Ninth EUFORGEN Populus nigra Network Meeting

Warth, Switzerland, 16-18 September 2004

Summary of the meeting

Opening

Peter Rotach welcomed participants to Warth on behalf of the Swiss Federal Institute of Technology, Zurich and Marcus Bollinger, the EUFORGEN National Coordinator of Switzerland, who was unable to join the meeting. He also gave a short introduction on the meeting venue and its surroundings.

Sven de Vries, Chair of the Network welcomed the participants and he also introduced new Network participants from Albania (Hajri Haska) and from Iceland (Halldór Sverrisson). He then pointed out that the end of the second phase of EUFORGEN is approaching and he encouraged all attendees to actively participate in all discussions during the meeting.

The agenda was adopted and Davorin Kajba and Kevin Keary were appointed as rapporteurs for the first day and Joan Cottrell and Denista Ivanova Pandeva for the second day. In order to facilitate discussion, all participants briefly introduced themselves for the benefit of newly attending members.

Introduction to *Populus* species in Albania and Iceland

Albania and Iceland participated in a meeting of the *Populus nigra* Network for the first time. Albania has been a member of EUFORGEN since 2001 while Iceland joined the programme in early 2004. Hajri Haska and Halldor Sverrisson provided a short introduction to the conservation and use of poplars in Albania and Iceland, respectively.

EUFORGEN update

Jarkko Koskela welcomed the participants on behalf of the EUFORGEN Secretariat and updated participants on the recent activities of the Programme and the MCPFE process. In particular, he informed participants that the Steering Committee decided to reorganize the EUFORGEN network structure and merge the current five Networks into three Networks, i.e. (Conifers, Broadleaves with scattered distribution and Broadleaves with wide distribution). In practice, this decision by the Steering Committee means that the *Populus nigra* and the Noble Hardwoods Networks will be merged together in January 2005. Similarly, the Mediterranean Oaks and Temperate Oaks and Beech Networks will be merged together. The other outputs of the Steering Committee meeting were also discussed.

In addition to the three species network, new thematic structures will be established for Phase III, namely the Forest Management Network and the Information Working Group (IWG). Through these thematic arrangements, EUFORGEN will promote implementation of recommendations presented in the technical guidelines and support integration of gene conservation issues into national forest programmes and policies. Following the current practice, National Coordinators will nominate representatives for the Forest Management Network while the representatives for the IWG will be nominated by the Networks for specific tasks. The species Networks will meet up to three times during Phase III. During the new phase, EUFORGEN will continue to operate under the MCPFE framework and

contribute to the implementation of the relevant resolutions i.e. Resolution V4 which broadened the earlier mandate based on Resolution S2.

The future status of *Populus* spp. in the proposed new network structure and inclusion of new species was then discussed. Some concerns were expressed regarding the Network operations and meeting arrangements during the new phase with a large group of participants. However, it was also mentioned that larger participation brings also some new opportunities. Aspen (*Populus tremula*) was mentioned as an example of a potential new species for Phase III. Germany, Hungary, Ireland and Iceland supported the idea of including aspen in the future EUFORGEN activities. Spain also agreed although aspen has a limited distribution in the country. Turkey said the species is not endangered. It was recommended that the Networks task force should consider aspen as a new species for the EUFORGEN activities during Phase III.

Ex situ conservation

Core collection of P. nigra clones

Lorenzo Vietto made a presentation on the current situation of the core collection. The collection comprises of material from 20 countries containing 39 genotypes and 15 reference clones. Partial duplications of the core collection are present in eight countries (Austria, Belgium, France, The Netherlands, Portugal, Spain, Turkey and Ukraine). The material collected from the countries represents 36% of the species' natural distribution. One Bulgarian clone is totally missing from the core collection and several clones are missing from the duplicative collections in other countries. Material from three countries in Africa, 16 in Asia and 10 countries in Europe are also missing.

Albania, Bosnia-Herzegovina, Ireland and Moldova agreed to send two clones to the core collection. Bulgaria will select and send one new clone to avoid problems in obtaining cuttings of the earlier identified clone, which is still missing. Croatia is able to send cuttings of the hairy type in spring 2005. The material to be sent should consists of 10 cuttings for each clone.

Furthermore, the Network members offered to contact other countries for missing material. It was agreed that the following countries will be contacted by persons with contacts to these countries: Algeria and Morocco (Marc Villar), China (Jos Van Slycken), Greece (Jarkko Koskela), Iran (Georg von Wuehlisch), Macedonia FYR (Dalibor Bailian, Hajri Haska) and Russia (Ion Palancean).

In spring 2005, Lorenzo Vietto will send missing material to the duplicative collections in other countries.

Core collection of P. alba clones

István Bach provided an update on the establishment of the white poplar core collection. There have been problems in the supply of suitable propagative material and these problems were discussed. Material from Spain, Turkey, Germany and Italy were sent to Hungary but only seven clones from Italy successfully rooted. It was recommended to send 10 rooted cuttings (in dormant stage) of two genotypes and ten ramets per genotype, preferably in containers. Georg von Wuehlisch will collate existing information on the various methodologies used for autovegetative propagation of *P.alba*. The participants should send any existing information (experiences, references, etc) on propagation

methods for *P. alba* to Georg von Wuehlisch by **30 September 2004**. He will then collate the information and send it to the participants by **28 February 2005**.

Berthold Heinze offered assistance to check whether a clone is *P. alba* or *P. x canescens*. Pressed leaves or winter buds can be sent to Austria for the testing.

Population collection of the EUROPOP project

István Bach informed the participants that material for the population collection has been received from five countries (France, Germany, Italy, The Netherlands and Spain). A total of 505 genotypes were received 2002-2003, 435 of them rooted and only 341 survived (August 2004). Berthold Heinze reported that the missing material from Austria has not yet been sent to Hungary but this will be made in the future (the maintenance of the material is secured).

On behalf of the Network, Sven de Vries thanked István Bach and his colleague, Sándori Bényi for their efforts. Sándori Bényi will be responsible for maintaining the population collection and Sven de Vries expressed the Network's appreciation for his work. Marc Villar informed that France has established a new *P. nigra* population collection, which includes 11 populations.

Documentation

Update on P. nigra clone database

Lorenzo Vietto reported the current status of the clone database, which now contains 3491 entries (September 2004). A total of 20 countries have provided their data to the database and there are 13 countries with a national collection. The information shows that the clones originate from 28 countries. Turkey and Spain are the two countries with most clones (769 and 300, respectively). It was discussed whether some data fields should be extended and additional information added to the database. It was decided to add one more field, 'river system', which should be filled by the countries. All fields were also decided to extend up to 40 characters.

On behalf of the Network, Sven de Vries thanked Lorenzo Vietto and his institute ISP in Casale Monferrato in Italy for all the work done for this database with special thanks to his colleague Gaetano Castro.

Update on P. alba clone database

Carmen Maestro gave an update on *P. alba* database. The survey made in 2003 among countries showed that at least 11 countries (Austria, Bulgaria, Czech Republic, Hungary, Italy, Malta, Portugal, Serbia and Montenegro, Slovakia, Spain, Turkey) are interested in *P. alba* conservation. There are no changes in the number of clones included in the database since the last update in 2003. Currently, there are a total of 1014 entries in the database: 114 from Italy and 900 from Spain. The *P. alba* database has the same structure as *P. nigra* database (in terms of data fields) but it is maintained in the Excel format. It was suggested to include *P. alba* core collection in the database and make it available through the INIA website. The need to establish linkages between the INIA, ISP and EUFORGEN websites was also highlighted.

Public awareness and communication

Technical Guidelines

Sven de Vries provided an update on the development of Technical Guidelines for *Populus nigra* and *P. alba*. The text for *P. nigra* was finalized by An Vanden Broeck after the previous meeting and it was published in April 2004 together with several other guidelines.

During the eighth meeting in Germany, it was also decided to develop technical guidelines for *P. alba*. Ion Palancean and Nuria Alba developed a draft, which was circulated to the Network members before the meeting. The Secretariat developed a distribution map and it was circulated as well. Several participants had made comments to the draft and the rest were asked to send their comments to Ion Palancean by **22 September 2004**. He will then compile all comments into a draft and send it to the Secretariat by **30 September**. The Secretariat will circulate the new draft to the Network participants which should provide their final comments to Ion Palancean by **7 October**. He should send the final version to the Secretariat by **14 October 2004**.

Each country can translate technical guidelines into their national languages and print them at their own costs. The template is available from the Secretariat. The original authors should be kept while translators and national contacts can be added to the last page.

Slide collections of Populus nigra and P. alba

Sven de Vries presented the third version of the *P. nigra* slide collection and distributed copies of the CD-ROMs to all participants. For the newly attending countries (Albania and Iceland), he also provided the earlier versions of the slide collections.

For *P. alba*, István Bach reported that some material has been received for the slide collection and that the slide collection has not yet been produced as CD-ROMs. The participants were asked to send more photos to István Bach, who will then produce the CD-ROMs for the next meeting.

Leaflet for black and white poplars

Sven de Vries circulated a draft text for the leaflet before the meeting. The purpose of the leaflet was discussed and it was decided to wait until the Information Working Group of Phase III has discussed public awareness efforts in general before finalizing the leaflet. All participants were encouraged to send their comments to Sven de Vries by **31 October 2004.**

ID sheet for P. alba

István Bach reported the development of the identification sheet for *P. alba*. He had received some comments after presenting the draft during the previous meeting in Germany. He provided the original drawings to the Secretariat and will also send the final text by **30 September 2004**. The Secretariat will then proceed with the production of the ID sheet following the format of the English version of the *P. nigra* ID sheet by the end of 2004.

International Poplar Commission meeting (Nov 2004)

Sven de Vries informed the participants about the meeting of the International Poplar Commission that will be held in Chile in November 2004. It was agreed that the Network poster will be presented there and other information on the EUFORGEN activities will be distributed.

Outputs of the 1st International Conference on the Future of Poplar Culture, Rome (Nov 2003)

Jos Van Slycken gave a brief review on the outputs of this conference. The purpose of the conference was to inform policy makers in Europe about the potential of poplars and willows for economic development and their environmental benefits. The importance of the overall forest sector within the EU was also highlighted as well as the work of the International Poplar Commission (IPC). The conference made 11 recommendations for future work on poplars in Europe (more detailed information can found at http://www.fao.org/forestry/foris/webview/forestry2/index.jsp?siteld=5441&sitetreeld=2058 7&langId=1&geoId=0).

Research facilitation

Marc Villar provided a short update on the EU-funded POPYOMICS project which focuses on ecophysiology, growth studies and molecular markers in poplars.

Carmen Maestro informed the participants nursery plant descriptors have been developed for white poplar in Spain. The draft is available and was put on display during the meeting.

Berthold Heinze mentioned that further efforts to test purity of poplar species have being continuing based on the collaboration between Austria and the UK.

Marc Villar highlighted some problems in using the descriptors for inventorying *in situ* stand of *P. nigra*. He also forwarded a message from Pascal Frey who asked last year the participants to supply *P. nigra* leaves infected with rust for his pathological study. Pascal Frey thanked the Network for its contributions and has informed the study revealed interesting results on rust resistance of *P. nigra*. Marc Villar will make sure that the results will be distributed among the participants once they are ready. A total of 27 samples were sent from 11 countries and from 23 different sites for this study.

Jos Van Slycken informed the participants that An Vanden Broeck will defend her PhD thesis in Belgium at the end of September. The title of her thesis is 'Potential geneflow from cultivated poplars into native European black poplar in Belgium'.

Sven de Vries informed that EVOLTREE II proposal is under development and Marc Villar mentioned that INRA is coordinating the proposal development for the last call of the 6th Framework Programme. He also reported that the proceedings of the DYGEN conference were recently published in a special edition of Forest Ecology & Management. The conference was held in Strasbourg, France in December 2002.

Common action plan for *P. nigra*

Density map for P. nigra populations in Europe

Marc Villar presented an update on his efforts to produce a density map for *P. nigra* in Europe. Data have been sent to him on the distribution of the species in 15 countries. He

commented that it was difficult to draw a map at a European scale because the data were all in different forms. There was considerable discussion about how to resolve these difficulties. Maria Carolina Varela suggested that rivers should be presented as different thickness of lines according to the density of trees present. Peter Rotach asked how large the populations should be to merit inclusion in the map. Maria Carolina Varela made the comment that some of the data are out of date and several trees which have been included no longer exist.

In the end it was decided that two maps were required. The first map in green and red lines was produced in hand-drawn form by Marc Villar as an initial version. The objective of the first map is to provide overview of the presence and abundance of *P. nigra* at the European scale. Marc Villar will continue his efforts and will present a new version during next meeting. He will provide the participants with the template map **by the end of 2004** so that more countries can send their inputs. It was agreed to call this map "*Populus nigra* survey map".

Minimum requirements for gene conservation units

Berthold Heinze gave a detailed account of how the Noble Hardwoods Network approached the task of defining and selecting gene conservation units for the common action plans. He outlined the minimum requirements for such a unit. The Noble Hardwood Network had agreed that the minimum size of a conservation unit should be 50 unrelated, flowering trees and that there should be at least 20 populations. It was decided to set up a working group in order to determine these criteria. The group consists of Berthold Heinze, Marc Villar, Georg von Wuehlisch and Peter Rotach.

The working group mentioned above was given the task of developing a check list to define the requirements for *P. nigra* gene conservation units and their management. They agreed to produce this list by **30 November 2004** and to have comments back from the countries by **31 December 2004**. The final version will be produced by **30 January 2005**. The next step is to ask countries to identify suitable conservation units and provide information on these. The construction of the second map will be discussed during the next meeting. The objective of the second map is to define and plot the position of populations which meet the criteria for inclusion as gene conservation units for the common action plan at pan-European level.

Project development for Council Regulation (EC No. 870/2004)

Update on the Council Regulation and EUFORGEN proposals

Jarkko Koskela gave an update on the current state of the Council Regulation on genetic resources in agriculture. He mentioned that the opening of the first call for proposals is likely to be postponed until the end of 2004 and that the EC expects budget requests of 400,000-500,000 euro per project. For targeted actions, this will cover 50% of the costs.

He then informed the participants that five project proposals are under development by the EUFORGEN Networks, i.e. POPGIS (an inventory and development of database of natural poplar populations), elm II (*in situ* and *ex situ* conservation), EUFORGEN-wide proposal (establishment of a European information system on FGR), a joint proposal by Noble Hardwoods Network and ECP/GR Malus-Pyrus Working Group and possibly a proposal on yew (*Taxus baccata*).

Jarkko Koskela provided some further details on the proposal development on the information system and mentioned that this project aims at 1) developing minimum requirements for dynamic gene conservation units of FGR (applicable for all tree species) and common information standards at pan-European level and 2) creating a web-based, permanent information system on national FGR inventories to support sustainable forest management in Europe. It is planned that all EU Member States, Associated Countries and other countries will be involved in this project together with the EUFORGEN Networks.

POPGIS

Lorenzo Vietto started his presentation by mentioning that he recently attended an 'International Symposium for River Restoration in Europe", held in Croatia. He commented that he was surprised that none of the speakers mentioned *P. nigra*.

He went on to make a presentation entitled 'POPGIS a new opportunity for the *P. nigra* network?'. The survey map would be a starting point of this proposal and of the development of detailed map would be the main goal of the proposal. The proposal will have four objectives – inventories, collection of geo-referenced data, set up of clone banks and creation of web-based database. There was total agreement that the proposal should be prepared and submitted, and that it should focus on pure *P. nigra*. If the project is funded, 50% of the costs will be supplied by the Commission and participants have to find another source for the remaining 50%. The group invited Lorenzo Vietto to coordinate the proposal development. He agreed to do this providing the status of his institute in Italy will be secured and it continues to be funded. It was agreed that Carmen Maestro, Jos Van Slycken, Marc Villar and Joan Cottrell would assist him to prepare the proposal. The proposal should be prepared in time for the first call at the end of 2004. The majority of the countries present indicated their interest to participate in the proposal.

Seminar on the inventory of *P. nigra* populations in Switzerland

Peter Rotach introduced the seminar topic and provided some background information on the inventory work in Switzerland. Andreas Rudow provided a presentation on the methodology of the inventory after which Eva Sabiote and Marco Paniga demonstrated the field techniques used. Rolf Holderegger then explained the molecular genetics and Peter Schwab outlined the first results of the project.

The group collected data and samples from poplars for molecular identification. The results showed that there is 3% error in morphological identification of the most obvious individuals (old trees) and it was suggested that the error is higher for younger trees. Thus, morphological traits reported in the literature need to be revised to minimize the error. The project has also made efforts to optimize searching areas for field surveys and found only weak correlation between the occurrence of *P. nigra* and specific habitat types. The project has also been trying to define methods for morphological identification of pure *P. nigra* individuals.

Wrap-up session

Any other business

Jos Van Slycken informed the participants that he and An Vanden Broeck were planning to develop a proposal on poplars for the 6th Framework Programme (as an integrated project). The participants were asked to indicate their interest to contribute to the proposal.

Marc Villar, Berthold Heinze, Sven de Vries, Joan Cottrell and Carmen Maestro expressed their interest. Jos Van Slycken will distribute the concept note to all participants after the meeting and other interested institutions are welcome to join for the proposal development.

Jos Van Slycken raised the issue of getting clones approved under Directive 1999/105/EC. He informed the meeting that this is a very time consuming operation which needs to be looked at if *P.nigra* clones are going to be made commercially available in the future. In fact out of the directive he concluded that clones can only be categorized as qualified or tested.

Date and place of the next meeting

The next meeting will be a combined meeting with the Noble Hardwoods Group and it has already identified Norway as the first option and Denmark as the second one. It was discussed and agreed that the next meeting can be held in Norway. The Secretariat will inform the dates after discussing with the Noble Hardwoods Network. It was recommended that the first meeting day of the merged meeting could include separate sessions for PN and NH Groups.

Election of new Chair and Vice-Chair

Berthold Heinze was proposed as new Chair and Marc Villar as new Vice-Chair of the *Populus nigra* Network. The participants agreed with this proposal and Berthold Heinze and Marc Villar accepted their new roles.

Adoption of the summary report

The report was adopted. Once the final additional comments have been incorporated, it will be circulated to the participants after the meeting.

Closure

Sven de Vries thanked the local organizers on behalf of the Network for the excellent meeting arrangements. He also thanked Network members for their contributions to the network tasks and discussions during the meeting. He then declared the meeting closed.

Annex I – List of participants

Ninth meeting of the EUFORGEN *Populus nigra* Network, Kartause Ittingen, Warth, Switzerland, 16-18 September 2004

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