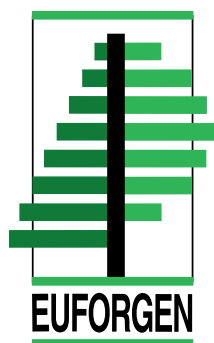




# Mediterranean Oaks Network

## Summary of the first meeting

Antalya, Turkey, 12-14 October 2000



European Forest Genetic Resources Programme (EUFORGEN)

## Summary of the Meeting

### Opening

Mr. Yavuz Yüksel, vice Undersecretary of the Ministry of Forestry, welcomed the participants and underlined the importance of protecting the genetic diversity of forests. He described the forest cover in Turkey and the efforts of his country to conserve plant genetic diversity through both *in situ* and *ex situ* measures. Large conservation projects were launched with the assistance of the World Bank. He also indicated that Turkey has 18 oak species (3 of which endemic) and he described the factors that currently threaten oak forests. He underlined the important role of oaks in Mediterranean forest types.

He added that he is sure that some of the threats are common to all Mediterranean countries and that it is very important to act in a coordinated fashion at an international level. He announced that Turkey has initiated the procedure to become full member of EUFORGEN and he hoped that this would happen before the end of the year. Finally, he wished the participants a successful meeting and a good stay in Turkey.

Maria Carolina Varela, chair of the Network briefly outlined the history of the S2 resolution, of the EUFORGEN Programme and of the *Quercus suber* Network. She then introduced the scope of the new Network.

She welcomed the participating countries (13) and thanked the National Coordinator Hasan Özer, the Network member Nihal Özel, the local organizers and the Turkish Government for the excellent organization and for their participation, which shows the importance of the collaborative work on forest genetic resources.

Simone Borelli, of the EUFORGEN Secretariat, gave a brief introduction on Phase II of EUFORGEN, a brief summary of the results of the most recent meetings of other networks, highlights on upcoming meetings and activities in progress in the Programme at large.

The agenda of the meeting was adopted.

### History and main outputs of the *Quercus suber* Network

In order to provide background information on the past activities of the *Q. suber* Network, the relevant members were asked to provide highlights of progress in the gene conservation in their respective countries.

In France, the main progress was made in research on populations. Genetic diversity and origin of the populations were studied with isoenzymes and cpDNA and two separate groups, one related to Spanish populations and the other to Italian ones, were identified. Also, some introgression from holm oak was found. Recently, new cork oak stands are being established in some regions.

In Italy, many populations are degraded and have been invaded by other Mediterranean species. As a result, the Ministry of Agriculture recently created a Task Group on the restoration, reforestation and the conservation of gene resources of this species. Subsidies are provided to owners who want to plant cork oak and in some regions, nurseries are being developed and local types are being collected for reproduction. The cork oak industry is also very interested in the protection of natural cork products.

In Morocco, the species is in regression due to problems with natural regeneration. Field tests were carried out in relation to the EUFORGEN Network and the EU FAIR project - European Network for the evaluation of genetic resources of cork oak for appropriate use in breeding and genetic conservation strategies. Thirty provenances and 88 progenies from seven countries were tested. The results of this work were presented in detail. Also studies on introgression have been carried out in collaboration with INRA.

To promote cork oak gene conservation, Portugal has been divided into 7 homogeneous provenance regions and minimum standards for conservation have been defined. Provenance trials have been carried out to assess different ecological and edaphic requirements. The demand for cork is increasing and reproductive material has to be imported, however origin is not always known.

In Tunisia, the cork oak stands have quite high economic importance, but surface is in regression. The stands are highly disturbed and are declining due to lack of regeneration. More systematic management started in 1970 and standard rotations were established. Regeneration is carried out through direct sowing and seedlings. Research is currently addressing the problems related to acorn storage and plantation techniques.

#### ***EU-FAIR project on the conservation of genetic resources of cork oak***

The EU funded FAIR project was briefly presented. The overall objective was to carry out provenance trials and progeny tests using material from all countries in the distribution area. Acorns were collected and sent to Portugal. Plants were produced and trials set out in all participating countries (except Algeria). The network of trials has been quite successful and for the first time represents the entire natural distribution area. Scientific results have shown that gene conservation is compatible with economic management. A management model was proposed and will possibly be included in the technical guidelines.

#### ***Case study on genetic conservation in Spain***

Pilar Jimenez presented the results of her research on genetic variation of *Quercus suber* in Spain. An isoenzyme analysis was carried out on 22 populations. Allelic richness, number of polymorphic loci identified and heterozygosity were measured. The most diverse populations were those from south of Spain. Differentiation patterns were examined. The results showed that in some marginal populations there is a strong founder effect. It also appears that geneflow and population size maintain diversity and that marginal populations are important and should be included in conservation programme.

#### ***Web page***

Simone Borelli briefly presented the new structure of the EUFORGEN Web page and asked network members to provide comments and suggestions. It was agreed to follow the same layout as the one used for other networks and to include country reports and country updates as appropriate.

#### ***Bibliographic databases***

Simone Borelli presented the proposed EUFORGEN bibliographic database on gray literature. Network members endorsed the idea of having a single database that would cover all species that are included in the EUFORGEN programme and would be accessible via the Internet. This would also facilitate access to the general public. An Access form has been developed and will be circulated to Network members by 31 October 2000. Excel and Word versions are also available, but contributors are encouraged to use Access whenever possible. It was clarified that each member should restrict contributions on gray literature to those available in his/her own country. However, in the case of Mediterranean oaks, international references will also be included in the database.

#### ***Technical guidelines***

There is an ongoing discussion within the Networks on the preparation of a EUFORGEN "manual" on general principles of gene conservation of forest trees. This issue will be discussed at the upcoming Inter-Network Meeting. As a result technical guidelines for individual species would be restricted to describing the biology, ecology and genetic

knowledge of the particular species or group of species and include practical management guidelines directed to practitioners.

The existing version of the technical guidelines was discussed and it was agreed that further clarification is needed on the following points:

- Overall objectives of the technical guidelines should be clarified
- The rationale of MPBS (choice of material could be based on expected future changes) should be explained
- A justification for proposed method for conservation of associated species should be added
- Density could be used as a criteria together with age classes
- Marginal populations should be considered
- Minimum standards should be further developed and included
- Support for natural regeneration and assisted natural regeneration when appropriate
- Both *ex situ* and *in situ* methods should be considered

Maria Carolina Varela and Gösta Eriksson will prepare and circulate a new draft of the relevant chapter by 31 March 2001.

## **Priorities for the Mediterranean Oaks Network**

### ***Introduction***

Francesco Spada made a general presentation on the current situation of oaks in the Mediterranean. He analyzed the origin of the existing subgenera and debated whether they actually present typical Mediterranean characteristics. He also tackled the issue of taxonomy and of the problems created by a lack of communication and exchange between botanists in the past. He presented anecdotal evidence on some of the most amusing cases. He underlined the importance of gene conservation and of genetic research in finally clarifying systematics of the oak genus.

### ***Country reports***

All Networks members presented a report on the current status of Mediterranean oaks in their respective countries and will provide the Secretariat with an electronic version of the report itself by 15 November 2000.

### ***Working sessions***

After some discussion on methodology, participants were divided into two groups to discuss a number of issues related to widely occurring (group 1) and rare and threatened species (group 2). The groups were asked to respond to a number of questions related to the characteristics of the species, existing threats and current needs and priorities for conservation. The results of the working groups are summarized in annex 1.

### ***Workplan***

The working groups then reconvened to discuss which activities the Network could carry out in the coming years. Five main areas of involvement (research, information, legal and policy issues, technical guidelines and public awareness) were discussed in the two working groups. Each working group proposed a set of activities and these provided the basis for workplan below, agreed during the final session of the meeting.

### ***Public awareness***

The idea of a public awareness video was launched. However, this would require some

initial investment and some effort on the part of each country to collect footage on local forest species. Eman Calleja offered to prepare a brief feasibility study. The proposal will be circulated to network members by 31 December 2000.

There was general agreement on the preparation of a Photo CD, which would include images on all Mediterranean oaks. Each country will be responsible for providing slides on different aspects (full tree, landscape, traditional uses, morphological characters, etc.) of local species as soon as they become available. Nihal Özel offered to be in charge of collecting the images and transferring them to CD Rom. The collection would be available to all members to be used for different PA material, publications, web pages etc. The Secretariat will provide existing format by 15 November 2000.

It was also decided that a EUFORGEN brochure on Mediterranean oaks directed at a general "forestry" public and decision makers would be produced. Luís Gil and Maria Carolina Varela offered to prepare a first draft of the text that will be circulated by 15 March 2001.

### **Information management**

A proposal was made to produce a database of genetic resources of Mediterranean oaks. This would include information on stands of relevant species in different countries. However, a prerequisite for the development of the database is the formulation of descriptors for Mediterranean oaks stands. Alexander Alexandrov offered to prepare a draft proposal, which will be discussed at the next Network meeting. The draft will be circulated one month before the meeting itself. The Secretariat will provide copies of the descriptors developed for *P. nigra* and Noble Hardwoods.

The database of stands will follow as soon as the descriptors are finalized.

It was also decided to collect existing distribution maps of Mediterranean oaks. Maps will be provided to the Secretariat for scanning and posting on the Internet by 31 March 2001.

### **Technical guidelines**

A consensus was reached that, since there is limited knowledge of the ecological and genetic characteristics of most of the species, the elaboration of technical guidelines for Mediterranean Oaks is premature. Therefore, for the time being the Network will concentrate on finalizing those for cork oak.

### **Legal issues**

The question of regulations of use of reproductive material for afforestation was raised. It was decided that this issue would be best tackled at the level of the Inter Network meeting and of EUFORGEN in general.

### **Research needs**

A number of research needs were identified:

- Geneflow in species made rare by fragmentation caused by human impact (with microsatellites and/or other markers)
- Geneflow in naturally rare species
- Ecological conditions for growth of rare oak species
- Better clarification of taxonomic status of Mediterranean oaks
- Characterization of genetic structure based on adaptive traits
- Role of hybridization for gene conservation
- Impact of silviculture *sensu lato* on genetic composition
- Delimitation of regions of provenance
- Wood properties and Non Wood Forest Products

In view of the complexity of issues to be addressed it was decided to prepare concept note (2-3 pages) on possible research projects that would involve the largest possible number of countries. Luís Gil agreed to develop a proposal on *Q. ilex* and Vlatko Andonovski and Alexander Alexandrov would prepare a similar proposal for *Q. pubescens* or *Q. frainetto*.

Gösta Eriksson suggested a COST action as a possible tool to develop these proposals further. This would also provide the necessary interdisciplinary focus.

#### ***Election of Chair and Vice Chair***

The Network proposed to have both a Chair and a Vice Chair, which would represent both the eastern and western part of the Mediterranean Basin. Luís Gil was elected as Chair of the Mediterranean Oaks Network and Vlatko Andonovski was elected as Vice Chair.

Both the Network members and the Secretariat expressed their sincere gratitude to Maria Carolina Varela for her commitment and efforts in the implementation of the S2 Resolution and in ensuring the success of the *Q. suber* Network and its smooth transition to the Mediterranean Oaks Network. The main role Maria Carolina Varela played in the provenance trial of cork oak and of course, her pleasant personality, were also underlined.

Maria Carolina Varela thanked all the members for the support and wished the Networks members a successful continuation of activities.

#### ***Date and Venue of the next meeting***

The next meeting of the Mediterranean Oaks Network will be held in Spring 2002. It was proposed that Malta hosts the meeting, but confirmation will follow. In the event this first proposal should not be successful, Macedonia FYR also offered to organize the meeting.

#### ***Adoption of the report***

The report was adopted and distributed to the participants.

#### ***Conclusions***

Jozef Turok, on behalf of IPGRI, thanked Hasan Özer and Nihal Özel for the excellent organization of the meeting. Luís Gil also thanked the local hosts for their kindness and declared the meeting officially closed.

## Programme

Wednesday 11 October - arrival of participants

Thursday 12 October

### Opening of the meeting:

- 9:00 Welcome (Host country and Chair of the Network)
- 9:15 Introduction (IPGRI)
- 9:30 Adoption of the agenda and nomination of rapporteurs

### Presentation of the history and main outputs of the *Quercus suber* Network:

- 9:40 Highlights on progress made in countries (R. Lumaret, F. Spada, H. Sbay, M. C. Varela, L. Gil, N. Akrimi)
- 10:30 Case Study: Conservation of genetic resources of cork oak in Spain (P. Jimenez)
- 11:00 Coffee Break
- 11:30 Web Page (EUFORGEN Secretariat)
- 11:45 Bibliography (EUFORGEN Secretariat)
- 12:00 Technical guidelines (EUFORGEN Secretariat)
- 12:30 EU-FAIR Project "European network for the evaluation of genetic resources of cork oak for appropriate use in breeding and gene conservation strategies" (M. Carolina Varela)
- 13:00 Lunch

### Assessing priorities for the Mediterranean Oaks Network:

- 14:30 Genetic diversity of Mediterranean oaks (F. Spada)
- 15:00 Country reports on Mediterranean oaks (All countries, approx. 10' each)
- 16:30 Coffee break
- 17:00 Country reports - continued
- 17:30 Presentation of the priority table (EUFORGEN Secretariat)
- 17:45 General discussion on needs and priorities

Friday 13 October

- 8:30 Working sessions on conservation strategies for different groups of Mediterranean oaks (economically vs. ecologically important, widely occurring species vs. rare and threatened species)
- 10:30 Presentation of results of the working groups on conservation strategies
- 11:00 Coffee break
- 11:30 Working sessions on the activities proposed for the workplan (e.g. information management, legal and policy issues, technical guidelines and methodologies, public awareness tools)
- 13:00 Lunch
- 14:30 Presentation of results of the working groups

- 15:00 Development of the workplan for the Mediterranean Oaks Network
- 16:00 Coffee break
- 16:30 Development of the workplan (continued)

**Saturday 14 October**

Field trip (1/2 day)

- 15:00 Election of Chair and Vice Chair
- 15:30 Date and place of next meeting
- 16:00 Coffee break
- 16:30 Any other business
- 17:00 Adoption of the report
- 18:00 Conclusions and closure of the meeting

**Sunday 15 October** – departure of participants

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