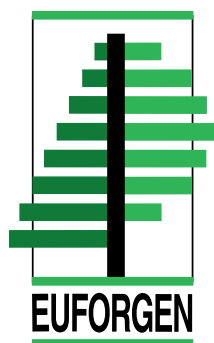




# *Populus nigra* Network

## Summary of the seventh meeting

Osijek, Croatia, 25-27 October 2001



European Forest Genetic Resources Programme (EUFORGEN)

## Summaries

### **Seventh EUFORGEN *Populus nigra* Network meeting**

#### ***Opening of the meeting***

Davorin Kajba, Head of the Department of Forest Genetics and Dendrology, and Vice-Chair of the Network, welcomed participants to Osijek on behalf of the Forestry Faculty of Zagreb University and wished everybody a pleasant stay and a successful meeting.

Mr Pavle Vrataric, Director of the Osijek Forest District Office, welcomed the participants. He expressed his satisfaction for hosting the meeting and wished the Network a fruitful time in Osijek. He gave a brief description of the area in which the meeting was held and underlined that almost half of the area is covered by riparian forest. This area is also very important for studies on biodiversity and conservation, which were started over 40 years ago.

Mr Joso Gračan, Director of the Forestry Institute and EUFORGEN National Coordinator for Croatia, again welcomed the participants and highlighted the role of Croatia in the Network and its active participation in all EUFORGEN Networks. He also thanked Simone Borelli for his contribution to the programme and wished him luck in his new job.

Sven de Vries, Chair of the Network, welcomed the participants and thanked the local organizers for all their efforts. He thanked Joso Gračan and Pavle Vrataric for their kind words. He encouraged members to actively participate in the meeting and in all activities of the Network.

Simone Borelli welcomed the participants on behalf of the EUFORGEN Secretariat and gave a brief overview of the recent developments in the programme, including recent and upcoming meetings and outputs.

In order to facilitate discussion, all participants briefly introduced themselves for the benefit of newly attending members. Melita Mihaljevic, Director of the Kopacki Rit Nature Park, was also present.

The agenda was adopted with some minor amendments.

#### ***Update on progress in gene conservation***

Eighteen countries (Austria, Belgium, Bulgaria, Croatia, Czech Republic, France, Germany, Hungary, Italy, Malta, Moldova, the Netherlands, Portugal, Russian Federation, Slovenia, Spain, Switzerland and Turkey) participated in the meeting. All participants presented brief updates on the progress made since the last Network meeting held in February 2000. Country updates will be provided to the Secretariat in electronic format by 15 November 2001.

Highlights of the country reports will be summarized in table format and included in the final report. The full text of the reports will be made available on the EUFORGEN Web site. Some highlights from the country updates are provided in Annex I below.

#### ***Report on the International Poplar Commission (IPC)***

Davorin Kajba provided a summary of the paper on the activities of the Network that was presented at the IPC meeting held in September 2000.

Sven de Vries underlined the fact that gene conservation was a main concern of all participating countries present at the IPC and that it is important to keep this point on the political and technical agenda of individual countries. The next meeting of the IPC will be held in Chile and Argentina in 2004.

### **Technical bulletin**

A draft copy of the 'In situ Conservation of *Populus nigra*' technical bulletin was distributed to the participants and they were asked to mark any mistakes/changes on a master copy to be returned to the printers for finalization.

In order to facilitate dissemination, it was suggested that an extended version of the summary, including some of the tables and graphs, should be prepared for translation into different languages. François Lefèvre, Peter Rotach and Berthold Heinze will prepare this document and provide it to the Secretariat for distribution by 31 January 2002.

It was also agreed to produce a technical sheet (4 pages) in the format already agreed upon by the Noble Hardwoods and Conifers Networks. This would be translated into national languages for the use of forest practitioners in the field. A space will be left at the back of the sheet for national information. The idea was discussed and accepted by the Network. An Vanden Broeck, Georg von Wühlisch and Peter Zhelev will prepare a draft and circulate it to the Network before 31 March 2002.

The production of a joint technical publication based on the recommendations of the project EUROPOP was discussed. The paper would have a 'question and answer' format and be based on typical questions asked by managers. All Network members will collect relevant questions and send them to the Secretariat for compilation and distribution one month before the next Network meeting.

### **In situ conservation**

#### **Introgression of *P. × euramericana* and *P. nigra***

An Vanden Broeck presented a study on introgression into *P. nigra* from other *Populus* species in Belgium. The main conclusions are that there are no phenological barriers to introgression; that there is no random mating, rather it is preferential and unbalanced; and that restoration of natural populations should not start with single trees or small groups because of the higher risk of introgression. This is particularly true in countries where no natural populations exist (Belgium, UK) and restoration of riparian forests is being carried out. In a mixed pollen cloud (*P. × euramericana* + *P. nigra*), pollen from *P. nigra* may be more successful than pollen from *P. × euramericana* in pollinating females of *P. nigra*.

Future activities will include controlled crossings with pollen mixes to test the hypothesis of pollen competition. A summary of the study will be included in the meeting report.

### **EUROPOP**

François Lefèvre summarized the main results of the EUROPOP project and the recommendations that can be derived from these. A full synthesis will be published in the proceedings of the EUROPOP final meeting.

A preliminary conclusion was that genetic diversity is not evenly distributed, so conservation sites should be distributed over the entire range of the species and should include more than one site per river. It is also useful to have a preliminary estimate on genetic diversity among adult trees.

Another result is that gene flow with cultivated poplars is scarce but not absent. As a consequence, there is no need to forbid poplar plantations around conservation units. However, attention should be paid to small populations and single trees. Introgression should be checked among reproductive trees. Introgression with var. 'italica' is usually not a problem, except possibly in southern Europe.

It also appears that mating is not random but preferential, and very few pollinators are involved in reproduction. Gene flow follows the model of isolation by distance and is symmetrical, upstream and downstream. Thus, the number and distribution of female trees

is critical. Also, establishment of seedlings should be favoured, and assisted regeneration, if needed, should be carried out on small plots.

Finally, genetic drift is observed within stands. It is therefore important to monitor all practices that impact on flowering and regeneration. The main indicators for this are hydroperiod, structure, and number and distribution of female trees.

## **Ex situ conservation**

### **Core collection of *P. nigra* clones**

Lorenzo Vietto gave a presentation on the current situation of the core collection. The collection was flooded in the year 2000 and sand was deposited on the clones. Luckily, it was possible to salvage all the clones, but it was not possible to provide reproductive material during this period. Currently, 19 countries are represented, with 37 clones. In fact, a new clone was provided by Portugal, possibly a female. The 15 reference clones were propagated.

Duplicates of the collection are currently present in five different institutes. The conditions of the clones in the different locations vary in terms of health. However, in general, the quantity and quality of clones is good. A duplicate of the collection will be planted next year in the vicinity of Mantova, Italy. Another duplicate will be planted in Spain. During the last year, some of the clones had to be replaced for health reasons or propagation difficulties and others might also need to be replaced in the near future. Nevertheless, it was agreed to keep to the original collection as much as possible.

It was suggested that records should be kept of where cuttings from the collection are sent. A field will be added to the database, and information on material sent in the past will be provided to Lorenzo Vietto by 30 November 2001. Datasets on molecular characterization of individual clones will also be included in the database after publication of EUROPOP papers.

Problems to be solved include, among others, the inclusion of missing countries in the range of distribution. A first letter was sent by the EUFORGEN Secretariat to these countries and replies are expected in the coming months. Network members offered to contact Algeria, Greece, Morocco and Iran. To facilitate collaboration with non-attending and non-European countries on the core collection and other activities, the Secretariat will circulate an updated list of country contacts for *P. nigra* for comments/suggestions by 31 December 2001.

### **Core collection of *P. alba* clones**

István Bach provided an update on the establishment of this core collection. Two suitable sites have been selected in Hungary: Sárvár and Tolna. Two clones have already been received from Italy and propagated. However, planting in the field was not very successful. After some discussion, it was decided to send material (either as rooted plants or as root suckers) to two locations: Germany and Hungary. Interested countries will provide two clones (ideally 10 cuttings per clone) of *P. alba* typical for their country by 28 February 2002.

### **Sharing responsibilities for the conservation of genetic resources in Europe**

A brief summary of the discussion that took place during the Inter-Network Group meeting in Antalya in October 2000 was provided. The objective of this group is to harmonize thematic priorities and coordinate activities among the five Networks. One of the important themes that emerged was that of sharing responsibilities for *in situ* conservation of forest genetic resources. This could be achieved through carefully designed and implemented networks of gene conservation units for selected target species of highest common priority within their entire distribution areas.

Berthold Heinze pointed out that the *P. nigra* Network has a lot of information on the conservation of the species and it is time to take some more practical action. Breeding

institutions are present in many countries, natural stands are still available and a lot of knowledge exists. So far, work has been carried out on a country-by-country basis. However, this approach has many limitations in terms of resources and it should be possible to increase collaborative efforts. Many borders in Europe are set by rivers, and direct transboundary collaboration would help in the tasks of the Networks. Of course, any activities should be carried out on a voluntary basis. The creation of a Europe-wide *In Situ* Conservation Network would provide an ideal framework for such activities and would also have public awareness value. It could also be used as a motivational tool for encouraging countries to share the conservation tasks.

This 'masterplan' would of course apply to all species and it will be necessary to coordinate with other Networks. A suggestion was made that the Inter-Network Group would prepare a concept note for the attention of the Steering Committee. The document would be also discussed through the listserver and could include potential practical applications. Due consideration should be given to species with limited economical importance. The Steering Committee would then bring the document to the attention of the Ministerial Conference on the Protection of Forests in Europe (MCPFE).

As a contribution from this Network, the document would be backed up by a practical case study on *P. nigra* that will be prepared by Berthold Heinze on the basis of his original document. Network members will provide him with comments by 9 November 2001.

After some discussion, it was proposed to hold a meeting of the Inter-Network Group in February or March 2002 to discuss this document, possibly in Vienna. The Secretariat will verify financial and logistic possibilities for organizing such a meeting and will inform potential participants in due course.

#### **Links with non-attending members or non-European countries**

The Network agreed to continue attempting to create links with all countries within the distribution range (see above).

#### ***In situ conservation***

##### **Biodiversity**

Peter Rotach presented a paper on poplars and biodiversity (pp. 78 of this publication). He highlighted the importance of poplar for supporting biodiversity. Over 700 species of insects feed on poplar, even though only about 80–100 of them are specialized. Butterflies, moths and beetles are the most frequent. In general, insects seem to make no distinction among species in the genus, so there is no proof that hybrids are less valuable or have negative effects. However, there is some evidence that resistance traits may have negative effects on biodiversity.

In terms of structure, natural populations are much richer in biodiversity than plantations. Plantations might also change the natural vegetation composition and are less rich in bird life. On the whole knowledge is still scarce, incomplete and biased towards species that cause damage to the stands. Thus, further information is needed.

Several Network members (Croatia, France, Germany, Malta, Portugal and Spain) indicated that they could provide additional sources of information. In Belgium, a new study was started looking at plant species associated with poplar stands. Some preliminary results are available and will be provided.

All information and comments will be provided to Peter Rotach by 30 November 2001. A final version of the paper will be sent to the Secretariat for inclusion in the meeting report by 31 January 2002.

## **Research**

Sven de Vries mentioned the issue of introgression of *P. tremuloides* into *P. tremula* in Estonia and Finland that had been discussed in the past months by some of the Network members, following a request for assistance. It was decided that in similar cases, it would be easier to provide input on an individual basis.

The issue of genetically modified organisms (GMOs) as a possible research item was raised. In France, for example, scientific discussion is currently centred upon introgression processes and gene flow and also includes GMOs. A literature review on GMOs in forestry was prepared for a recent meeting and will be circulated to Network members.

An Vanden Broeck has also made a preliminary literature search on introgression in *P. nigra* and she is willing to act as a focal point for reviewing literature on introgression and gene flow for the entire *Populus* genus. Georg von Wühlisch will assist her in this task. All Network members will provide literature and references by 31 March 2002. The results of this work will be presented at the next Network meeting.

The idea of carrying out a genetic resources collection of *P. nigra*, aimed at studying variation of adaptive traits, was also raised. A nursery trial was carried out in the framework of EUROPOP and the plants could be used for a collection of provenances. EUROPOP participants will be contacted to verify their availability to provide the material to initiate the collection. Additional material could be collected following the same sampling strategy. Hungary offered to host the collection. Objectives of the collection and general instructions on how to provide material are included in Annex II below.

## **Documentation**

### **Update on *P. nigra* clone database**

Lorenzo Vietto gave a report on the current status of the database, which currently contains approximately 3000 entries, with some duplicates. Currently 13 countries participate, but in fact 28 are represented in the collections, covering almost the entire distribution range. Current problems include data format and missing or incomplete information in the national databases.

Recent activities included an update of the database and the preparation of new software for data input. This new software was demonstrated and all Network members expressed their satisfaction with this new tool. Countries that are already contributing information received a personalized copy of the programme to be used for future updates. Updates or new information should be provided to Lorenzo Vietto by 31 January 2002. A further update will be carried out one month before the next meeting.

### **Update on *P. alba* clone database**

National collections of *P. alba* are currently only found in Spain, Italy, Hungary, Czech Republic and possibly Bulgaria and Germany. It was agreed that the format of the *P. alba* database, hosted by Spain, would be regularized to the one proposed for *P. nigra*. Lorenzo Vietto will adapt the format and send it to relevant countries by 30 June 2002.

### **PGR information platform**

Simone Borelli briefly introduced the new format of the IPGRI Regional Office for Europe Web site and presented the idea of using this as a gateway to information on plant genetic resources throughout Europe. Participants were encouraged to visit the Web site, provide comments and also information on their national programmes (i.e. focal persons, Web sites, etc.) for inclusion in their respective national pages.

## **EUFORGEN Bibliography**

Simone Borelli provided an update on the current status of the EUFORGEN Bibliography Database. The database went online in January 2001 and has become one of the most frequently visited pages of the IPGRI Web site. However, most of the references currently found in the database (about 1700 items) are dated 1999 or earlier, and all Network members were encouraged to continue providing references on a regular basis, in order to keep this tool valuable. Participants were also reminded of the importance of following the format and instructions provided by the Secretariat.

The contents of the database were also discussed and there was general agreement that new additions should refer only to grey literature. In this respect, the issue of access to the original literature was also discussed and it was agreed that, even though it would not be advisable to name a contact person directly on the database, it would be useful to have a full list of Network members on the *Contacts* page of the Web site. The Secretariat will take the necessary action as soon as possible.

## **Public awareness**

### **CD-ROM**

Sven de Vries distributed a copy of the slide collection to all relevant participants. A new version will be provided as soon as slides become available, possibly using the database system developed for the Social Broadleaves Network. Dominique Jacques, the person responsible, will be contacted accordingly.

However, some of the themes that were decided upon in the last Network meeting have not yet been covered and relevant network members have agreed to provide slides by 30 June 2002 as follows: mixed riparian ecosystem (István Bach, Davorin Kajba and François Lefèvre), western China (Georg von Wühlisch), biodiversity (Peter Rotach and François Lefèvre), north African landscape (François Lefèvre and Carmen Maestro), vine–poplar systems (Maria Carolina Varela), and restoration techniques (Georg von Wühlisch).

A slide collection for *P. alba* will also be created under the responsibility of István Bach. All participants were encouraged to send slides as soon as possible. Moldova and Croatia had already provided the first slides. The images will be catalogued and included in a database format (see above). For this collection high-resolution scans are also acceptable.

### **Poster**

Sven de Vries briefly illustrated the process of preparing the Social Broadleaves poster and circulated a copy of the latest draft. The *P. nigra* Network did not feel that this was currently a priority. However, it was suggested that existing posters developed in different countries should be sent to the Secretariat, and that some should be brought to the next meeting for inspiration. The idea of a general EUFORGEN poster was also put forward.

### **Listserver**

There was general agreement that it is a useful tool, although so far its use has been quite limited. It is expected that use will increase if the ‘masterplan’ and other issues of general concern are discussed over the next few months.

### **Other public awareness initiatives**

Simone Borelli presented the new EUFORGEN brochure, which is intended to contain a leaflet for each of the five Networks and to be used mainly for public awareness purposes.

It was agreed that Peter Zhelev, Eman Calleja and Sven de Vries will prepare text for a *P. nigra* leaflet by 31 December 2001 and send it to the Secretariat for final production.

Lorenzo Vietto supplied copies of a poster produced for an IUFRO meeting in Rome that

could be used as an example for future presentations.

Sven de Vries described the presentation that he recently made in China on the activities of the Network.

In Croatia, the current meeting was extensively covered by national and local press and two interviews were given to Croatian national television.

In Hungary, a TV special was devoted to the Gemenc Region, and a substantial part (5–6 minutes) of it focuses on gene preservation of *P. nigra*.

In Moldova, an ecological trip for students was organized by a national NGO and part of the trip was devoted to conservation of biodiversity in riparian ecosystems. The trip was followed by a press conference, and news of the tour was broadcast on TV as well as in the specialized press.

In Malta, the Department of Agriculture provides school representatives with tree seeds (including *P. alba*) that are then grown in schools, and prizes are awarded to the schools with best results. In January, a full week is devoted to visits in nature reserves and tree planting.

Network members highlighted the importance of having a standard presentation on EUFORGEN to be used for different purposes. The Secretariat will make this available to all Networks through the listserver.

An identification sheet for *P. alba* will be prepared by István Bach. Carmen Maestro will contact Nuria Alba (Spain) to verify whether she is willing to assist in this task. Jos Van Slycken (Belgium) will be contacted in due course with regard to illustrations.

The possibility of collaborating with WWF and other environmental NGOs was mentioned and the Chair encouraged participants to foster contacts that might be useful for Network activities.

Additional public awareness activities can be found in the individual country reports (see Annex I).

### **Adoption of the report**

The report was adopted.

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

Georg von Wühlisch offered to host the eighth EUFORGEN *P. nigra* Network meeting on behalf of Germany. The Network accepted this kind offer. The meeting will be held in spring 2003. Further information will be provided in due course.

### **Closure**

The Chair thanked the organizers on behalf of the Network for the excellent organization of the meeting and for their warm hospitality. He also thanked Network members for their contribution to all tasks. He also thanked Simone Borelli for his excellent contribution and wished him luck in his new position. The Chair declared the meeting closed.

### **Annex I: Highlights of progress made in individual countries**

In **Austria**, the new inventory that is currently under way will attempt, for the first time, to distinguish natural *P. nigra* from hybrids. This will provide useful information for the elaboration of gene conservation strategies.

In **Belgium**, many new relict individuals had been identified and characterized. The database currently contains a total of 216 individuals. However, it appears that many of these are in fact the same clone. Forty-nine genotypes have been identified so far, but work is ongoing.

**Bulgaria** has launched a new project on mapping individuals and small populations of *P.*

*nigra*. The project is multidisciplinary and also looks at biodiversity in these stands. A clone collection will be established in the framework of the project.

The area of **Croatia** in which the meeting was held was occupied during the war and was reintegrated in 1997. A clonal archive, established in 1995, is present in the area and also includes clones from Bosnia-Herzegovina. Some protected areas have been established at the confluence of the Drava and Danube and are ideal for *in situ* conservation of *P. nigra*. However, mines still pose a major problem.

In the **Czech Republic**, the Forestry and Game Management Research Institute currently holds several clones of *P. nigra*, *P. alba* and other poplar species. Demonstration fields have been established for technical and public awareness purposes. An inventory of *P. alba* was started recently and 17 clones have been collected.

In **France**, an inventory of rust-resistant clones is in progress. The collection of clones has been completed with 37 clones from southeastern France. An adult plot of the core collection will be established in 2003. A three-day science event was held in the Drome, directed at both visitors and local people. A meeting of the 12 reserves belonging to the *P. nigra* conservation network was held and the managers highlighted the need for technical guidelines.

In **Germany**, inventories continued and over 4640 trees have been identified. These trees have also been propagated and *ex situ* plantations have been established. Some restoration projects are underway on the Rhine, the Elbe and the Oder. Rolf Schulzke organized a large public event for environmental education in Kassel, which included a stand with information on *P. nigra*. Work on identification of *P. alba* was also carried out.

In **Hungary**, additional clones have been collected. There are now over 600 registered genotypes. The EUROPOP congress was held in Hungary and it was a very good opportunity for raising public awareness through newspapers and TV.

In **Italy**, inventories were carried out in Piemonte and Emilia Romagna through remote sensing and field checks. Further inventories will take place in Lombardia and Veneto. The inventories included both cultivated plots and natural forest. A Hydrogeological Management Plan for the Po river, which includes incentives for the re-establishment of natural vegetation, was recently approved. The Rural Development Plan was also approved and includes incentive for biomass plantation and arboriculture on marginal agricultural lands. A pool of *P. nigra* will be registered for these plantations. Two *P. alba* clones, Marte and Saturno, were also registered. A new research proposal on stress tolerance in *P. nigra* was submitted to the EU. A new project funded by the Branca Foundation was started for inventories, creation of genebanks and restoration. In Lombardia, 100 hectares of rice paddies were converted to *P. alba* plantation.

In **Malta** there is a new law for protection of native species, which includes *P. alba*. Most of the trees present are male and they mostly come from the same parent trees. There is an ongoing campaign for growing trees (including *P. alba*) around schools, and prizes are awarded every year.

In **Moldova**, most of the poplar forests are made up of *P. alba*. Mother plantations were established seven years ago and are now being used for plantings throughout the country.

In **the Netherlands**, a new threat for *P. nigra* appeared in the last year—beavers. They seem to love big poplars! Two articles on the ID sheet appeared in a magazine and a lot of requests were received. The Dutch version of the sheet is much appreciated.

In **Portugal**, there is some collaborative research with Austria and Italy. An agricultural school is willing to establish a duplicate of the core collection.

In **Russia**, a large number of plus trees and plus stands have been selected in different regions. Conservation is underway in nature reserve and national park. However, there is limited attention to *P. nigra* and the area of poplar has been steadily declining. Its health

conditions are also worsening.

In **Slovenia**, there is limited activity on poplar. However, there are plans for future work.

In **Spain**, the inventory of the Ebro valley was finished and 190 individuals were collected for genetic studies. A new plan for management of the Ebro valley was presented and it includes measures for protection of natural forest formations. Two institutions are currently working on *P. nigra* and *P. alba* in Spain and the national collection of clones is maintained in both Zaragoza and Madrid. Clones from the collection are being multiplied for use in restoration. Two new publications are being prepared.

In **Switzerland**, progress was made thanks to regional collaboration. There are now 98 identified pure individuals. Two clones will be provided to the core collection. Unfortunately, funds for the project on rare species, now entering its second phase, were reduced and it will not be possible to include floodplain species.

In **Turkey**, 29 new clones were selected. Nurseries and field trials were established in different regions. Informative material was distributed to poplar growers.

### ***Annex II: Objective of the provenance collection and instructions for sending material***

The Network stressed the need for the establishment of an international collection of provenances. Considering the dioecious nature of the species and the results obtained in the EUROPOP project on mating systems, i.e. preferential mating with very few males effectively pollinating each female tree, it was recommended to use a sampling strategy based on clones rather than half-sib progenies as is usually done for other tree species.

The EUROPOP material available in the nurseries of different countries provides an opportunity for starting this work. This includes approximately 10 populations represented by 60 clones each that were compared to the EUFORGEN reference clones and to the core collection in nursery trials. The following steps are proposed:

- In order to conserve the EUROPOP material, Hungary offered to maintain and propagate this collection. France will contact EUROPOP partners and ask them to send 3 cuttings per clone to Hungary before 1 March 2002 (10 populations × 60 clones + 15 reference clones + 35 clones of the core collection = 640 clones).
- Several countries (including Russia and Turkey) offered to collect new provenances following the sampling strategy of EUROPOP: in each population 30 adults and 30 juvenile trees are sampled. Populations should be at least 50 km apart. A more detailed set of instructions will be provided. The cuttings will be sent to Hungary for initial propagation before 1 March 2002.
- Hungary will maintain the EUROPOP material and propagate the new material in order to establish secondary propagation in 2003.

## Programmes

### Seventh EUFORGEN *Populus nigra* Network Meeting Osijek, Croatia, 25–27 October 2001

Wednesday 24 October—arrival of participants

Thursday 25 October

#### Opening of the meeting

09:00 Welcome (Host country and Chair of the *Populus nigra* Network)

09:15 Introduction (EUFORGEN Secretariat)

09:30 Adoption of the agenda and nomination of rapporteurs

#### Country updates

09:45 Highlights of progress made in countries (round-the-table discussion)

10:30 *Coffee break*

10:45 Highlights of progress (continued)

11:30 Report on the International Poplar Commission (D. Kajba)

12:00 Technical Bulletin (dissemination and implementation) (S.M.G. de Vries)

13:00 *Lunch*

#### *In situ* conservation

14:30 Results and recommendations of the EUROPOP project and their practical application (F. Lefèvre)

16:00 *Coffee break*

#### *Ex situ* conservation

16:30 Update on EUFORGEN core collection of *P. nigra* clones (L. Vietto)

17:00 Establishment of core collection of *P. alba* clones (I. Bach)

Friday 26 October

#### Sharing responsibilities for the conservation of genetic resources in Europe

09:00 Concept, results of the EUFORGEN Inter-Network meeting, the case of *Populus nigra* (S.M.G de Vries, B. Heinze, EUFORGEN Secretariat)

10:15 Links with non-member or non-European countries

10:30 *Coffee break*

#### Biodiversity

11:00 Biodiversity and genetic resources in *Populus* stands (P. Rotach)

#### Research

12:00 Discussion on further research needs and opportunities (all)

13:00 *Lunch*

Documentation

14:30 Update on European *P. nigra* clone database (L. Vietto)

15:00 Update on *P. alba* clone database (C. Maestro)

15:30 EUFORGEN Database/ Information platform (EUFORGEN Secretariat)

15:45 Bibliography (EUFORGEN Secretariat)

16:00 *Coffee break*

**Public awareness**

16:30 CD-ROM (S.M.G. de Vries)

17:00 Poster (S.M.G. de Vries)

17:30 Listserver (EUFORGEN Secretariat)

17:45 Other public awareness initiatives

**Saturday 27 October**

Field trip to Drava and Danube rivers and Nature Park 'Kopacki rit'

15:00 Adoption of the report

16:30 *Coffee break*

17:00 Date and place of next meeting

17:30 Conclusions and closure

**Sunday 28 October**—departure of participants

## Combined list of participants

Berthold Heinze  
 Department of Genetics  
 Federal Office and Research Centre for Forestry  
 Hauptstrasse 7  
 1140 Wien  
**Austria**  
 Tel: (43-1) 878382219  
 Fax: (43-1) 878382250  
 Email: Berthold. bfw.gv.at

An Vanden Broeck (Osijek only)  
 Institute for Forestry and Game Management  
 Gaverstraat 4  
 9500 Geraardsbergen  
**Belgium**  
 Tel: (32-54)437125  
 Fax: (32-54)436160  
 Email: an. in.vlaanderen.be

Jos van Slycken (Treppeln only)  
 Institute for Forestry and Game Management  
 Gaverstraat 4  
 9500 Geraardsbergen  
**Belgium**  
 Tel: (32-54) 437110  
 Fax: (32-54) 410896  
 Email: jozef. in.vlaanderen.be

Dalibor Ballian (Treppeln only)  
 Šumarski Fakultet u Sarajevu  
 Zagrebacka 20  
 71000 Sarajevo  
**Bosnia and Herzegovina**  
 Tel: (387-33) 614003-130  
 Fax: (387-33) 611349  
 Email: bih.net.ba

Ivanova Pandeva Denitsa (Treppeln only)  
 Forest Research Institute  
 Blvd Kliment Ohridski 132  
 1756 Sofia  
**Bulgaria**  
 Tel: (359-2) 9620442  
 Fax: (359-2) 9620447  
 Email: bulnet.bg

Peter Zhelev (Osijek only)  
 University of Forestry  
 Kliment Ohridski Bulvd. 10  
 1756 Sofia  
**Bulgaria**  
 Tel: (359-2) 91907  
 Fax: (359-2) 622830  
 Email: tu.acad.bg

Davorin Kajba  
 Dept. of Forest Genetics and Dendrology  
 Faculty of Forestry, University of Zagreb  
 Svetosimunska 25  
 10000 Zagreb  
**Croatia**  
 Tel: (385-1) 235 2427  
 Fax: (385-1) 235 2505  
 Email: davorin. zg.htnet.hr

Martin Slovacek  
 Forestry and Game Management  
 Research Institute  
 Research Station Uherske Hradiste  
 686 04 Kunovice  
**Czech Republic**  
 Tel: (420-572) 420632/420927  
 Fax: (420-572) 549119  
 Email: vulhmuh.cz

François Lefèvre (Osijek only)  
 INRA – Unité de Recherches Forestières  
 Méditerranéennes  
 Avenue A. Vivaldi  
 84000 Avignon  
**France**  
 Tel: (33)490135920  
 Fax: (33)490135959  
 Email: avignon.inra.fr

Marc Villar (Treppeln only)  
 INRA - Unite Amélioration, génétique et  
 physiologie forestières  
 BP 20619, Ardon  
 45166 Olivet Cedex  
**France**  
 Tel: (33-2) 38417874  
 Fax: (33-2) 38417879  
 Email: orleans.inra.fr

Georg von Wühlisch  
 Institute for Forest Genetics and Forest Tree  
 Breeding  
 Sieker Landstr. 2  
 22927 Grosshansdorf  
**Germany**  
 Tel: (49-4102)696106  
 Fax: (49-4102)696200  
 Email: holz.uni-hamburg.de

Rolf Schulzke (Treppeln only)  
 Regierungspräsidium Kassel  
 Dezernat Forsten  
 Steinweg 6  
 34117 Kassel  
**Germany**  
 Tel: (49-5601) 1064122  
 Fax: (49-5601) 1061691  
 Email: rolf. rpks.hessen.de

István Bach  
National Institute for Agricultural Quality Control  
Keleti Karoly utca 24  
1024 Budapest  
**Hungary**  
Tel: (36-1) 336 9113  
Fax: (36-1) 336 9094  
Email: ommi.hu

Kevin Keary (Treppeln only)  
Forest Service, Department of Agriculture and Food  
Johnstown Castle Estate  
Co. Westford  
**Ireland**  
Tel: (353-0) 1-6072482  
Fax: (353-0) 1-6072545  
Email: kevin.agriculture.gov.ie

Lorenzo Vietto  
Istituto di Sperimentazione per la Pioppicoltura, ISP  
Strada Frassineto 35  
15033 Casale Monferrato (AL)  
**Italy**  
Tel: (39-0142) 454654  
Fax: (39-0142) 55580  
Email: populus.it

Eman Calleja  
Ministry of Agriculture and Fisheries  
Department of Agriculture  
Notabile Road  
Attard  
**Malta**  
Tel: (356) 21415488/21419125  
Fax: (356) 21493176/ 21415488  
Email: eman.gov.mt orbit.net.mt

Ion Palancean  
Institute of Botany  
Padurii 18  
2002 Chisinau  
**Moldova**  
Tel: (373-22) 270040, 225280  
Fax: (373-22) 274060  
Email: pfap.md

Sven M.G. de Vries  
Centre for Genetic Resources the Netherlands,  
Wageningen University and Research  
c/o ALTERRA  
P.O. Box 47  
6700 AA Wageningen  
**The Netherlands**  
Tel: (31-317) 477841, 474700  
Fax: (31-317) 424988, 419000  
Email: sven.wur.nl

Maria Carolina Varala  
Estação Florestal Nacional  
INIA, PROCALFER  
Quinta do Marquês  
2780-159 Oeiras  
**Portugal**  
Tel: (351-21) 4463700/4463783  
Fax: (351-21) 4463701  
Email: carolina.efn.com.pt AND yahoo.com

Ivan I. Popivshchy (Osijek only)  
Russian Tree Breeding Centre  
Nadsonovskaya 13  
141200 Pushkino (Moscow)  
**Russian Federation**  
Tel: (7-095)-58 42 407  
Fax: (7-096)-53 26 662  
Email: essem.msk.ru

Gregor Bozic (Osijek only)  
Dept. of Forest Biology and Ecology  
Slovenian Forestry Institute  
Vecna pot 2  
1000 Ljubljana  
**Slovenia**  
Tel: (386-1) 2007821  
Fax: (386-1) 273589  
Email: gregor.gozdis.sl

Carmen Maestro Tejada  
Centro de Investigacion y Tecnologia  
Agroalimentaria (CITA)  
Avenida Montanana 930  
50059 Zaragoza  
**Spain**  
Tel: (34-976) 716376  
Fax: (34-976) 716335  
Email: aragob.es

Peter Rotach  
Swiss Federal Institute of Technology  
Department of Environmental Sciences  
ETH-Zentrum /Rämistrasse 101  
8092 Zürich  
**Switzerland**  
Tel: (41-1)6323210  
Fax: (41-1)6321033  
Email: peter.env.ethz.ch owi.ethz.ch

Ferit Toplu  
Poplar and Fast Growing Forest Trees Research  
Institute  
P.O. Box 1034 Yahyakaptan  
41050 Izmit/Kocaeli  
**Turkey**  
Tel: (90-262) 3116964  
Fax: (90-262) 3116972  
Email: kavak.gov.tr AND yahoo.com

Saša Orlovic (Treppeln only)  
 Institute of Lowland Forestry and Environment  
 Agricultural Faculty Novi Sad  
 Antona Cehova 13 - P.O. Box 117  
 21000 Novi Sad

**Serbia and Montenegro**

Tel: (381-21) 540387  
 Fax: (381-21) 540385  
 Email: polj.ns.ac.yu

**Observers**

Hans Muhs (Treppeln only)  
 Inst. for Forest Genetics and Forest Tree Breeding,  
 Federal Research Centre for Forestry and Forest  
 Products

Sieker Landstrasse 2  
 22927 Grosshansdorf

**Germany**

Tel: (49-4102) 696107  
 Fax: (49-4102) 696200  
 Email: holz.uni-hamburg.de

Ralf Katzel (Treppeln only)  
 Landesforschungsanstalt Eberswalde  
 Abteilung Waldökologie  
 Alfred-Möller Str. 1  
 D-16225 Eberswalde

**Germany**

Tel: (49-3334) 65231  
 Fax: (49-3334) 65239  
 Email: Ralf. fe-e.brandenburg.de

Thorsten Hinrichs (Treppeln only)  
 Bundesministerium für Verbraucherschutz,  
 Ernährung und Landwirtschaft BMVEL,  
 Referat 533

Rochusstrasse 1  
 53123 Bonn

**Germany**

Tel: (49-228) 529 4287  
 Fax: (49-228) 529 4318  
 Email: thorsten. bmvel.bund.de

Gisela Naujoks (Treppeln only)  
 Federal Centre for Forestry and Forest Products  
 Inst. for Forest Genetics and Forest Tree Breeding  
 Eberswalder Chaussee 3A  
 15377 Waldsiedersdorf

**Germany**

Tel: (49-33433) 157160  
 Fax: (49-33433) 157199  
 Email: holz.uni-hamburg.de

**EUFORGEN Secretariat/IPGRI**

Simone Borelli (Osijek only)\*  
 Regional Office for Europe  
 International Plant Genetic Resources Institute  
 (IPGRI)

Via dei Tre Denari 472/a  
 00057 Maccarese (Fiumicino)

Italy

Tel: (39-06) 6118223  
 Fax: (39-06) 61979661  
 Email: s. cgiar.org

Jarkko Koskela (Treppeln only)  
 EUFORGEN Coordinator  
 Regional Office for Europe  
 International Plant Genetic Resources Institute  
 (IPGRI)

Via dei Tre Denari 472/a  
 00057 Maccarese (Fiumicino)

Italy

Tel: (39-06) 6118223  
 Fax: (39-06) 61979661  
 Email: j. cgiar.org

**Unable to attend the seventh meeting  
 (Osijek)**

Saša Orlovic  
 Institute of Lowland Forestry and Environment  
 Agricultural Faculty Novi Sad  
 Antona Cehova 13 - P.O. Box 117  
 21000 Novi Sad

**Serbia and Montenegro**

Tel: (381-21) 540387  
 Fax: (381-21) 540385  
 Email: polj.ns.ac.yu

**Unable to attend the eighth meeting  
 (Treppeln)**

Hajri Haska  
 Forest and Pasture Research Institute  
 Rruga "Halil Bega" 23  
 Tirana

**Albania**

Tel: (355-4) 371237  
 Fax: (355-4) 371242  
 Email: yahoo.com AND  
 albaniaonline.net

Joan Cotrell  
 Forest Research  
 Northern Research Station  
 Tree Improvement Branch (FCTIB)  
 EH25 9SY Midlothian  
**United Kingdom**  
 Tel: (44-131) 445 6921  
 Fax: (44-131) 4455124  
 Email: joan. orestry.gsi.gov.uk

\* Contact details at the time of the meeting.