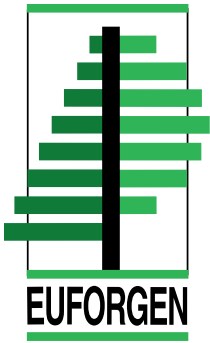




***Populus nigra* Network**

Summary of the first meeting

Izmit, Turkey 3-5 October 1994



European Forest Genetic Resources Programme (EUFORGEN)

Introduction

The first meeting of the *Populus nigra* Network was held at Izmit, Turkey from 3 to 5 October 1994 in parallel with the 37th meeting of the Executive Committee of the International Poplar Commission (IPC).

On 3 and 4 October, the participants attended the meeting of the Breeding working party of IPC. On 4 October Dr E. Frison gave a presentation on the European Forest Genetic Resources Programme (EUFORGEN) and Dr F. Lefèvre presented the history of the creation of the *Populus nigra* Network. In the evening of the same day an information meeting was attended by 18 participants from 11 countries during which the functioning of EUFORGEN in general and the *Populus nigra* Network in particular were discussed.

On 5 October the Network meeting was attended by 12 participants from 10 countries (see list of participants). The meeting was opened by E. Frison who welcomed the participants on behalf of IPGRI. He stated that this first meeting of the *Populus nigra* Network was also the first meeting within the framework of EUFORGEN. He thanked the Turkish Government and the local organizers for having made it possible to hold this first meeting in Izmit and expressed his wishes for a successful meeting.

He further stressed the fact that this Network belonged to the participants and that its success would depend on the enthusiasm and dedication of the participants. IPGRI's role in providing a secretariat is mainly to act as a facilitator. Dr Frison also mentioned that the future of EUFORGEN will depend on the number of countries joining the programme, a minimum budget being required to make it viable. For this first meeting of the Network, the participants from countries which had not yet signed the Letter of Agreement to join EUFORGEN were exceptionally sponsored by the IPGRI budget in order to allow the Network to start its activities.

Dr Tunçtaner welcomed the participants to Turkey and expressed its satisfaction at seeing the first meeting of the Network held in Izmit.

Dr Frison also thanked FAO for having allowed this meeting to take place on the occasion of the meeting of the Executive Committee of the International Poplar Commission and thereby to ensure a close collaboration between the Network and IPC. He hoped that Mrs Palmberg-Lerche would have the opportunity to address the Network on behalf of FAO.

Following these introductory statements, Dr F. Lefèvre was unanimously elected as Chairman of the Network and Dr L. Cagelli as Vice-Chair.

The draft agenda was adopted and the participants briefly introduced themselves.

Synthesis of the national activities

Before the meeting, the participants were asked to prepare a brief, informal presentation of the national activities for the conservation of *P. nigra* resources, some of which were presented in greater detail during the session of the Breeding Working Party of IPC.

The situation of *P. nigra* is highly variable among the countries. Turkey has a unique situation where *P. nigra* commercial stands represent 50% of the annual poplar production. Dense plantations along the fields and roads are used for the production of small logs for construction; except for these plantations, native stands are not frequent in that country. Plantations of pure *P. nigra* selected clones are also found in Hungary and the Netherlands. In contrast, the occurrence of native stands or natural regeneration is particularly scarce in Belgium, Germany and in the Netherlands, because of intensive agriculture on the riparian sites. In Bulgaria, the native stands of *P. nigra* were overexploited because of particular patterns in the wood which make it attractive for veneer, and only a few stands remain on the islands of the Danube.

The national programmes for the conservation of *P. nigra* often started more than 20 years ago (Belgium, Bulgaria, France, Germany, Hungary, Netherlands, Turkey), and some countries have recently developed new programmes (Croatia, France, Italy, the Netherlands, Spain, Turkey). Inventory of the resource is often the first step, and repeated inventories of *P. nigra* give an insight of the threat to the species (more than 50% of the stands have disappeared in the middle part of the Ebro Valley, in Spain, during the last 40 years). Early inventories specific for *P. nigra* exist on a national scale in Germany and Hungary and have to be updated; in other countries this work is in process (France, Spain). Depending on the country, nonexperts are involved in the inventory (mainly nongovernmental nature conservation organizations); therefore, some guidelines are needed for the identification of species. This is difficult because of the risk of introgression from the cultivated interspecific varieties and the difficulty of distinguishing pure *P. nigra* and introgressed forms. An inventory is planned both at the single tree level in collections and at the stand level (pure stands or mixed stands).

Populus nigra is actively used in the breeding programmes, sometimes as a pure species but often as a parent for Euramerican hybrids, and therefore a lot has been done on *ex situ* conservation of the species in the breeding institutes. Three levels of *ex situ* conservation are generally used: networks of trial plantations, genebanks as stool-beds, genebanks as adult tree plots. Passport data, characterization data and evaluation data (mainly resistance to various diseases) are often available for this material and sometimes stored in computerized databases (France, Italy). Intraspecific crosses, within or among provenances, have often been achieved to enlarge the genetic diversity. A particular problem arises when it is necessary to renew old adult collections (cost in space, time and money). In such a situation, and when starting *ex situ* programmes, guidelines are needed for a safe and economic conservation strategy.

In situ conservation is also used (Bulgaria, Croatia, Hungary, the Netherlands, Spain). This directly concerns particular *P. nigra* stands or individual trees, or it concerns a particular site that includes *P. nigra* among other species. Protected areas are in public and private lands, with possible uncertainty about the status of this land in the future (Hungary). Many different legal and technical measures are taken for these protected areas, which have to be synthesized. The plantation of Euramerican hybrids is sometimes forbidden in the vicinity of the protected area. A further study of the introgressive process and its consequences might be needed since such measures may have important economic and social consequences. For the establishment of plantations for the purpose of *in situ* conservation, the objective of conservation excluding commercial production has to be officially recognized in order to be able to grow unregistered material in the nurseries.

Workplan

From the review of the national activities concerning the conservation of *P. nigra*, and after consideration of the draft workplan established in Viterbo in 1993, a series of practical objectives has been identified, and the coordination of the tasks was distributed among the Network members. The various tasks for members are highlighted in bold in the text.

1. A standardized descriptor list for *P. nigra* stands
(**Coordination: R. Schulzke**)

This is the first step required to initiate an inventory using a standardized language. It is proposed to base the development of such descriptors on those used for other species. The list does not have to be very long. **A preliminary list will be sent by Dr Schulzke to the network members before 1 December 1994 for revision. Revised lists and comments should be sent back to the coordinator by 15 January 1995. A revised list should be available by the spring of 1995 and will be discussed at the next meeting of the Network.**

2. Identification sheet for *P. nigra*
(**Coordination: F. Lefèvre**)

It was agreed that a short (2 pages) identification sheet for *P. nigra* would be developed. Special emphasis will be placed on the distinction with Euramerican hybrids and possible introgressive forms.

F. Lefèvre will coordinate the production. A preliminary list of characters and illustrations was distributed to Network members. It was agreed to include the following illustrations:

- range of *P. nigra* tree shapes in the wild;
- twigs and buds;
- leaves from different types of branches;
- bark designs.

All members are required to send comments and illustration to F. Lefèvre by 1 December 1994. These identification sheets are meant for people making inventory, who are not necessarily *P. nigra* specialists.

A similar information sheet will be developed for *P. nigra* at the nursery stage. This will mainly include leaf shapes in the nursery, buds and twigs (especially lenticelles).

J. van Slycken offered the services of a professional artist to make drawings for the information sheets if required.

Selected illustrations will be sent to Belgium by F. Lefèvre before the end of December 1994.

The two types of identification sheets should be available in the spring of 1995.

3. Descriptor list for *P. nigra*
(**Coordination: J. van Slycken**)

It was agreed to develop a descriptor list for *P. nigra*. This list should be as

comprehensive as possible but the network will also agree on a minimum set of descriptors which everyone should apply.

The UPOV and FAO descriptor lists will be used as a base and several other descriptor lists for other species published by IPGRI will serve as a model. **E. Frison will send IPGRI descriptors for other species to all members by 31 October 1994 as a model. J. van Slycken will circulate drafts for comments to all members by 31 May 1995.**

4. Reference clones for *P. nigra* characterization

The set of UPOV reference clones originating from the same collection (probably the German reference collection) will be sent to all participants. **J. van Slycken will arrange for this set of clones (10 cuttings of each) to be sent to the participants by February-March 1996.**

5. European database
(Coordination: L. Cagelli)

A questionnaire on *ex situ* collection was sent to different countries after the Viterbo meeting and a number of countries have replied. This information was compiled and those countries which have not yet replied should send the information to L. Cagelli.

It was agreed to develop a European database for *P. nigra*. Comments on the set of descriptors to be used for the database, which was developed by F. Lefèvre, **will be given by IPGRI to L. Cagelli by the end of November 1994.**

L. Cagelli will then send this list by mid-December 1994 to all countries requesting the information for inclusion in the database. **Network members should send the information before 1 February 1995 to L. Cagelli.**

L. Cagelli accepted the responsibility for establishing and maintaining the European database for *P. nigra*. It was recommended that L. Cagelli visit IPGRI Headquarters for a few days of interaction with the germplasm documentation specialists to be trained in documentation.

6. Synthesis of *in situ* conservation measures
(Coordination: S. de Vries)

After the meeting in Viterbo, information was requested from participants on what methods and regulations for *in situ* conservation exist in different countries. Some raw data in various languages were received but these were not very useful. **It was agreed that each participant would summarize (in English) the different regulations and methods (maximum 2 pages, with possible annexes) and send these to S. de Vries by 31 January 1995.**

7. Review of *P. nigra* literature
(Coordination: F. Lefèvre)

At the Viterbo meeting, it was agreed that a literature review would be compiled by F. Lefèvre. This was carried out successfully and this review was distributed to all members. A first update was distributed at the meeting (see Selected Bibliography).

It was agreed that participants would send all relevant literature references, with specification of the language and in the format of the first survey, to F. Lefèvre who will make an updated list before each meeting of the Network.

8. Study of genetic diversity of *P. nigra*

The Network agreed that it was very important to develop tools to study the distribution of the genetic diversity of *P. nigra*. This should also allow the study of genetic diversity of *P. nigra* in the wild: the structure of this diversity, geneflows, vegetative vs. sexual reproduction. It will also allow the study of dynamics of native stands in different environments and the introgression process of *P. nigra* from hybrids and other *Populus* species.

The results of such studies are essential for the development of appropriate collecting and *in situ* conservation strategies. Different levels of management for *in situ* conservation will be required depending on the outcome of such studies.

9. Guidelines for maintenance and duplication of *ex situ* field collection
(Coordination: S. de Vries)

It was agreed to develop simple guidelines for the establishment of *ex situ* collections. **S. de Vries will send a draft for comments to participants by 15 January 1995 and comments should be sent to S. de Vries by 1 March 1995.** The guidelines should be presented at the next meeting.

The participants stressed the importance of safety duplication of unique material and **it was agreed** that attempts should be made to duplicate unique material.

10. Other *ex situ* conservation methods

The usefulness of other *ex situ* conservation methods was discussed and it was agreed that different alternatives should be investigated. **C. Maestro agreed to carry out** a review of the literature on storage of seeds, pollen and buds of species similar to poplar by 31 December 1994. **Relevant references should be sent by members to C. Maestro before 15 November 1994.**

The Network also recommended that research be undertaken on alternative *ex situ* conservation methods.

11. Core collection

It was agreed to postpone the discussion on the establishment of a core collection for *P. nigra* until the European database is established.

12. Development of joint proposals

It was agreed that the *Populus nigra* Network was an ideal forum for the development of joint proposals for research and conservation activities to be submitted to the EC and other donors.

13. Inventory of *P. nigra* genetic resources

Once the necessary tools have been developed (descriptors for individual trees and descriptors for stands; identification sheets) a European inventory of the remaining

resources of *P. nigra*, as individual trees and native stands, should be made for inclusion in the database. Further material should be collected and characterized.

14. Future of the Network

It was recommended that IPGRI invite the National Coordinator for EUFORGEN of Portugal to nominate a participant for the *P. nigra* network if interested.

The participants agreed to hold the second meeting of the *Populus nigra* Network in the autumn of 1995. J. van Slycken kindly offered to organize the meeting in Belgium and the participants welcomed the offer. After the end of the meeting, a suggestion was made to hold the next meeting in Casale-Monferrato, just before or after the final meeting of the current AIR project and therefore allowing some savings on travel costs. The two possibilities will be further examined in consultation with the Chair and Vice-Chair of the Network.

The participants thanked F. Lefèvre for his excellent and hard work since the meeting of the IPC in Spain in 1992. They also thanked Mr van Slycken for the simultaneous translation which he provided to Drs Toth and Tsanov.

The participants encouraged the countries which had not yet signed the Letter of Agreement to join EUFORGEN as soon as possible.

Agenda

1. Introduction
 - 1.1. Welcome address (*K. Tunçtaner*)
 - 1.2. Welcome address and presentation of the European Forest Genetic Resources programme (*E. Frison*)
 - 1.3. History of the black poplar conservation network (*F. Lefèvre*)
2. National activities for the conservation of *P. nigra* genetic resources - presentation of countries
3. Discussion of needs for a European inventory of native black poplar stands
4. Synthesis of the existing *in situ* protection systems (*S. de Vries*)
5. Development of descriptors and database for the black poplar *ex situ* collections (*L. Cagelli, J. van Slycken*)
6. Development of guidelines for *ex situ* conservation (*S. de Vries*)
7. Identification of common needs to study genetic diversity and the possibilities of joint project proposals
8. Literature survey (*F. Lefèvre*)
9. Agreement on network tasks and development of a workplan
10. Final session: Approval of the report

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