

INTERNATIONAL POPLAR COMMISSION

Report of the 19th Session of the Commission
and of the 36th Session of its Executive Committee

Zaragoza, Spain, 22 - 25 September 1992

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Rome, 1992

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PART I. REPORT OF THE 36TH SESSION OF THE EXECUTIVE COMMITTEE
OF THE INTERNATIONAL POPLAR COMMISSION

I. ORGANIZATION

1. The 36th Session of the Executive Committee of the International Poplar Commission (IPC) was held in Zaragoza, Spain, on 22nd September 1992, at the kind invitation of the Government of the Kingdom of Spain. Mr. V. Steenackers, Chairman of the Executive Committee chaired the meeting. It consisted of a closed session of 10 members and 3 heads of Working Parties as well as the Secretary of the Commission and a former Secretary of the IPC acting as adviser.

II. THE SESSION

2. The Session was opened by the Chairman of the Committee. The provisional Agenda was adopted.

3. The Chairmen of the Working Parties presented their reports. Arising from the discussions a request was made by the Executive Committee to the Working Party on Breeding to prepare a project on the conservation, exploration and improvement of the genetic resources of species of poplars and willows growing in arid, semi-arid and subtropical regions. This would in due course be transmitted to FAO with the recommendation to explore means of funding to implement the project.

4. The Committee was informed that Mr L. Nef (Belgium) would be the new Chairman of the Working Party on Insects and Other Animal Pests.

5. The Secretariat informed the Committee of the candidates proposed by member countries from which its members for the period 1993-1996 would be elected. The need for an appropriate geographic distribution of members for the dissemination of developments in poplar and willow technology was stressed.

6. The Executive Committee, at its 35th meeting, proposed to transform the two Ad Hoc Committees on Poplar Breeding and Biomass Production Systems into Working Parties of the same name (paras. 40 to 42 of the Report of the 35th Executive Committee meeting). The Secretariat advised the Committee that the FAO Legal Office gave clearance for the proposal to be implemented. The Committee accordingly agreed to recommend it to the 19th Session of the IPC.

7. The Secretariat informed the Committee of the offers received from member countries to host the 37th Session of the Executive Committee; the Committee supported the proposal to hold the meeting in Italy.

8. The Committee was informed by Mr Bisoffi of the preparation of a Directory of Poplar and Willow Scientists, which is held on a database by the Italian Istituto di Sperimentazione per la Pioppicoltura. The Committee recommended that the new Executive Committee consider the arrangements that should be made for its future maintenance.

III. POST SESSION INFORMAL MEETING OF THE EXECUTIVE COMMITTEE

9. The newly elected members of the Executive Committee for 1993-1996 met on 25th September 1992 to elect the Chairman and Vice-Chairman of the Committee and discuss general business.

10. Mr. Steenackers (Belgium) was elected as the Chairman and Mr. Wang Shiji (People's Rep. of China) as the Vice-Chairman of the Executive Committee, both unanimously. It was agreed that Messrs G. Vallée (Canada), K. Siddiqui (Pakistan) and G. Lapietra (Italy) should be co-opted to the Executive Committee. Mr D. Terrasson (France) was elected Chairman of the Sub-committee on Nomenclature.

11. The preparation of a new edition of the FAO publication "Poplars and Willows" was discussed and it was agreed to request the Chairman to obtain the views of the Executive Committee, before raising the matter at the next Executive Committee meeting.

PART II. REPORT OF THE 19TH SESSION OF THE INTERNATIONAL POPLAR COMMISSION

I. ORGANIZATION

1. The 19th Session of the International Poplar Commission (IPC) was held in Zaragoza at the kind invitation of the Government of the Kingdom of Spain under the Chairmanship of Mr. Domingo Cadahía (Spain), with the assistance of two Vice-Chairmen, Mr. G. Vallée (Canada) and Mr. Jaime Ulloa (Chile), and three Rapporteurs, Mr. Dean DeBell (USA), Mr. François Lefevre (France) and Mrs. Teresa Cerrillo (Argentina).

2. The Session was attended by delegates, alternates and advisers from 23 member countries of the Commission: Argentina, Belgium, Bulgaria, Canada, Chile, China (People's Democratic Republic of), France, Germany, Hungary, India, Ireland, Italy, Korea (Republic of), Netherlands, New Zealand, Pakistan, Spain, Sweden, Switzerland, Syria, Turkey, U.K. and U.S.A. Observers attended from Croatia, Finland, Greece, Mexico, Norway and Uruguay. Participants and observers totalled 172.

II. OPENING OF THE SESSION

3. The Session was opened by the Chairman of the retiring Executive Committee, Mr V. Steenackers, who reviewed the objectives of the Commission.

4. Mr José Barreiros, Secretary General of the Ministry of Agriculture, welcomed participants and observers to Spain and apologised for the absence of the Minister of Agriculture. The Secretary General emphasised the support of his Ministry to the forestry sector and to the growing of poplars in particular. The first priority is given to poplar growing under his Ministry's assistance to private forestry. He noted that the theme of the meeting was very appropriate to the situation in Spain in view of recent EEC changes concerning "set aside" arable land and his country's environmental protection policy. In declaring the Session open he thanked FAO for its confidence in entrusting arrangements for the meeting to his country and the Government of Aragón for organising it.

5. The Director General for Research and Technology, Government of Aragón, Mr Ignacio Palazón, stressed the interest of his government in the growing of poplars, which make up about 17% of the total area dedicated to this crop in Spain. The Director General hoped that the participants would consider the challenge posed by the need for new agricultural policies, which included the encouragement of combinations of poplars grown with agricultural crops. In welcoming participants to Aragón he looked for a two-way flow of information between those from within and those from outside the region.

6. The Secretary of the IPC, Mr J.B.Ball, welcomed participants and observers on behalf of the Director-General of FAO, Mr E. Saouma. The Secretary noted that a record number of both participants and countries were attending, a compliment to the high quality of the arrangements made by the host country and the Government of Aragón, for which he thanked the organisers.

7. Mr. Domingo Cadahía (Spain) was elected Chairman of the 19th Session and Mr. G. Vallée (Canada) and Mr. J. Ulloa (Chile) Vice-Chairmen.

8. The Provisional Agenda was adopted without amendment.

III. THE SESSION'S ADMISSION OF NEW MEMBER NATIONS

9. Delegates were advised that Sweden, as a member of FAO, had applied to join the International Poplar Commission under Article II (1) of the Convention governing the IPC. Sweden had lodged its formal acceptance of the Convention with the Director-General of FAO and was accordingly now a member of the IPC.

10. Croatia had also applied to FAO to join the IPC, as a member of the United Nations, under Article II (2) of the same Convention. It had lodged acceptance of the Convention. Election to membership under this Article requires a two thirds majority of the membership (23 members at that time). A vote was therefore held on the application of Croatia, scrutinised by the three Rapporteurs, at which all 23 delegations present in the hall voted in favour. Croatia was therefore declared the thirty fifth member of the International Poplar Commission.

IV. POPLAR- AND WILLOW-GROWING IN COMBINATION WITH AGRICULTURE

11. Mr D. Terrasson presented the paper on the theme of the 19th Session, "Poplar- and Willow-Growing in Combination with Agriculture". The paper was based on replies to a questionnaire which had been circulated to all member countries in mid-1991; responses had been received from 19 countries.

12. The theme was similar to that for the 16th Session (1980). Two conclusions were drawn in 1980. The first was that there was a decline in interest in the association between poplar cultivation and agriculture in the countries of traditional poplar cultivation, that is to say western Europe, but other countries were showing increased interest in growing poplars in association with agriculture. The second conclusion was that the creation of energy plantations using the Salicaceae was being actively researched in several countries; it was believed that such plantations would be developed during the last two decades of the century.

13. The conclusions drawn from the present study are not entirely consistent with these previous findings. Intercropping continues to be practised in most of the warm temperate countries in order to hold down production costs, but only with poplars, and its importance is marginal to arable crop production. The association between poplar cultivation and agriculture or animal husbandry requires labour which is decreasing in the agricultural sector in most countries. On the other hand, there is more and larger farm machinery in response to the reduced labour supply, but the use of heavy equipment is often incompatible with line planting, which is tending to decrease except where there is a critical wood deficit or the use of windbreaks is very beneficial to agricultural production. In China, however, the large wood deficit and the small area of agricultural land per person makes this a special case and the association of poplar growing with agriculture accounts for most of the poplar plantations that are established.

14. The expected development of plantations of the Salicaceae for wood energy has not happened, and short rotation coppice remains a subject for research. The trials are now more linked to pulpwood supply than to energy.

15. Moreover, some new trends are emerging that may influence the long-term prospects for poplar cultivation in industrialised countries. These are:

- Agricultural over-production in the countries of western Europe is leading to limitations being placed on the growing of many agricultural crops; this will reduce the potential for poplar growing in association with agriculture. Where marginal land has been taken out of agriculture such land is generally not suitable for growing the Salicaceae, but where it is of better quality the cultivation of poplars and willows is possible but has so far not been widespread.

- Political developments in Eastern Europe may affect the management and ownership of existing poplar plantations, especially where they are closely linked to the agricultural sector.

- A hostile reaction is emerging in some industrialized countries towards the growing of poplars on moist sites, not only because such sites may be threatened or fragile but also and because of the artificial appearance of the plantations.

V. SYNTHESIS OF NATIONAL REPORTS ON ACTIVITIES RELATED TO POPLAR AND WILLOW AREAS, PRODUCTION, CONSUMPTION AND THE FUNCTIONING OF NATIONAL POPLAR COMMISSIONS

16. National Reports were received from the Poplar Commissions of 21 member countries (see Annex IV).

17. Current inventory data for standing volume and/or area of poplars were available for most member countries. Canada dominated the reported stocks, with nearly 3,000 million m³ standing volume. The U.S.A. had 765 million m³. In terms of the area of poplar plantations France reported 279,500 ha (1989), Hungary and Yugoslavia (up to 1990) 150,000 ha each, Turkey 130,000 ha, Spain 91,000 ha (1985), Romania 83,000 ha (1984) and Italy 79,000 ha (1990). China reported that 140,000 ha were established between 1988 and 1991; Korea reported 19,000 ha and Syria 12,600 ha established in almost the same period.

18. Production of poplar wood was 16 million m³ in the U.S.A. in 1991; in the same year Turkey produced 3,5 million m³, France 3.3 million m³, or 14% of total national production, Hungary 1.7 million m³ and Pakistan 1.1 million m³. Italy reported an average of 1.6 million m³/yr in the three years 1988-90, compared with 4.1 million m³ reported in 1988. Countries reporting significant exports of poplar wood were Belgium (210,000 m³ or 60% of production in 1991) and France (478,000 tonnes in 1989).

19. The most important consuming member countries are Canada, which reported a considerable increase in the consumption of poplar wood (especially *Populus tremuloides*) and China, where it was an important industrial roundwood. Consumption figures were available for relatively few countries. Importations of poplar wood were important to Italy (593,000 tonnes) and Korea (25,000 m³, or 51% of consumption). Germany and Italy reported weak markets. Syria reported production of 25,000 tonnes/yr.

20. Several European countries (e.g. Belgium, Italy, Spain, U.K.) reported that EEC regulations on "set aside" agricultural land and on incentives to afforest such land would aid poplar growing, but some of those countries (and the U.S.A.) also reported resistance from some members of the public to the expansion of poplar growing. Romania, one of the countries whose economy was formerly centrally planned, reported legislative changes with the change to the market economy which would affect the ownership, management and disposal of forest land (including poplar plantations).

21. Most member countries reported active national poplar commissions and a great deal of exchange of breeding material and of scientists between countries. The Bulgarian and Romanian commissions have been reestablished and the statutes of the Swiss commission have been modified to give it more freedom. The United Kingdom reported that a poplar working group was set up. Only Hungary and Morocco reported that their commissions were not functioning.

22. The cultivation of willows was little mentioned in national reports, although some member countries such as Romania (50,700 ha, of which 9,400 are native stands), Hungary (21,600 ha) and the Netherlands (4,000 ha, excluding 3,900 of osier fields) reported on the areas of willows. Spain reported an average production of 24,400 tonnes/yr. In addition to those countries which reported that willows were of some importance in their forest economies, Pakistan noted production of 18,000 m³ of willows in 1991.

VI. POPLAR AND WILLOW IDENTIFICATION AND VARIETAL CONTROL

23. The Chairman of the Sub-Committee on Nomenclature and Registration, Mr Viart (France), presented the International Catalogue of Poplar Cultivars. The preparation and publication of this Catalogue had been the subject of recommendations of both the 18th Session (Beijing, 1988) and the 35th Executive Committee Meeting (Buenos Aires, 1990).

24. The following points arose from discussion of the Catalogue:

- the International Poplar Commission is the only international authority for the registration of cultivars of poplars (a decision taken in 1958 by the International Commission for the Nomenclature of Cultivated Plants);
- by extension, the competence of the International Poplar Commission, functioning as the International Authority for Registration, is universal and is not limited only to member countries of the IPC;
- in the field of registration of the names of the cultivars of poplars, the competence of the International Poplar Commission is limited to the strict application of the International Code of Nomenclature of Cultivated Plants;
- in conformity with this Code, the International Poplar Commission is in particular not permitted to carry out trials, give an opinion on the merits of one cultivar over another or to give an opinion on the identification of cultivars.

25. The meeting confirmed that the International Catalogue of the Cultivars of Poplars met these four points.

26. Mr Viart advised the meeting that he wished to retire as Chairman of the Sub-Committee, and requested the Executive committee to appoint a new Chairman. Mr Viart was warmly thanked by the members not only for his work on the Catalogue but also for his important contributions to the work of the International Poplar Commission in the past.

VII. POPLAR AND WILLOW PROTECTION

a) Report of the Working Party on Poplar Diseases

27. The Chairman of the Working Party, Professor Cellerino (Italy), presented an overview paper describing the work of the IPC on poplar diseases since the formation of the Working Party in Madrid in 1955. Fifteen delegates from 11 countries took part in the discussions, while reports or communications were received from another five countries.
28. The Working Party recognised the existence of physiological races of *Melampsora* spp., the rapid evolution of populations of these races and progress made in knowledge of the reaction of clones and species of poplar to the disease. In particular the group noted the first case of an infection by *M. larici-populina* on the west coast of the U.S.A. and the detection in New Zealand of a morphological hybrid between *M. medusae* and *M. larici-populina*.
29. Cases of infection by *Venturia populina* have been cited from Italy and the U.S.A. Attention was drawn to attacks caused by *Alternaria alternata* on *Populus nigra* and *P. alba* in Argentina and *Rhizoctonia solani* on *P. deltoides* in India.
30. *Septoria muciva* continues to be a problem in North America. In Europe and in North America *Dothichiza populea* outbreaks have developed due to stress factors. A study on immunisation by *Trichoderma viridae* against bark parasites is under way in Bulgaria.
31. *Xanthomonas campestris* has been detected for the first time in Italy and several attacks due to *Pseudomonas syringae* have been observed in France and Sweden.
32. Participants from Italy described a strategy for the utilisation of white poplar, involving the selection of families and provenances for tolerance of frost and drought. Some new clones have been selected and cultivated in Belgium for their resistance to the principal diseases.

b) Report of the Working Party on Poplar Insect Pests

33. Twenty people from 5 member countries took part in the discussions of the Working Party. During the meeting, Mr Cavalcaselle (Italy), tendered his resignation as Chairman of the Group; the members elected Mr L. Nef (Belgium) in his place, with Mr Allegro (Italy) as secretary.
34. Discussions centred on the papers which were presented, in particular on the presence of a new pest recorded from France (*Anisandrus dispar*), the use of pheromone traps for monitoring and the mass trapping of *Paranthrene tabaniformis*, the biological control of *Cryptorrhynchus lapathi* by nematodes, the resistance of poplar clones to *Chrysomela* sp., *Anoplophora* sp. and *Hyphantria cunea*, the influence of *Phyllocnistis suffusella* attacks on the physiology of leaves, an artificial diet for *Cryptorrhynchus lapathi* and the entomological problems arising from poplar/agricultural crops associations.
35. The Working Group agreed that it was essential to improve the exchange of information between scientists working on similar problems of pest control in the member countries and that greater efforts must be made to develop more environmentally friendly methods of pest control.

VIII. LOGGING AND UTILIZATION

36. The meeting of the Working Party was attended by over 50 participants, representing 18 countries. The Chairman, Mr. Balatnecz (Canada), highlighted activities since the last meeting in Beijing.
37. Discussions of the papers presented to the meeting stressed the theme of the Session, the growing of poplars and willows in combination with agriculture. Topics included the role of poplar growing on "set aside" farmland in the EEC, the uses of computer modelling in such situations, the effect of management regimes, large-scale industrial projects and the benefits of combinations with agricultural crops or grazing. The characteristics of

new Belgian clones and utilization in Canada were described.

IX. BREEDING AND SELECTION OF POPLARS AND WILLOWS

38. The Working Party had decided before the 19th Session to concentrate on the following topics: (a) the potential of biotechnology in poplar breeding, (b) poplar breeding for extensive culture, (c) status and perspectives of North American poplar resources, and (d) breeding of Asiatic willows. A total of 44 papers reflecting these topics were presented.

39. The discussions of the Working Party concerned not only the presented papers but also took regard of the growing demands for wood in developing as well as in the developed countries, which could be met at least in part through the improvement of poplar and willow growing stock without increasing the pressure on already endangered forest ecosystems. The Working Party stressed the primary importance of genetic diversity towards such improvement, while at the same time recognising that there was a high risk that genetic reserves represented by native stands of several poplar and willow species might be lost in the near future due to the destruction of their native habitats and/or due to introgression by genetically uniform cultivated varieties. Furthermore, several species which have so far been little explored may have considerable potential for the genetic improvement of poplars and willows, particularly in arid, semi-arid and subtropical areas.

X. BIOMASS PRODUCTION SYSTEMS FOR THE SALICACEAE

40. A total of 55 participants from 19 countries attended the meeting of the Working Group, which was held jointly with the IEA-Bioenergy Activity on Growth Processes.

41. The participants agreed on the integrated approach being adopted in consideration of short rotation biomass systems, and requested more information in future on the cultivation of willows for biomass. The usefulness of joint meetings with other groups concerned with similar problems was agreed as well as the importance of socio-economics and market analysis and the exchange of research information on topics of interest to those working in the field of biomass production systems in different regions. The participants noted the lack of a Working Party of the International Poplar Commission devoted to management systems of poplar and willow plantations. The participants also suggested the broadening of scope of the Working Party on Biomass Production Systems to include a variety of short rotation systems with an integrated approach, including questions of environmental safeguards, and the provision of technical assistance to countries starting biomass production programmes.

XI. RECOMMENDATIONS OF THE COMMISSION

42. The Session was advised of the recommendation of the Executive Committee concerning with the transformation of the former Ad Hoc Committees into Working Parties. The recommendation was approved.

43. The Commission reviewed the recommendations formulated by the subsidiary bodies and, after discussions, adopted the following recommendations:

Nomenclature and Registration

44. The member countries of the International Poplar Commission should each create without delay a National Authority for Registration, charged with the registration of poplar cultivars conforming to the International Code for the Nomenclature of Cultivated Plants, of which the principal provisions are included in the Catalogue of Poplar Cultivars.

45. Member countries of the International Poplar Commission, using the cultivars produced by non-member countries, should be invited to advise the latter to follow the process of registration so that their cultivars are correctly registered.

46. Member countries of the International Poplar Commission should be invited to send to the Secretariat of the IPC their proposals for additions or amendments to the existing Catalogue.

47. With a view to the development of the Catalogue, it is recommended that the Secretariat take the necessary measures to ensure the updating of the Catalogue by requesting the services of, for example, the Istituto di Sperimentazione per la Pioppicoltura of Casale Monferrato (Italy).

Poplar and Willow Protection

a) Diseases

48. The Working Party on Diseases recommended that the collaboration between tree breeders and pathologists should be expanded and should be translated into joint sessions, which would not exclude specialised meetings of either of the Working Parties.

b) Insect Pests

49. The Working Party recommended that there was need to increase basic research carried out on the resistance of the Salicaceae to pest damage, as well as to increase the interdisciplinary work aimed at genetic improvement.

50. A fellowship plan was recommended, which should be set up for young scientists from developing countries to study in institutions having long experience in research into entomological problems in poplars. It further recommended that member countries of the International Poplar Commission should report regularly to the other members of the Working Party the results and research projects being carried out, in order to harmonize and collaborate in their work.

Logging and Utilization

51. The Working Party recommended that member countries should give greater emphasis to the collection and regular updating of economic data, as well as to sharing information with other members.

52. It was recommended that member countries should pay more attention to the environmental aspects of poplar growing, as well as to the recycling of products. The need for greater coordination between the growers of poplar wood and those who use it was noted.

Breeding and Selection

53. The Working Party recommended that the International Poplar Commission, through FAO, should address to member and non-member countries a formal invitation to adopt appropriate measures to ensure that existing genetic resources of poplar and willow species, in natural and man-made stands, be properly preserved, stressing the role that fast-growing species may play in reducing the pressure on delicate and endangered natural environments worldwide.

54. The International Poplar Commission, with the active contribution of its subsidiary bodies, should support those activities that are already undertaken for the collection of the germplasm of the Salicaceae in several countries, with particular regard to:

(i) the establishment of links between existing programmes funded by national and international organizations,

(ii) improving the exchange of information and material between scientific institutions worldwide,

(c) designing model programmes around *Populus deltoides* and *P. nigra* in consideration of their great importance in breeding programmes and the existing threats of genetic pollution from cultivated varieties.

Biomass Production Systems

55. At the next meeting of the Working Party discussion should centre on environmental, socio-economic and marketing issues of short rotation woody biomass production systems in agriculture and animal husbandry.

56. Working Party meetings should include country reports on state-of-technology.

57. Joint sessions should be held with the Working Parties on Breeding and on Diseases to consider integrated approaches towards breeding for disease resistance in biomass production systems.

XII. OTHER MATTERS

Election of the Executive Committee 1993-96

58. Eighteen candidates were proposed by fourteen member countries for election to the Executive Committee for the 1993-1996 period. An election was held by secret ballot involving 22 member country delegates authorized to represent their respective governments (Argentina; Belgium; Bulgaria; Canada; Chile; China, People's Republic of; France; Germany; Hungary; Ireland; Italy; India; Korea, Republic of; Netherlands; New Zealand; Pakistan; Spain; Sweden; Syria; Turkey; United Kingdom; United States of America).

59. The following were elected to the Executive Committee for 1993-1996: R. Arreghini (Argentina), Chong-Supp Shim (Korea, Rep.), L. Christersson (Sweden), C. Foster (United Kingdom), E. Giordano (Italy), A. Padró (Spain), J. Richardson (Canada), V. Steenackers (Belgium), D. Terrasson (France), Wang Shi Ji (China), H. Weisgerber (Germany), A. Wilkinson (New Zealand). The collection and counting of votes was scrutinized by D. DeBell (U.S.A.) and F. Lefevre (France).

XIII. DATE AND PLACE OF THE NEXT MEETING OF THE EXECUTIVE COMMITTEE

60. Delegates were advised that invitations had been received from Italy, Romania and Syria, and informally from Hungary, to host the next meeting of the Executive Committee of the International Poplar Commission. It was agreed to request FAO to approach these countries, and on the basis of their responses, to decide the venue of the next Executive Committee meeting.

XIV. CLOSING OF THE SESSION

61. Mr J.P.Lanly, Director, Forest Resources Division, Forestry Department of FAO, speaking on behalf of the Director-General of FAO, thanked the Governments of Spain and of Aragón for hosting the 19th Session of the International Poplar Commission and its associated meetings. He welcomed the expansion of the IPC through its new members, and on the occasion of the 45th anniversary of its establishment, encouraged members to expand its horizons to include questions such as the environmental impact of poplar growing, socio-economic considerations and support to developing countries.

62. Mr D. Trueba, Chairman of the National Poplar Commission of Spain, drew attention to the national preoccupation not only with the wood deficit of the country but also with the preservation of the environment. It was for this reason that the Minister of Agriculture had delegated a strong team, under the Coordinator, Mr Padró, to organise the event.

63. Mr. Steenackers, Chairman of the Executive Committee of the International Poplar Commission, thanked all those concerned for the arrangements connected with the 19th Session and its associated events.

64. His Excellency, Mr. José Urbieto Gale, Consejero de Agricultura, Ganadería y Montes of the Government of Aragon, formally closed the Session.

ANNEX I(a)

36th SESSION OF THE EXECUTIVE COMMITTEE

Zaragoza (Spain), 22 September 1992

PROVISIONAL AGENDA

1. Adoption of the Agenda
2. Activities of the Working Parties and ad hoc Committees of the Commission since the 35th Session of the Executive Committee in Argentina in March 1990.
3. Activities of the Sub-Committee on Nomenclature and Registration of Poplars.
4. Proposals for the composition of the Executive Committee for the period 1993-1996.
5. Proposals for the date and place of the next session of the Executive Committee.
6. New Working Groups.
7. Other matters.

ANNEX I(b)

19TH SESSION OF THE INTERNATIONAL POPLAR COMMISSION
AND RELATED SESSIONS

Zaragoza (Spain), 23-25 September 1992

PROVISIONAL AGENDA

1. Adoption of the Agenda
2. Election of Officers
3. Admission of New Member Nations
4. Poplar and Willow Growing in Combination with Agriculture
5. Poplars and Willows: Summary of Statistics and Economics, Cultivation and Silviculture, Policy and Legislation and Operation of National Poplar Commission
6. Poplar and Willow Identification and Varietal Control
7. Poplar and Willow Protection
8. Poplar and Willow Logging and Utilization
9. Breeding and Selection of Poplars and Willows
10. Biomass Production Systems for Poplars and Willows
11. Other matters, including the Election of the Members of the Executive Committee for the Four-Year Period (1993-1996)
12. Date and Place of Next Session

LIST OF PARTICIPANTS

MEMBER COUNTRIES

ARGENTINA

Arreghini, Rosa Inés
Directora Instituto Forestal
Facultad de Ciencias Agrarias
Alts. Brown 500 - Chacras de Coria
5505 Mendoza

Cerrillo, Teresa
Centro de Investig. y Exper.
Forestales CCIEF
Moreno 431
1091 Buenos Aires

BELGIUM

Evrard, René
Institut Supérieur Industriel
du Hainaut
11 rue P. Pasteur
B 7800 ATH

Nef, Ludovic
Université Catholique de Louvain
Unité Eaux et Forêts
Place Croix-du-Sud, 2 B.P. 9
1348 Louvain-La-Neuve

Spaas, P.A.J.
Berkenbroekstraat, 1
3690 Bree

Steenackers, Jan
Xylindus University Ghent
Lab. Wood Technology
Coupure Links 653
9000 Ghent

Steenackers, Marijke
Institute for Forestry
and Game Management
Gaverstr. 4
B 9500 Geraardsbergen

Steenackers, Victor,
Directeur,
Station de Populiculture,
Garverstraat 4,

9500 Geraardsbergen

Van Slycken, Jos
Institute for Forestry
and Game Management
Gaverstr. 4
B 9500 Geraardsbergen

Van Acker, Joris
University Ghent
Lab. Wood Technology - Xylindus
Coupure Links 653
9000 Ghent

BULGARIA

Canov, Canko
Professor, Station expérimentale
de recherche des espèces
à croissance rapide
18 rue Nové
5250 Svichtov

Radoslavova, Dimka
15 V. Levaki
Bjala

CANADA

Balatinecz, John J.
Professor, Faculty of Forestry
University of Toronto
Toronto, Ontario M5S 3B3

Richardson, James
Forestry Canada
351 St. Joseph Boulevard
Hull, Quebec K1A 1G5

Gilles Vallée
Direction de la recherche
Service de l'amélioration des arbres
Ministère des forêts - Quebec
2700 rue Einstein
Sainte-Foy, Québec G1P 3W8

Zsuffa, Louis
Faculty of Forestry
University of Toronto
33 Willcocks St.
Ontario M5S 3B3

CHINA

Jingfang, Huang
Beijing Forestry University
College of Forestry Resources
100083 Beijing

Shiji, Wang
Chinese Academy of Forestry
Wan Shou Shan
100091 Beijing

Shixing, Lu
Nanjing Forestry University
210037 Nanjing

Weilun, Yin
Department of Forestry
Beijing Forestry University
Beijing 100083

Ximeng, Wang
Wangtaipu Youngning County
Ningxia

Yiyu, Zhao
Wangtaipu Youngning County
Ningxia

CROATIA

Jelcic, Krunoslav
Poplar and Willow Forests,
Cultures and Plantation in
Croatia
Hrvatske Sume
Zagreb Vukotinoviceva 2

Lovas, Ondrej
54000 Osijek
Fruskogorska 5A

Sikora, Josip
Hrvatske Sume
Zagreb, Urava
Suma Osijek 54000
J. Benesica 1/V

Starcevic, Tomislav
Poplar and Willow Forests,
Cultures and Plantations
in Croatia
Hrvatske Sume Zagreb
Vukotinoviceva 2

FRANCE

Augustin, Sylvie
INRA
Station de Zoologie Forestière
Ardon 45160

Bonduelle, Patrick
AFOCEL "Asoc. Forêt Cellulose"
La Petite Lande
49800 Brain sur Authion

Delplanque, A.
INRA
Station de Zoologie Forestière
Ardon 45160

Gavaland, André
INRA
Ardon 45160 Olivet

Lefevre, François
Station d'amélioration
des arbres forestiers
45160 Ardon

Terrasson, Daniel
CEMAGREF
Domaine des Barres
45290 Nogent sur Vernisson

GERMANY

M. Raj Ahuja
Institute of Forest Genetics
Federal Research Centre for Forestry and Forest Products
Sieker Landstrasse 2,
2070 Grosshansdorf

Dörflinger, Helmut

GREECE

Koukos, Paul
National Agricultural Research Foundation
Forest Research Institute
57006 Vasilika-Thessaloniki

INDIA

Chauhan, Partap S.
College of Forestry
University of Horticulture and Forestry
Solan 173230 H.P.

IRELAND

Bulfin, Michael
Head Forest Research
TEAGASC
Kinsealy Research Centre
Dublin 17

ITALY

Allegro, Gianni
Istituto di Sperimentazione per la Pioppicoltura
C.P. 116 - 15033 Casale Monferrato (AL)

Anselmi, Naldo
University of Turin - DI.VA.P.R.A
Via Pietro Giuria, 15
10126 Torino

Aresca, Giovanni
Arespan comitato del pioppo
Adi Monbelli

Cavalcaselle, Benedetto
via Di Casalotti 300
00166 Roma

Frison, Giuseppe
Istituto di Sperimentazione per la Pioppicoltura
C.P. 116 - 15033 Casale Monferrato (AL)

Pucci, Giuseppe
Corso Vittorio Emanuele, 101
00186 Roma

Sabatti, Maurizio
Dip Di Scienze Dell'Ambiente Forestale
Università Dei Studi Della Tuscia
Via S.C. De Leuis - 01100 Viterbo

KOREA (Rep. of)

Eui Rae Noh
Executive Member
Institute of Forest Genetics,
Suwon

Chong-Supp Shim
Chairman
C/o Forest Research Institute,
Seoul

NETHERLANDS

de Vries, Sven M.G.

Kolster, Henk W.
Stichting Bos en Hout
Postbus 253
6700 AG Wageningen

NEW ZEALAND

Wilkinson, Allan
C/o Landcare Research
Private Bag 11052
Palmerston North

PAKISTAN

Javid, Zahid
Divisional Forest Officer
DFO (PME), Swan Camp G.T. Road
Rawalpindi, Pakistan

Siddiqui, Khalid
Director General
Pakistan Forest Institute
Peshawar

SPAIN

José Ramón Anadon Escobedo
San Francisco 127 - 44002 TERUEL

José Manuel Arangüena Fanego
Sarriopapel y Celulosa, SA
Auda Montanana 109
50.016 Zaragoza

Fernando Basurco Alcibar
Instituto Nacional de Investigacion
y Tecnologia Agraria y Alimentaria (INIA)
Jose Abascal, 56
28003 Madrid

Manuel Bello León
Av. de Portugal No. 3 - Bl. 4-3ºD
Toleoco.

Joan Bonany
Fundació Mas Badia
Mas Badia
17134 La Tallada (Girona)

Francesc Camps Saguer
Fundació Mas Badia
17134 - La Tallada
Catalunya

Gabriel Catalán Bachiller
Icona
Servicio Material Genetico
c/Gran Via de San Francisco N° 4
28015 Madrid

Maria Pilar Ciria Ciria

Ramón Esnaola

Miguel Gamo Basaganyes
c/ Ronda de Buenanista, 26
45005 Toledo

Jesús García Betore
c/ Zaragoza, 30 - 1º A
50.660 Tauste, Zaragoza

Eloy González Planagumá
Deaprtament Agricultura
17430 Sta Colona de Farners

Vicente Emilio Gracia
Ingeniero Techico Agricola
c/Bolivia N° 1 - 3º D
44002 - TERUEL

Enrique Martín Bernal
Ensayos de Capturas masivos de machos de P. Tabanifarmrs Rott.
Cametara de Montanara 176
50080 Zaragoza

Virgilio Martínez Jimenez
Ingeniero de Montes; D.G. Aragon
Conservacion medio natural
c/San Francisco, 27
TERUEL

Carlos Millan Carazo
Consejeria Agricultura Castilla La Mawcha
Pintor Matia Mobew' n° 4
45002 TOLEDO

Ramón Molné i Domingo

Antonio Navarro Muñoz
Ingeniero de Moncez. D.G.A.
Agustina de Aragon 10 3⁰
TERUEL 44002

Joaquín Navarro Julián

Josep Maria Pagès
Associació de viveristes de Girona
Mas Badia
E-17134 Canet de la Tallada
Girona

Jesús Peman García
Ingeniero Montes, D.G.A.
Dep. Agricultura, Ganaderia, Montes
M Agustin 36

Jesús Pérez Fernández
Paseo de Isla N° 6-10° C
09003 Burgos

Agustín Pérez Rodilla
Instituto Nacional de Semillas y Plantas
de Vivero
Jose Abascal N° 56
Madrid

Fernando Puertas Tricas
Servicio de Montes - Departamento
de Agricultura. G. Montes de Navarra
c/Tudela N° 20
31002 PAMPLONA

Antonio Ramos Fernández
Acerra del Darro N° 30
postal 1 - 4°B

Granada

Francisco Rodríguez Castillo
C/General Vives Camino, 18,2ºC
19004 - Guadalajara

Fernando Ruiz Pérez
Consejería de Agricultura
Dirección General de Montes Caza y Pesca
c/Pintor Hamas Moreno, 4
45002 Toledo

M. Carmen Traver de la Iglesia
Gobierno de Navarra
c/Tudela 20
31002 Pampiona
Navarra

Carlos Villar Gutiérrez de Ceballos
Prado Tuerto S/o Edificio Servicios
Múltiples P.14 - Zamora

SWEDEN

Christersson, Lars
Professor
Swedish University of Agricultural Sciences
Box 7072
S-75007 Uppsala

Falk, Bo
Swedish University of Agricultural Sciences
Box 7072
S-75007 Uppsala

Gullberg, Urban
Swedish University of Agricultural Sciences
Department of Forest Genetics
Box 7072,
S-75007 Uppsala

Ilstedt, Bruno
Eshadeng 5
75337 Uppsala

Sennerby-Forsse, Lisa
Swedish University of Agricultural Sciences
Dept. Ecol & Envir. Res.
P.O. Box 7072,
S-75007 Uppsala

Verwijst, Theo
Swedish University of Agricultural Sciences
Dept. Ecol. & Envir. Res.
Box 7072
S-75007 Uppsala

SWITZERLAND

Gaillard, François
Président
Rue de l'Orient, 19
CH 1400 Youdon

Ritzler, Hans
Ettingevstr. 126
CH 4147 Aesch

SYRIA

Al-Ahmad, Farouk
Director of Forest (Chairman)
Ministry of Agriculture and Agrarian
Reforms - Dept. of Forestry and Afforestation
Damascus

TURKEY

Diner, Ahmet
Poplar Research Institute
41001 Izmit

Tunçtaner, Korhan
Poplar Research Institute
41001 Izmit

URUGUAY

Secco de Souza
Productor
Piedras 1836 Young - Rio Negro
Uruguay

UNITED KINGDOM

Foster, Caroline
E.T.S.U.
B154 Harwell
OXON OXII ORA

Tabbush, Paul
Principal Silviculturist
Forestry Commission
Alice Holt Hodge, Wrecclesham
Farnham, Surrey

U.S.A.

Debell, Dean
Research Forester
USDA Forest Service
Forestry Sciences Laboratory
3625 93rd Ave. SW
Olympia, Washington DC 98502

Hall, Richard B.
Professor
Dept. of Forestry
251 Bessey Hall,
Iowa State University
Ames, Iowa 50011

Hanna, Roger
Research Associate
Dept of Forestry
Iowa State University
Ames, IA 50011

Jacobi, William R.
Prof. of Forest Shade Tree Pathology
Dept. Plant Pathology Weed Science
Colorado State University, Fort Collins
Colorado 80523

Newcombe, George
Washington State University
Puyallup Research & Extension Center
Puyallup, WA, 98371-4998,

Ostry, Michael
Research Plant Pathologist
North Central Forest Experiment Station
1992 Folwell Ave
St. Paul, Minnesota 55108

Tuskan, Gerald
Research Scientist
P.O. Box 2008, MS-6352
Oak Ridge National Laboratory
Oak Ridge, TN, USA 37831

NON-MEMBER COUNTRIES

FINLAND

Smolandez, Heikki
Finnish Forest Research Institute
Svonenjoki Research Station
SF 77600 Svonenjoki

NORWAY

Urdahl, Dag Kjetil
Research Assistant
Agricultural University of Norway
Dept of Forestry
P.O. Box 5044
N-1432 AAS

FAO

Lanly, Jean Paul
Director,
Forest Resources Division,
Forestry Department
FAO, Rome

Ball, Jim B.
Senior Forest Officer (Plantations)
Forest Resources Development Branch
Forestry Department
FAO, Rome

Fugalli, Oscar
C/o Forest Resources Development Branch
Forestry Department
FAO, Rome

Carrasco-Stocchi, Mercedes
Forest Resources Development Branch
Forestry Department
FAO Rome

ANNEX III.A

List of Working Papers

Nomenclature and Registration

Number Title

FO:CIP:NR/92/1 Présentation du Catalogue International des cultivars de Peupliers - M. Viart

FO:CIP:NR/92/2 Leaf shape as a tool for the discrimination among poplar clones - S. Bisoffi, L. Cagelli

Logging and Utilization of Poplar Wood

Number Title

FO:CIP:N/92/1 Aptitud al desarrollo del Género *Populus* - M. Miranda

FO:CIP:N/92/2 Planting and sylvan conduct of poplars - R. Evrard

FO:CIP:N/92/3 Álamos consociados con hortalizas. Parte I: Repollo; Part II: Cebolla - J.C. Vega,
R.I. Arreghini

FO:CIP:N/92/4 Cultivo de álamos consociados con pasturas - R.I. Arreghini, M. Bajuk, A.D. Calderón

FO:CIP:N/92/5 Durabilidad de postes de álamos tratados por inmersión parcial en
pentaclorofenol - R.I. Arreghini

FO:CIP:N/92/6 The potential for poplar based agrisilvo-pastoral systems on arable land in the United
Kingdom - T.H. Thomas, R.W. Willis, J. Van Slykan

FO:CIP:N/92/7 Tree farming with poplars - B. Falk

FO:CIP:N/92/8 Variabilité des qualités papetières de 25 clones de peuplier âgés d'un an - G. Chantre, S.
Chauis

Poplar Diseases

Number Title

FO:CIP:D/92/1 Poplar rusts: Variability and populations in France - J. Pinon

FO:CIP:D/92/2 Resistance progenies and clones of black poplars to *Melampsora* spp. in years of heavy attacks
- G. Avramovic, V. Guzina, Z. Tomovic

FO:CIP:D/92/3 Alternariosis del álamo - P.A. Merlo, M.R. Carranza, A.M. Aprea

FO:CIP:D/92/4 Growth performance and disease resistance of euramerican poplar clones in Greece - P.K.
Koukos, S.M. Diamandis

FO:CIP:D/92/5 Influence of poplar plants' thickness to infection by *Dothichiza populea* and relative resistance

of different poplar clones to it - H. Michalopoulo, G. Skarmoutsos

- FO:CIP:D/92/6 Disease status of poplars in India - P.C. Pandey, S.N. Khan
- FO:CIP:D/92/7 *Rhizoctonia* leaf web blight, a destructive disease of *Populus deltoides* in India and its management - M.D. Mehrotra
- FO:CIP:D/92/8 Characterization of *Melampsora larici-populina* Kleb. and its impact on poplars - A. Giocelli, L. Vietto, N. Anselmi
- FO:CIP:D/92/9 *Xanthomonas campestris* pv. *populi* in Italy - A. Giocelli, L. Vietto, N. Anselmi
- FO:CIP:D/92/10 Poplar disease situation in Italy - A. Giocelli, L. Vietto
- FO:CIP:D/92/11 The introduction of the eurasian poplar leaf rust fungus *Melampsora larici-populina* into North America during an epidemic of *M. medusae* along the Lower Columbia River - G. Newcombe, G. Chastagner
- FO:CIP:D/92/12 Control index of grey leaf-spot of *Populus simonii x nigra* - Hao Hong, Wang Taizhen, Xu Chengqi, Wu Lijun, Wei Jianhua
- FO:CIP:D/92/13 International Poplar Commission - Working party on diseases - G.P. Cellerino
- FO:CIP:D/92/14 The use of molecular markers in developing and deploying disease resistant cultivars - G.A. Tuskan
- FO:CIP:D/92/15 A study on the prediction and forecast of the grey leafspot (*Coryneum populinum* Bres.) of *Populus simonii x nigra* - Xu Chengqi, Wang Taizhen, Hao Hong, Wu Lijun, Wei Jianhua, Wang Zhiyan, Hu Xianhui, Du Tingrui, Huang Fengeun, Sun Guoyu

Poplar Insect Pests

<u>Number</u>	<u>Title</u>
FO:CIP:I/92/1	Problematicues relatives à la protection phytosanitaire du peuplier associé aux cultures agricoles - B. Cavalcaselle
FO:CIP:I/92/2	Poplar and willow resistance to insects - F. Duhoux
FO:CIP:I/92/3	The role of monitoring by pheromone traps in the management of <i>Paranthrene tabaniformis</i> Rott - G. Lapietra, G. Allegro
FO:CIP:I/92/4	Influence of <i>Phyllocnistis suffusella</i> attacks on gas exchange of poplar leaves - L. Nef, R. Ceulemans, J.F. Menu
FO:CIP:I/92/5	Poplar insect pests fauna of Turkey and important variations observed in the period 1972-1992 - O. Sekendiz, N. Guler
FO:CIP:I/92/6	The current advance in the research of <i>Anoplophora glabripennis</i> (Motsch.) (Cerambycidae, Coleoptera) in China - J. Huang, Y. Lou, Z. Zhou
FO:CIP:I/92/7	The study on resistant gene types of poplar to longicorn beetle <i>Anoplophora nobilis</i> - X. Wang, Q. Jiang
FO:CIP:I/92/8	Informe sobre las investigaciones del INRA (Francia) acerca de la resistencia de los álamos contra los insectos - S. Augustin, J. Chenault, D. Cornu, A. Delplanque, L. Jouanin, J.C. Leple, S. Picard, M. Villar
FO:CIP:I/92/9	Biological control of <i>Cryptorrhynchus lapathi</i> L. - A. Hou, J. Liu, S. Man
FO:CIP:I/92/10	Artificial diet, rearing and behaviour of osier weevil (<i>Cryptorrhynchus lapathi</i> L.) - A. Hou, J. Liu, S. Xue
FO:CIP:I/92/11	<i>Anisandrus dispar</i> F. (Coleoptera Scolytidae). Ravageur des peupliers en France - A. Delplanque, M. Lemoine, D. Sauvard
FO:CIP:I/92/12	Ensayos de capturas masivas de <i>Paranthrene tabaniformis</i> , Rott, con feromonas sexuales específicas - E. Martin
FO:CIP:I/92/13	Poplar clonal preferences of the fall webworm (<i>Hyphantria cunea</i> Drury) - G. Allegro, G. Picco
FO:CIP:I/92/14	Insect pest status of poplars in India - M.L. Thakur
FO:CIP:I/92/15	The effect of benzoylphenol urea - III on the reproductive system of osier weevil - Li Chengde, Chi Defu, Miao, Jiancai
FO:CIP:I/92/16	Population dynamics of <i>Cryptorrhynchus lapathi</i> L. (Coleoptera: curculionidae) - Hu Yinyue, Liu Kuanyu, Chi Defu, Li Chengde, Zhang Xueke
FO:CIP:I/92/17	A study on the management of the major pest of poplar - <i>Clostera anastomosis</i> L. - Lou Wei, Wang Shumin, Yan Guanzhen, Li Qing, Tian Jinquan, Li Qingyu, Xia Wenfu
FO:CIP:I/92/18	The forecast of the overrun of osier weevil, <i>Cryptorrhynchus lapathi</i> L. (Coleoptera: Curculionidae) within its distribution region - Liu Kuanyu, Hu Yinyue, Yan

Shanchun, Sun Jianghua, Li Changsheng, Zhang Xueke

Poplar Breeding

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FO:CIP:BR/92/1 Breeding of aspen (*Populus davidiana* Dode) in Korea - E. Noh, Y. Koo, C. Shim

FO:CIP:BR/92/2 The breeding of cold-resistant fast-growing clones of poplar - X. Lu, Y. Sun, Y. Bai, G. Dong

FO:CIP:BR/92/3 Hybrid breeding of *Populus euramericana* in resistance to *Marssonina brunnea* - Y. Xiang, X. Zhu, D. Huang

FO:CIP:BR/92/4 Crossbreeding of *Populus deltoides* cv. 'Lux' x *Populus deltoides* cv 'Harvard' and the new cultivars - D. Huang, X. Zhu, R. Wang

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FO:CIP:BR/92/6 Introducción de nuevos clones de chopo en la provincia de Girona - E. Gonzalez

FO:CIP:BR/92/7 Evaluation of the possibility of the early selection of eastern cottonwood (*Populus deltoides*) by half-sib progenies - V. Guzina, Z. Tomovic, G. Avramovic

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FO:CIP:BR/92/9 Fenología de la foliación de una serie de clones de chopo en el Valle Medio del Ebro - A. Padro

FO:CIP:BR/92/10 Recuperación de terrenos degradados en el Pirineo con el empleo de *Populus tremula* L. obtenido mediante técnicas de micropropagación - A. Padro, C. Hernandez

FO:CIP:BR/92/11 El "Alamo blanco de La Alfambra" (*Populus x canescens*). Caracterización y medidas de conservación - A. Padro, A. Garcia

- FO:CIP:BR/92/12 Multiclonal poplar plantation: mixtures
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- FO:CIP:BR/92/13 Poplar tree improvement programme - A.N.
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- FO:CIP:BR/92/14 Productividad de nuevos clones de sauce en el Delta
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- FO:CIP:BR/92/15 Propagación clonal de árboles adultos de *Populus tremula* L. de la Sierra
de Madrid por cultivo de tejidos - M.A. Bueno, R. Astorga, J.A.
Manzanera, M.D. Garcia de los Rios
- FO:CIP:BR/92/16 Programa de recuperación de los sotos naturales de la
Ibañez, M. Martín, L. Laría Rioja - J.I.
- FO:CIP:BR/92/17 Principales características de los más conocidos clones
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- FO:CIP:BR/92/18 Primeros resultados de la experimentación clonal de
Estació Experimental Agrícola Mas Badia- Girona - F. Camps chopo en la
- FO:CIP:BR/92/19 Natural populations of *Populus alba* in Italy: Sampling strategy and
preliminary observations on growth habits, cold and rust susceptibility (Summary) - E.
Avanzo, N. Anselmi, G.P. Cellerino, M. Sabatti, G. Scarascia
Mugnozza
- FO:CIP:BR/92/20 Water stress effects on different clones of *Populus alba* grown in
controlled environment (Summary) - G. Scarascia Mugnozza, M. Sabatti, C. Caprioli, B.
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- FO:CIP:BR/92/21 Impact of increased CO₂ ON *Populus alba* one-year-old plants
(Summary) - G. Scarascia Mugnozza, P. de Angelis, E. Pompei, M. Sabatti
- FO:CIP:BR/92/22 El Populetum de Zamadueñas, Valladolid - F. Glez Antoñanzas,
J.M. Grau
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- FO:CIP:BR/92/29 Study on the variation and selection of *Populus ussuriensis* geographic provenances - Q. Zhan, X. Su
- FO:CIP:BR/92/30 The selection of poplars for planting in tropical and sub-tropical countries - L. Pryor
- FO:CIP:BR/92/31 Characterization of fast-growing Belgian poplar clones for industrial transformations (Summary) - J. Van Acker, J. Steenackers, M. Stevens
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- FO:CIP:BR/92/37 Growth - Allometry relations in *Salix* species and families, having different tree form and being under different mating design - F.A. Aravanopoulos, L. Zsuffa
- FO:CIP:BR/92/38 Transgenic poplars - expression of transferred chimeric genes in four different constructs - J.C. Leple, A.C. Miranda Brasileiro, M.F. Michel, F. Delmotte, L. Jouanin
- FO:CIP:BR/92/39 A study on the selective breeding potentiality of the F₁ hybrids between the cultivars of *Populus deltoides* and *P. euramericana* - Chen Hongdiao, Liu Zhichen, Pan Chengliang
- FO:CIP:BR/92/40 The selection breeding and utilization of *Populus alba* x *P. berolinensis dipple* - Shen Qingyu
- FO:CIP:BR/92/41 The strategy and advances in breeding program of *Populus tomentosa* in China - Zhiti Zhu
- FO:CIP:BR/92/42 The hybrid clones of *Populus deltoides* March - the selection breeding of Shaanxi poplar 3 and Shaanxi poplar 4 - Fu Yuqin, Liu Yuyuan, Li Jun'an, Gao Jianshe
- FO:CIP:BR/92/43 A study on the inheritance and variation of isozymes of *Populus tomentosa carr.* - Zhang Zhiyi, Zhu Zhiti, G. Muller-Starck, H.H. Hattemer
- FO:CIP:BR/92/44 The breeding of cold-resistant fast-growing clones of poplar - Lu Xuecheng, Sun Yujie, Bai Yuru, Dong Guoyu

Biomass Production Systems for the Salicaceae

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- FO:CIP:BS/92/1 Growth performance of different provenances of Himalayan poplar - P.S. Chauhan, D.K.

Khurana

- FO:CIP:BS/92/2 Poplar breeding for the purpose of biomass production in short rotation periods in Germany: Problems and first findings - H. Weisgerber
- FO:CIP:BS/92/3 Impact of poplar tree buffers on riparian ecosystems - L.A. Licht, J.L. Schnoor, M. Madison
- FO:CIP:BS/92/4 Stem form, volume and dry matter production in a 12-year old circular Nelder plantation of *Populus trichocarpa x deltoides* "Beaupré" - J. Steenackers, J. Van Acker, M. Stevens, V. Steenackers
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- FO:CIP:BS/92/10 Population dynamics of willow coppice systems and its implications for management of short rotation forests - E. Willebrand, T. Verwijst
- FO:CIP:BS/92/11 Deploying genotypes in short-rotation plantations: mixtures and pure cultures of clones and species - D.S. Debell, C.A. Harrington
- FO:CIP:BS/92/12 Woody biomass production of *Populus* clones under five short-rotation density and harvest regimes - D.S. Debell, G.W. Clendenen, J.C. Zasada
- FO:CIP:BS/92/13 Taillis à courte rotation de peupliers sur sols de Marais - Institut National de la Recherche Agronomique
- Miscellaneous
- | <u>Number</u> | <u>Title</u> | |
|------------------|---|----------------------------------|
| FO:CIP:MISC/92/1 | History of the International Poplar Commission (IPC) | 1947-1992 - M. Viart, O. Fugalli |
| FO:CIP:MISC/92/2 | Discussion on rooting growth with inner function of poplars with difficulty in striking root - Zhao Yi-Yu, Lu Wen | varieties of |
| FO:CIP:MISC/92/3 | Intercropping - main form of poplar plantation in | China - Wang Shiji |
| FO:CIP:MISC/92/4 | Influence of spacing - Plantation density of <i>Populus euramericana</i> cl. I-214 on rotation length - J. Markovi_ | S. Roncevic |
| FO:CIP:MISC/92/5 | Problèmes de la production des peupliers en Italie - Italienne des planteurs de peupliers | Association |
| FO:CIP:MISC/92/6 | Method of measuring and estimating transpiration water- in tree - Liu Fengjue | consumption |
| FO:CIP:MISC/92/7 | La populiculture pour utiliser les terres abandonnées l'agriculture dans deux régions du Québec: l'Abitibi- Témiscamingue et le Saguenay - Lac- | par |

Saint-Jean - G. Vallée

- FO:CIP:MISC/92/8 Effect of crown architecture on vertical distribution of annual
increment in main stem of poplar - Liu Fengjue, Zheng, Sze-kai, Lu Yongnong
- FO:CIP:MISC/92/9 Possibilities of poplar cultivation in acid, saline and calcareous
soils - G. Frison, G. Facciotto
- FO:CIP:MISC/92/10 Investigation prospect of development the poplar in Three-North
Region (Summary) - Lu Wen
- FO:CIP:MISC/92/11 Effects of stand density on crown architecture and distribution
of light energy in *Populus deltoides* cv. 'Lux' I-69/55 Plantation - Pei Baohua, Jiang
Xiangning, Zheng Junbao, Zheng Shikai, Liu Fenjue
- FO:CIP:MISC/92/12 A study on the optimum proportion of nutrient elements needed by
poplar - Zhang Jianbin, Tang Yonglin, Zhao Yonghe, Yan Guanzhen, Li Qing
- FO:CIP:MISC/92/13 Effects of stand density on the utilization rate of light energy in
Populus deltoides cv. 'Lux' I-69/55 Plantation - Pei Baohua, Jiang Xiangning, Zheng Junbao,
Zheng Shikai, Liu Fenjue
- FO:CIP:MISC/92/14 Study of the relationship between soil moisture and growth of
young *Populus tomentosa* - Wang Wenquan, Zhang Zhejiang
- FO:CIP:MISC/92/15 A study on the fertilization amounts of N, P and K applied to the
artificial forest of *Populus tomentosa* Carr. and their ratios - Sun Shixuan, Zhang
Zhenjiang, Sun Xiaoli, Yuan Yuxin

List of Posters

- INRA. Taillis à courte rotation de peuplier sur sol de marais. (France).
- VAN SLYCKEN, J.; BAEYENS, L.; STEVENS, D. Clone-site research in Belgium. (Belgium).
- SMETS, P.; STEENACKERS, V. Juvenile and mature density of different selected poplar clones. (Belgium).
- SMETS, P.; STEENACKERS, V. Height increment during the growing season of different selected poplar clones. (Belgium).
- STEENACKERS, J.; VAN ACKER, J.; STEVENS, M.; STEENACKERS, V. Stem form, volume and dry matter production in a 12 year old circular Nelder plantation of *Populus trichocarpa x deltoides* "Beaupre". (Belgium).
- CAGELLI, L. Poplar seed germination and storage. (Italy).
- LEFEVRE, F.; FAIVRE RAMPANT, P.; VILLAR, M.; TEISSIER DU CROS, E.; INRA. *Populus nigra* resource preservation in France. (France).
- ERDOS, L. Poplar cultivation in Hungary. (Hungary).
- HALL, R.B.; HART, E.R.; McNABB, H.S. Developing pest-resistant clones of *Populus* for biomass energy production. (USA).
- SCHULTZ, J.P.; COLLETTI, J.P.; HALL, R.B. Using *Populus* and *Salix* in temperate agro-forestry systems. (USA).
- GARCIA DE LOS RIOS, M.D.; ASTORGA, R.; MANZANERA, J.A.; BUENO, M.A. Fidelidad al tipo de las plantas regeneradas vía amento mediante cultivo In Vitro de *Populus tremula* L. (Spain).
- SABATTI, M.; SCARASCIA MUGNOZZA, G.; ISEBRANDS, J.; GIORDANO, E. Seeds collection of poplar natural populations from U.S.A. semiarid zones (USA).
- SABATTI, M.; CAPRIOLI, C.; POMARE, B.; SCARASCIA MUGNOZZA, G. Water stress effects on plant growth and biomass distribution of *Populus alba* clones. (Italy).
- SCARASCIA MUGNOZZA, G.; DEANGELIS, P.; POMPEI, E.; SABATTI, M. Impact of increased CO₂ on *Populus alba* one-year-old plants. (Italy).
- CIRIA, MaP.; GONZALEZ, E.; MAZON, MaP.; FERNANDEZ, J. Efecto del turno de corta sobre la producción de biomasa con fines energéticos en plantaciones de clones (Spain).
- LEPLE, J. CH.; MIRANDA BRASILEIRO, A.C.; MICHEL, M.F.; DELMOTTE, F.; JOVANIN, L. Transgenic poplars: expression of chimeric genes in four different constructs. (France).
- LEPLE, J. CH.; BONADE-BOTTINO, M.; DUMANOIS, V.; CORNU, D.; DELPLANQUE, A.; AUGUSTIN, S.; JOVANIN, L. Obtention of transgenic poplars expressing toxins active against coleopterous. (France).
- VILLAR, M.; GAGET, M.; RAQUIN, C.; LEMOINE, M.; ROUGIER, M.; DUMAS, C. INRA. Pollen-pistil interactions in interspecific crosses in *Populus*: Consequence for the french INRA poplar breeding

programme. (France).

- MENARD, M.; LUISETTI, J. Necrose bacterienne de l'ecorce du peuplier. *Xanthomonas campestris* pr. *populi*. (France).
- LEFEVRE, F.; PICHOT, C. (INRA). An integrated breeding strategy for resistance of poplars to *Melampsora* species. (France).
- STEENACKERS, M.; VAN BRAECKEL, E.; STEENACKERS, V. Selection and breeding of tree-forming willows resistant to *Erwinia salicis*. (Belgium).
- STEENACKERS, M.; NESME, X.; MENARD, M.; VAUTERIN, L. Characterization of *Xanthomonas populi* races. (Belgium).
- JACOBI, W.R.; McINTYRE, G.A.; BURKS, S.; GUYON, J.C.; RAMALEY, A.W. Effects of environmental stress on *Cytospora canker* of aspen.

ANNEX IV

NATIONAL REPORTS AND ANSWERS TO QUESTIONNAIRES ON
THEME SENT TO THE SECRETARIAT

1. National reports on activities related to poplar and willow cultivation, exploitation and utilization 1989-1992
2. Questionnaire replies on the theme of the 19th Session of the IPC "Poplar-and willow-growing in combination with agriculture."

Countries

Argentina	2	Korea	1, 2
Austria		Lebanon	2
Belgium	1, 2	Morocco	1, 2
Bulgaria	1, 2	Netherlands	1
Canada	1, 2	New Zealand *	1
Chile		Pakistan	1, 2
China	1, 2	Portugal	1, 2
Croatia *	1	Romania	1
Egypt	-	Spain	1, 2
France	1, 2	Sweden	
Germany	1, 2	Switzerland	1, 2
Hungary	1, 2	Syria	1, 2
India		Tunisia	-
Iran		Turkey	1
Iraq		U.K.	1, 2
Ireland		U.S.A.	1, 2
Italy	1, 2	Yugoslavia	1
Japan			

* received after summary of national reports completed

