

**INTERNATIONAL POPLAR COMMISSION
REPORT OF THE TENTH SESSION**



Held in Italy
26 September - 8 October 1959

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

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R E P O R T
of the
T E N T H S E S S I O N
of the
INTERNATIONAL POPLAR
COMMISSION

(Italy, 26 September - 8 October 1959)

FOOD AND AGRICULTURE ORGANIZATION
OF THE UNITED NATIONS

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INTERNATIONAL POPLAR COMMISSION
10th SESSION

(Italy, 26 September - 8 October 1959)

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GENERAL REPORT*

I - INTRODUCTION

1. At the kind invitation of the Italian Government, the International Poplar Commission held its 10th Session in Italy from 26 September to 8 October 1959.
2. The following Member Governments of the Commission were represented : Argentina, Austria, Belgium, France, Germany, Greece, Italy, Japan, the Netherlands, Spain, Switzerland, Turkey, U.A.R. (Syria), United Kingdom, and Yugoslavia. The following member countries of FAO were represented by observers: Canada, Ireland, Korea, Poland and Portugal. The European Agriculture Confederation and the International Union of Forest Research Organizations, also sent observers. Experts from U.S.A., Finland and Hungary participated in a personal capacity at the invitation of the Chairman of the Standing Executive Committee.

The list of participants is included in Annex 1 of the present report.

The following countries expressed their regret that they were not able to participate in this session of the Commission and asked to be informed of the results of the session : Brazil, Chile, Denmark, India, Libya, Luxembourg, Morocco, Mexico, New Zealand, Norway, Pakistan, Sweden, Union of South Africa.

3. The Commission, according to its statutes, elected Prof. A. Camaiti (Italy) as Chairman of the Session, and Messrs. A. Herbignat (Belgium) and J. Jeremić (Yugoslavia) were appointed First and Second Vice-Chairman respectively. Mr. R.G. Fontaine (FAO) was in charge of the Secretariat.
4. Mr. R.G. Fontaine, representing the Director-General of FAO, Prof. G. Giordano, Chairman of the Standing Executive Committee of the Commission, and Prof. A. Camaiti, Director-General of Forestry of Italy and Chairman of

* A final edition of the report, including also a detailed description of the study tour, will be published through the good offices of the Italian National Poplar Commission, and will be issued shortly.

the Session, made preliminary statements at the opening meeting. The texts of their speeches are found in Annexes 2-a, 2-b and 2-c of the present report.

5. Messages of gratitude were addressed by the Commission to Prof. Ph. Guinier, Honorary Founder-Chairman of the Commission, and to Mr. M. Lohr, former Director of the FAO Forestry Division.

The role played in the activities of the International Commission by Prof. Houtzagers, Honorary Chairman of the Commission, who died in 1957, was also evoked and one minute's silence was observed in his memory.

6. The business meetings were held in Venice on 26 and 28 September at the Cini Foundation, and on 6 October in Turin at the 'Associazione Industriali'. During the study tour through Venice-Treviso-Verona-Bergamo-Piacenza-Turin, participants visited nurseries, plantations, natural stands, research stations, trial plots and industrial plants.

7. During the session and study tour the Commission was received by the Directorate-General of Forestry, the 'Ente Nazionale per la Cellulosa per la Carta', the Cartiere Burgo, S.A.I.C.I., the Chamber of Commerce, Agriculture and Industry, and the Industrial Associations of Turin; by the Chamber of Commerce, Agriculture and Industry, and the Provincial and Municipal Authorities of Mantua, by the ERACLIT Society, the Forest Inspectorate of Udine, the Borghese, Nichetti, Cane e Solo Farms, and by the Farm of the Agricoltura Society Valenza-Po.

The Commission expressed its deepest appreciation and heartiest thanks to its hosts for their warm reception, the collaboration afforded to its work and the experiences gained during these visits.

II - AGENDA AND DOCUMENTATION

8. The Agenda prepared by the Secretariat, in consultation with the Chair of the Standing Executive Committee, was unanimously approved (Annex 3).
9. The reports either prepared by the Secretariat or submitted by the delegations, concerning the various items of the Agenda, as well as the various documents distributed by the delegations in the course of the session are listed in Annex 4.
10. The resolutions and recommendations made by the Commission are dealt with in the following sections of the present report.

III - NEW STATUS OF THE COMMISSION

11. During an International Poplar Week organized in Paris in 1947, the participating countries, on the proposal of the French Government, decided to constitute an International Poplar Commission under the aegis of FAO. The founder countries were the following: Belgium, France, Italy, the Netherlands, Sweden, Switzerland and the United Kingdom.

12. The Commission thus constituted, of which other countries later became members, approved its statutes and rules of procedure at its second session in Italy. It has held several sessions from 1947 to 1957 and FAO has provided the Secretariat.

13. The ninth Session of the Conference of FAO, held in Rome in 1957, noted that the provisions of the statutes of certain semi-autonomous bodies working in liaison with the Organization gave rise to some ambiguity with regard to their legal status. It could in fact be asked whether these bodies should be considered as entirely independent legal entities, having working relations only with the Organization, or as bodies set up within the framework of the Organization. More specifically the Conference noted that the statutes of the International Poplar Commission gave rise to some ambiguity regarding its legal status.

14. In view of the desirability of avoiding any ambiguity with regard to the legal status of bodies working under the aegis of the Organization, the Conference asked the Director-General of the Organization to get in touch with the International Poplar Commission in order to clarify the situation.

15. The Member Nations of the Commission, sounded by the Director-General in 1958, expressed by a large majority the wish to see the Commission integrated into FAO under the provisions of Article XIV of the Constitution.

16. The Commission, on the proposal of the Standing Executive Committee, and after having heard the heads of the delegations of Member Nations present, unanimously approved the convention placing the Commission within the framework of FAO, the text of which is attached to the present report (Annex 5).

17. However, in order to stress the continuity of the legal status of the Commission, the latter decided that once the mentioned Convention has become operative:

- a) the Commission will resume and continue the work carried out since 1947;
- b) Professor Ph. Guinier (France) will remain Honorary Founder-Chairman of the Commission;
- c) the Standing Executive Committee, elected in Paris in 1957, will remain in office subject to the provisions of Article VII of the Convention and to confirmation by the Commission at the first session held after the Convention becomes operative;
- d) the sessions of the Commission, after the Convention becomes operative, will be a continuation of the sessions held by the Commission since its creation in Paris in 1947.

18. The Commission also wished to suggest some modifications of form for the consideration of the forthcoming session of the FAO Conference, as follows :

- a) the terms "Members" and "Member Nations" should be used in a consistent way throughout the text;
- b) in the Spanish text, the word "Alamo" should be used throughout instead of "Chopo". However, the word "Alamo" could be followed by the word "Chopo" in brackets in Article I;
- c) in Article III, paragraph (a), add "... and willow" after "poplar" (taking into account the decision taken at its 9th session in Paris to extend its activities to willow cultivation and to request national commissions to leave room in their work for an inventory of natural stands as well as plantations of willow);
- d) in Article VI, delete paragraph 5 as it is superfluous taking into account paragraph 6;
- e) in Article VII, paragraph 1, replace "not less than 12 and not more than 17 members" by "12 members and up to 5 co-opted members";
- f) in Article XVII, after the first sentence, add "subject to the approval of the FAO Conference".

IV - GENERAL POLICY - REPORT ON THE ACTIVITIES OF THE SECRETARIAT

19. The Commission heard the Secretary's report on the activities undertaken during the last year. On the basis of this report the Commission planned the broad lines of its future activity.
20. While confirming the general lines so far followed, the Commission stressed the importance of an expansion which in associating itself with countries not yet members but interested in poplar culture, would on the one hand lead to general knowledge of poplar growing throughout the world and, on the other hand, would propagate scientific methods of culture.
21. This expansion, however, should not cause the necessity of examining in detail the problems particular to each region to be overlooked and the interest of regional studies was recalled in this context. A regional conference in the Far East would serve as a basis for a regional poplar policy in that region while a European regional conference would provide the opportunity to survey the ground covered since 1947 and to compare the policies followed in the different sub-regions. A second regional conference for the Near East would also be useful in order to examine the development of the situation since the Regional Conference held in Damascus in 1954. It would also be useful to organize a Seminar in Turkey at the Poplar Institute, in order to foster the professional formation in that region.
22. In these detailed studies poplar growing should be considered within the framework of agricultural and forest policies; then in the wider framework of economic and social development. The study

tours accompanying the sessions could take this approach to the problem as their guide and, in this connection, the tour made in Italy during the 10th Session could serve as an example.

23. The meetings of the Working Parties have made it now possible to single out the problems to be studied and in some cases have led to concrete results. In order to encourage this tendency and not overburden the sessions of the Commission, the Working Parties could be invited to meet between the sessions of the Commission. Proposals have furthermore been made to this effect in the reports of the Working Parties.

24. The Commission wished to draw the attention of Member Governments to certain joint achievements and in particular to the Mediterranean Populetum and the Poplar Research Institute in Turkey:

(a) With regard to the Mediterranean Populetum, the Commission congratulated the Research Centre of the "Ente Nazionale per la Cellulosa e per la Carta" on the follow-up of its recommendations and invited countries to send without delay any material which has been asked of them. They were also requested to send samples of aspen from Mediterranean mountainous regions for the establishment of a special section on Mediterranean aspens.

(b) As far as the Poplar Research Institute in Turkey was concerned, the authorities of the country were congratulated on the action taken and FAO was thanked for the help given under its Technical Assistance Program in the setting up of the Institute. The Commission again recommended that the countries in the region should co-operate with each other in order to prepare a joint programme.

25. The Commission expressed its warmest thanks to the Standing Executive Committee and its Chairman, Professor Giordano, for the activities undertaken since the last session and for the preparation of this session of the Commission.

26. The Commission took note that Mr. R.G. Fontaine, who had been appointed Secretary at its 2nd session following the proposal of the Director of the Forestry Division, was forced to resign as he had been assigned to a higher charge due to the internal reorganization of the FAO Forestry and Forest Products Division.

27. The Commission expressed its deepest regret to Mr. Fontaine for his departure, due to the requirements of his work, and its satisfaction and gratitude for the intelligent and skilful way in which he carried out the work of the Secretariat since 1947, in spite of the great difficulties with which he was faced at times. The Commission thanked him and his collaborators for the work accomplished and unanimously nominated him as Honorary Secretary of the International Poplar Commission.

28. The Commission entrusted the Chairman of the Standing Executive Committee with the task to settle the problem of the functioning of the Secretariat with the Director of the FAO Forestry and Forest Products

Division in the light of the Commission's new status.

V - REPORTS ON THE ACTIVITIES OF NATIONAL COMMISSIONS

29. The Commission took note of the progress reports submitted by National Commissions of its Member Nations summarized by Mr. Pourtet and the Secretariat, and also heard some remarks made by several delegations in this connection. Written or oral reports on the state of poplar growing in their countries were made by the delegations of Ireland, Japan, Poland and Portugal.
30. All these reports give a clear indication of the intensity of the efforts that are being made to foster poplar growing in numerous countries, leading either to the setting up of specialized sub-commissions or specialized working parties, the organization of study tours or training centres, as well as to the issuance of many technical brochures and the holding of conferences and propaganda talks. The national progress reports have been summarized in document FAO/CIP/95, which together with some supplementary information made available to the Secretariat in the course of the session, constitutes Annex 6.
31. These increased activities by National Commissions have also led to an ever growing exchange of plants and cuttings. This may however render the identification of clones difficult and cause trouble from the plant protection point of view unless the rules are strictly observed pertaining to the certificates of origin and phytosanitary conditions. Attention was therefore drawn to the recommendations made in the past by the Commission with regard to the exchange of cuttings and plants for scientific purposes and countries were urged to obtain the poplar types in which they were interested only from those countries where the types in question had originally been selected.
32. As for studies to be pursued or undertaken, the importance of the following was underlined: aspens, willows, use of organic or inorganic fertilizers, topophysis, mechanization of planting operations, spacing and the influence of the site on the behaviour of a clone. National Commissions were invited to take appropriate steps to that end.
33. It was pointed out that data are still inadequate with regard to the area planted to poplars as well as to production, and the Commission consequently recommended that work on national inventories should be speeded up. Note was taken with appreciation of the inventory that is being undertaken in Belgium and of the fact that this country is prepared to make available, the relevant questionnaire to the other national commissions for their information as soon as it is ready.
34. The Commission took note with satisfaction that the Study on Poplars issued by FAO in English, French and Spanish had been translated and published also in Serbo-Croat by the National Commission of Yugoslavia, which was warmly congratulated on the work accomplished. Thanks were also addressed to the Yugoslav forestry officers who took responsibility for the translation. The Commission took note that the Syrian National Com-

mission was prepared to undertake the translation and publication of the Study in Arabic, and that the Secretariat was following up arrangements for its translation and publication in German, Turkish and Czech.

35. In order to help the Secretariat analyze national progress reports, the Commission recommended that these should be drawn up following the outline as closely as possible and should constitute a concise synthesis of all new activities of national commissions. It might be advisable to have them preceded by a short introduction highlighting the major developments and especially those having a bearing on the overall national poplar policy.

It was also noted that the headings and sub-headings of sections I.a) and I.b), II.A.b) and II.A.c) of the outline have not been interpreted in the same way by the various countries; I.c.v) and II.A.c) overlap with each other, as well as II.B.c)iii and II.B.a). The Standing Executive Committee was invited to amend the outline as appropriate with a view to remedying its present shortcomings.

VI - REGISTRATION OF POPLAR NAMES

36. The Commission took note of the document FAO/CIP/CP/23 prepared by a Sub-Committee of the Standing Executive Committee, led by Mr. Pourtet.

37. Following the proposal of this Sub-Committee, it was decided to ask the Secretariat to commence on a provisional basis the registration of names by means of the form and catalogue prepared. Mr. Pourtet and his colleagues were thanked for the work accomplished.

38. The Commission asked however the Standing Executive Committee to re-submit the form and catalogue to experts in order to determine whether it was necessary to add other columns to the form, and indicate which columns it was essential to fill in. National Commissions would also be consulted.

39. The deposit of a botanical sample together with the form was also discussed. Such samples could be deposited with a Research Centre or a University of a Member Country. In this connection, the Commission took note of the offer of the Agricultural and Forest Research Centre of the "Ente Nazionale per la Cellulosa o per la Carta" to keep this centralized herbarium.

40. Finally, the Commission dealt with a proposal for registration from the Swiss National Commission, concerning the 'Yvonand' Poplar, which brings to 14 the number of clones already submitted for registration.

VII - REPORTS OF THE WORKING PARTIES : 1) on DISEASES, 2) on UTILIZATION and EXPLOITATION, and 3) on POPLAR INSECT PESTS.

41. The Commission unanimously approved the Reports of the Second Session of the Working Party on Diseases, the Sixth Session of the Working Party on Utilization and Exploitation, and the First Session of the Working Party on Poplar Insect Pests, which are to be found respectively in Annexos 7, 8 and 9 of the present report.

42. The Commission expressed its congratulations to their Chairmen and members for the work accomplished.

VIII - METHODS EMPLOYED IN POPLAR EXPERIMENTS

43. The Commission took note of the Report on the activities of the Study Group on the methods employed in poplar experiments (FAO/CIP/CP/25). It approved the conclusions reached, after having congratulated the Group and its Rapporteur, Mr. Jobling, on the work accomplished. The activities of the Study Group and its conclusions were summarized by Mr. Jobling as follows :

44. In 1955, a questionnaire was circulated to Member countries of the Commission, on the recommendation of a Sub-Committee on Statistical Methods which met in Rome in 1954, to determine if possible the methods of assessment and the way in which assessment data were presented in the different countries in which experimental work on poplar was being carried out, and to ascertain if a degree of uniformity could be obtained in reporting on experimental results. The questionnaire and the answers to it were submitted to the Commission at its session held in Paris in 1957. A Study Group was then formed to consider the problem of standardization and other problems relating to experimental work on poplars, and the activities of the Group were described in the above-mentioned report.

45. A report was prepared and circulated to members of the Group showing how standardization of certain assessment methods could be obtained, particularly with reference to the recommendations made by the IUFRO Working Group on Standardization of Symbols and Forest Mensuration at a meeting in Wageningen in 1954. The members of the Group agreed that it should be possible to achieve a certain amount of standardization of methods and certain proposals were made whereby improvements could be achieved in presenting experimental data. The fact still remained, however, that not only did many assessment techniques differ from country to country, making it difficult to foresee how standardization could be achieved, but that in many respects it would seem that the methods employed in many poplar growing countries differed considerably from those recommended by the International Poplar Commission. This problem was referred to the Standing Executive Committee in Rome in 1958, when it was agreed that further consideration could only be given to the problem of standardization after the next meeting of the Working Group of Section 25 of IUFRO. Discussions were held between Mr. Jobling and the Secretary of the IUFRO Working Group already referred to, Mr. Jeffers, who agreed that the documents relating to standardization should be placed before its Working Group for comments. This proposed action received the full approval of the Standing Executive Committee at the meeting preceding the Commission session. After the IUFRO Working Group has considered the problems taken up by the Commission Study Group, the latter will be able to deal conclusively with the whole question of standardization.

46. Subsequent to the Commission session in 1957, an invitation was transmitted to Mr. Jeffers asking him to prepare a paper embodying the principles and considerations governing the use of statistical designs and analysis in experimental work on poplar. This Mr. Jeffers did by referring to the wide range of experimentation carried out in Great Britain since 1948. The paper in no way proposes that a standardization of experimental layout should be adopted by the Commission. It does show, however, how sound statistical designs can be selected for a given problem, whether for a comparison of planting treatments or for a trial of clones. This paper was placed before the Standing Executive Committee at its meeting in Rome in 1958, when it was agreed that it should be referred to the Study Group for consideration. This Study Group approved in principle its presentation to the Commission, although various possible amendments were suggested in the event that Mr. Jeffers could undertake a revision of the text, and the Standing Executive Committee, after having taken note of the comments of the Study Group, agreed to bring the report before the Commission.

IX - POPLAR STATISTICS

47. The Commission took note of a questionnaire on costs, prepared by a Study Group presided by Mr. Bauer (Germany), and expressed its thanks for the work accomplished.
48. The Commission agreed, however, to ask the Standing Executive Committee to revise this questionnaire so that it could be used not only for the wood categories employed in Europe, but also for those used in non-European countries.
49. The questionnaire thus amended should be sent as soon as possible to National Commissions, to be filled in.

X - ELECTION OF NEW MEMBERS

50. Japan was unanimously elected as a Member of the International Commission. Having already formed a national Commission, Japan will accede officially to membership after depositing with the Secretariat a formal instrument of acceptance of the Commission statutes in force at the time of its election.

XI - STUDY TOUR

51. The participants in the Commission session also took part in a study tour from Venice to Turin, organized by the National Poplar Commission of Italy. The details of the program of the study tour and the reports submitted are included in a separate printed publication.
52. During this study tour, the subject of which was "The conquest of difficult land by poplar", the Commission was able to appreciate the outstanding techniques used by the Italians for planting poplars on lands being reclaimed. It also was able to renew acquaintance with the classical Italian poplar cultivation last seen in 1948, as well as to inspect most modern industrial installations of Northern Italy.

53. The Commission expressed its gratitude to the Organizing Committee and its Chairman, Prof. Giordano, for the perfect organization of the study tour and the high quality of the documentation prepared. The Commission also expressed its warmest thanks to all the Public Services, and to the professional and private organizations which helped in the carrying out of the tour, enabled the Commission to inspect their factories, installations and nurseries and put their most qualified technicians at the disposal of the participants.

XII - DATE AND PLACE OF NEXT SESSION

54. The Commission noted with gratitude the invitations extended by the representatives of Yugoslavia, Greece and Turkey. The Commission asked the Director-General to fix the place and date for the next session in consultation with the Chairman of the Standing Executive Committee and interested countries.

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LIST OF PARTICIPANTS

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- Japon
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- Igawa, Tokuo.
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 - Inokuma, Taizo, Professor, University of Tokyo
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Division of Forestry
University of Agriculture
Wageningen
 - van Vloten, H., Président de la Commission Nationale du Peuplier
Directeur du Centre expérimental de Sylviculture
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Yugoslavia : - Jovković, B., Conseiller au Secrétariat des Forêts de la
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- Knobl, F., Secrétaire pour les forêts de la République
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Belgrade
- Nikolandić, D., Inspecteur forestier,
Chef de la Section forestière
Bilje v. Osijek
- Orošćanin, D., Professeur à la Faculté forestière
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- Pajić, D., Secrétaire de la Chambre d'Agriculture et Forêts
Sarajevo
- Pavša, I., Chef du Service des forêts
Kidričeva 11
Varaždin
- Petruševski, B., Chef de la Section pour la culture des
poupliers
Sunsko Stopanstvo
Titov Velos
- Rogina, T., Chef de la Section forestière
Zupanja v. Vinkovci
- Vasić, M., Inspecteur forestier
Direction des forêts
Bilje v. Osijek

B. Pays Membres de la FAO, Non-Membres de la Commission
Member Countries of FAO, Non-Members of the Commission

Canada : - Nordin, V.J., Associate Director, Forest Biology Division
Canada Central Experimental Farm, K.W. Neatby Bldg.
Ottawa, Ontario

Corée : - Hong, Lung-Wook, First Secretary of Consul
Korea Korean Embassy
Roma, Italy

Irlande : - Morris, N., Inspector, Dept. of Lands, Forestry Division
Ireland Upper Merrion Street 22
Dublin C.17

Pologne : - Tyszkiewicz, S., Chef de Section à l'Institut de
Poland recherches forestières
ul. Wory Kostrzewy 3
Varsovie

Portugal : - Lagrifa Mondez, J., Ingénieur des forêts
Portugal Direction générale des eaux et forêts
Rua das Amorciras 136 - 1. Esq.
Lisbonne

C. Organisations internationales
International Organizations

Confédération européenne de l'agriculture
European Confederation of Agriculture

- Boccalari, F.
Président de la Chambre de Commerce, Industrie et Agriculture
Mantoue, Italie

Union internationale des instituts de recherches forestières
International Union of Forest Research Organizations

- van Vloten, H.
Director, Forest Research Station
Wageningen, Netherlands

D. Experts invités à titre personnel
Experts invited on a personal basis

Finlande : - Koivisto, V., Ingénieur forestier
Finland United Paper Mills Ltd.
Valkeakoski

Hongrie : - Balassa, G., General Director of the Hungarian Forestry Minister
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Budapest-V

- Kopecky, F., Chief of the Research Station of the Institute
of Scientific Forestry
Kossuth Lajos-tér 11
Budapest-V

- Sali, E., Section Chief
Kossuth Lajos-tér 11
Budapest-V

U.S.A. : - Shaw, A.C., Director, International Forestry
"The Champion Paper and Fibre Co.
Hamilton, Ohio

E. Organisation des Nations Unies pour l'Alimentation et l'Agriculture
Food and Agriculture Organization of the United Nations

- Glosinger, E., Director, Forestry and Forest Products Division
- Fontaine, R.G., Chief, Special Policies Section
- Fugalli, O., Regional Liaison Officer
- Flinta, C., Forestry Officer, Silviculture Section

- Allegri, E., FAO Expert
Stazione Sperimentale di Selvicoltura
Firenze
- Badran, O.A., Forestry Officer, Acting Director Near East
Forest Rangers School
FAO Mission,
P.O.Box 256
Damascus, UAR (Syrian Region)
- Vaccarone, E., FAO Expert
c/o Resident Representative of the UNTAB, P.K.407
Ankara, Turkey

DISCOURS PRONONCE PAR M. R.G. FONTAINE
représentant le Directeur Général de la F.A.O.

SPEECH GIVEN BY Mr. R.G. FONTAINE
representing the Director General of F.A.O.

Monsieur le Représentant du Ministre,
Messieurs,
Messieurs,

Je voudrais tout d'abord, au nom du Directeur Général de la FAO et du Directeur de la Division des forêts et produits forestiers, saluer les Délégations présentes, les observateurs des Organisations internationales et les experts venus à titre personnel.

Je voudrais également excuser le Directeur de la Division des forêts et produits forestiers, M. Glesinger, qui, retenu par d'autres occupations, n'a pu assister à cette séance d'ouverture, mais se propose de rencontrer la Commission à Turin.

Il est souvent d'usage de dire dans une réunion internationale que celle-ci a une importance toute particulière. Je crois qu'on peut le dire sincèrement de cette 10^{ème} Session de la Commission internationale du peuplier. Si la dernière Session tenue à Paris a été particulièrement importante pour faire la synthèse des activités passées et tracer un programme d'avenir, cette session revêt une importance analogue. Vous allez en effet être amenés à vous prononcer sur le projet de Convention qui placera formellement la Commission dans le cadre de la FAO.

Dès sa 2^{ème} Session, votre Président d'Honneur-Fondateur, M. Guinier, déclarait, et ceci a été rappelé par M. Loloup, qui suivait cette Commission avec une attention particulière, que la Commission internationale du peuplier voulait aboutir rapidement à des résultats concrets sans s'arrêter à des questions de détail ou de procédure. C'est dans cet esprit que vous avez abouti à des décisions prises à l'unanimité et c'est cette unanimité et cette solidarité dans l'oeuvre entreprise que vous devez préserver, sans avoir recours trop souvent aux procédures de vote qui vous sont tracées par votre statut et votre règlement intérieur.

Si, en effet, le droit des traités qui est à la base des accords internationaux, s'est développé très rapidement au cours des dernières années et a donné aux institutions internationales une structure satisfaisante, le sentiment de solidarité et le désir de travail en commun restent encore les moteurs les plus valables.

Toutefois, la Nouvelle Convention donnera à la Commission le statut juridique le plus apte à faciliter son expansion en permettant l'adhésion rapide de nouveaux membres de la FAO et, après élection, de membres des Nations Unies, non membres de la FAO.

Toutefois, la coopération entre la Commission et la FAO existait déjà dans les faits puisque la Commission se considérait comme une émanation de la FAO qui, de son côté, assurait le Secrétariat, et la Convention ne fait que sanctionner cette coopération.

Vous ne devez pas vous attendre à une aide considérablement accrue à votre Secrétariat en raison de l'augmentation de nos responsabilités dans d'autres domaines, mais une réorganisation interne de la Division faisant participer plusieurs officiers au Secrétariat, vous assurera toutefois une meilleure gestion administrative et technique.

Cette aide plus complète au Secrétariat ne permettra pas cependant de faire face seule à l'augmentation des besoins résultant de l'expansion de la Commission. Il faudra de plus en plus que la Commission internationale confie aux Commissions nationales des tâches particulières. A cet égard, l'exemple de la Commission nationale allemande qui a bien voulu se charger du dépouillement d'une enquête sur les prix, ceux des Commissions nationale française et italienne qui ont bien voulu se charger respectivement des publications des Rapports de la dernière session et de cette session, sont particulièrement encourageants. Elles doivent être remerciées.

Guidée par son Comité exécutif permanent et aidée de son Secrétariat et des Commissions nationales, la Commission internationale doit donc poursuivre son expansion. A cet égard doivent être également rappelés la nécessité d'une étroite liaison avec l'Union internationale des instituts de recherches forestières pour les problèmes de la recherche, et la possibilité donnée pour les réalisations concrètes par l'Assistance technique des Nations Unies, et surtout par le Fonds spécial des Nations Unies, qui vient d'être créé.

Parlant de votre expansion, je voudrais, si vous le permettez, vous indiquer les grandes lignes suivies par le Directeur général de la FAO, telles qu'elles ont été rappelées par le Directeur de la Division des forêts au Comité permanent. Il s'agit d'abord d'un intérêt plus particulier pour les pays les moins favorisés, ensuite d'une campagne contre la faim et le besoin, et, enfin, d'une conception "intégrée" des problèmes qui nous sont soumis.

On peut dire que votre Commission, en provoquant des conférences régionales, en se penchant sur le problème du développement de la ressource et de sa meilleure utilisation et, enfin, en se préoccupant de placer le peuplier dans l'utilisation générale des terres, est bien dans cette voie, et notre Organisation vous demande d'accentuer votre action dans ce sens.

Ayant ainsi parlé des activités futures, je ne peux m'empêcher de penser aux activités passées et à ceux qui les ont dirigées. Je voudrais tout d'abord rappeler le souvenir du Président d'Honneur-Fondateur, M. le Professeur Guinier, qui n'a pu assister à cette réunion, et demander à la délégation française de vouloir bien lui transmettre l'expression de la gratitude de notre Organisation pour l'oeuvre qu'il a accomplie. Je voudrais également rappeler

la mémoire du Professeur Houtzagers, décédé après la dernière session de la Commission, et exprimer à ses amis et ex-collègues présents ici, la reconnaissance que nous lui avons également pour le rôle qu'il a joué dans la bonne marche de la Commission internationale.

Et, pour terminer, il me reste l'agréable devoir de remercier les organisateurs de cette session. Je voudrais tout d'abord remercier M. le Professeur Alberto Camaiti, Directeur général pour l'économie montagnarde et les forêts, qui a bien voulu patronner l'organisation d'une telle réunion. Je voudrais également remercier le Professeur Giordano, Président du Comité d'organisation, et ses collaborateurs, pour l'organisation excellente de la session et du voyage d'étude qui l'a accompagné. Enfin, je voudrais aussi remercier les Organisations professionnelles qui ont aidé le Comité d'organisation dans sa tâche.

Je voudrais, en conclusion, vous adresser, Mesdames et Messieurs, mes vœux les plus sincères pour le succès de cette session.

DISCOURS PRONONCE PAR M. le Professeur GIORDANO
Président du Comité exécutif permanent

SPEECH GIVEN BY Professor GIORDANO
Chairman of the Standing Executive Committee

Monsieur le Représentant du Ministro,
Mesdames,
Messieurs,

Il y a dix ans la Commission internationale du peuplier se réunissait ici, à Venise, pour sa Deuxième Session, et l'on pourrait penser qu'il s'agit d'un retour sur des lieux déjà vus pour visiter des choses désormais suffisamment connues. S'il en était ainsi, il faudrait en conclure que la popu-
liculture est de moindre importance et qu'elle est dominée par un esprit où le dynamisme n'entre sûrement pas en ligne de compte.

La réalité est tout autre et pour s'en convaincre, il suffit d'examiner quelles ont été les tâches et les résultats obtenus pendant les premières années d'existence de la Commission internationale du peuplier. Le bilan, non seulement actif, mais brillant, des travaux menés à bien, a été dressé à l'occasion du Congrès de Paris et de la Dixième Session de la Commission internationale, et je ne veux nullement répéter ce qui avait déjà été dit à cette occasion. Par contre, qu'il me soit permis de souligner que si les résultats d'ensemble ont été si bons, si le travail d'une équipe de techni-
ciens a procédé en parfait accord, nous le devons surtout à la compétence et à l'enthousiasme de deux personnes : notre Président d'Honneur-Fondateur, M. le Professeur Guinier, et notre Président d'Honneur, M. le Professeur Houtzagers.

S'ils ne sont plus parmi nous, nous ne pouvons certainement pas les oublier et je voudrais exprimer au Professeur Guinier, en notre nom à tous, nos sentiments de profonde reconnaissance et nos vœux les meilleurs pour une heureuse et longue retraite.

M. le Professeur Houtzagers est malheureusement disparu peu de temps après la réunion de Paris. En témoignage de l'estime que nous lui portons et des regrets que nous éprouvons pour sa disparition, j'invite la Commission à observer une minute de silence en sa mémoire.

Dans le monde actuel, on ne pourrait plus concevoir une activité quelconque sans une planification, sans un schéma de ce que l'on veut et que l'on peut faire pour atteindre les buts que l'on se propose.

Si nous considérons dans son ensemble l'oeuvre développée dans le passé par la Commission internationale sur la base des travaux préparatoires du Comité exécutif permanent, nous constatons que, si l'on veut examiner seulement

Les grandes lignes du travail accompli, nous pourrions les comparer à l'oeuvre d'un architecte qui, ayant à bâtir un grand édifice, considère en premier lieu de quelle manière il pourra l'insérer harmonieusement dans le paysage et comment il pourra en effectuer économiquement la construction avec les moyens et les matières premières dont il dispose.

Pour les premiers pays qui ont adhéré à la Commission internationale, on peut réellement dire que cette phase a été achevée. Les grandes lignes de la populiculture, soit du point de vue de son harmonie avec le milieu physique, soit du point de vue de son importance économique et sociale, ont été mis en lumière, tandis qu'en ce qui concerne les détails, on a entrepris des études systématiques dans les secteurs de la botanique, de la phytogéographie, de la lutte contre les maladies et les insectes, de l'utilisation du bois, etc..

Cette conception des travaux de la Commission internationale du peuplier, qui était absolument la seule valable pour les premières années, ne peut plus suffire maintenant ou, du moins, doit être intégrée en vue de l'évolution générale et des développements au sein même de la Commission.

Au groupe restreint des pays de l'Europe occidentale et méridionale qui composaient à ses débuts la Commission internationale du peuplier, se sont petit à petit ajoutés d'autres pays qui ont énormément élargi le champ de notre activité qui, actuellement, va de la vieille Europe aux pays du Proche et de l'Extrême-Orient, aux plaines lointaines de l'Amérique Latine.

Ce serait une grave erreur que de vouloir adapter dans des milieux si différents les mêmes techniques qui ont donné les résultats magnifiques que l'on voit en Europe : il n'y a rien d'absolu et d'immuable dans la nature, mais toujours une adaptation au milieu et aux nécessités locales. La chose n'est pas une nouveauté car déjà à la 5^{ème} Session de la Commission internationale à Londres, on avait souligné la nécessité d'une telle orientation, qui a abouti aux Conférences régionales de Damas et de Buenos Aires.

Il faut donc, avant tout, avoir pour ces autres régions, des connaissances précises sur les peupliers et les cultures pratiquées jusqu'à présent avec ces arbres, ainsi que la possibilité de les faire participer activement à la couverture des besoins en bois.

Arrivé à ce point, j'estime nécessaire, voire même indispensable, de souligner que la Commission internationale du peuplier n'est pas seulement un ensemble de techniciens et d'experts qui aiment se réunir de temps à autre pour faire des voyages d'études agrémentés par les attraites touristiques des différents pays, mais qu'il s'agit surtout d'hommes qui sont persuadés intimement et profondément qu'un développement rationnel de la populiculture en étroite alliance avec l'agriculture, est un élément fondamental de bien-être pour les populations et de disponibilités de bois pour les pays pauvres en forêts.

Qu'il me soit permis donc d'affirmer que la populiculture revendique, à juste titre, la place qui lui convient dans les secteurs de l'économie du bois, dans le secteur de l'agriculture, dans le secteur industriel et dans le secteur forestier.

Il est évident que - une fois admise cette ligne fondamentale pour tous les pays -, les détails en différeront d'un pays à l'autre, ou, plus exactement, d'une région à l'autre : il en résulte donc que, tout en conservant à la Commission internationale son unité, certains aspects, certains détails, devront être considérés dans des groupes régionaux. Les contacts entre techniciens, experts, savants, doivent continuer et s'accroître : personne n'a le monopole de la science, mais chacun peut et doit apporter sa contribution à l'oeuvre commune pour le bien-être humain. Des problèmes particuliers sont encore à étudier partout et dans les jours à venir la Commission nationale italienne essaiera de vous montrer par quelles techniques on peut arriver à conquérir avec le peuplier des terrains extrêmement difficiles.

Nous ne devons pas penser que tous les problèmes ont été résolus, ni accepter de nous reposer, même si des résultats satisfaisants ont été obtenus.

Le Comité exécutif permanent est prêt à accepter toute suggestion utile que la Commission voudra faire pour atteindre les buts que je vous ai esquissés : ce sera notre orgueil d'adopter comme programme pour les années à venir un mot latin très simple, mais plein de responsabilité : Ultra ! En avant !

DISCOURS PRONONCE PAR M. le Professeur A. CAMAITI,
Directeur Général pour l'économie montagnarde et les forêts,
représentant M. le Ministre de l'Agriculture d'Italie.

SPEECH GIVEN BY Professor A. CAMAITI,
Director General for Mountain Economy and Forests,
representing the Minister of Agriculture of Italy.

Mesdames,
Messieurs,

Le souvenir de notre dernière réunion vit encore dans mon souvenir - dans notre souvenir à tous, je pense - tant ces journées de mai 1957 à Paris furent pleines de cordialité, de contacts et d'échanges précieux, tant fut intéressant et fécond le travail qui y fut accompli. C'est donc avec un plaisir sincère que je retrouve ici, à l'ouverture de la Dixième Session de la Commission internationale du peuplier, de nombreux visages d'amis et d'éminentes personnalités, qui se sont tous fidèlement retrouvés au rendez-vous.

Une absence cependant attriste notre réunion : M. Leloup ayant atteint l'âge de la retraite après de nombreuses années de travaux féconds, s'est retiré : que notre souvenir cordial et l'expression de notre déférence l'accompagnent dans sa retraite.

Aux présents, au nom de l'Italie et de nos amis et collègues italiens, je souhaite du fond du cœur la bienvenue parmi nous.

Avant de vous parler en mon nom propre, j'ai l'honneur de vous adresser, au nom du Ministre italien de l'Agriculture et des Forêts, M. Rumor, un message chaleureux de bienvenue; le Ministre me charge aussi de vous assurer que, bien qu'il ne puisse se joindre à nous, il suivra de près nos travaux.

Entre la lagune enchanteuse qui vous reçoit et le pied des Alpes qui, au-dessus de Turin, bornent la Plaine du Pô, dans une zone d'un très grand intérêt pour le secteur de la populiculture, vous passerez des jours qui, j'espère, seront riches en expériences utiles, avant-courus de nouveaux progrès et de nouvelles satisfactions.

Nous nous associerons mutuellement aux travaux accomplis dans nos pays respectifs au cours des deux dernières années, depuis que nous nous sommes séparés à Paris, en 1957. Nous nous attarderons ensemble à analyser l'état actuel de la populiculture sous les différents aspects technique, scientifique et économique; nous étudierons attentivement les perspectives qui s'offrent à nous : bref, nous examinerons ce qui a été fait et ce qui reste à faire pour développer au maximum la populiculture tout en la perfectionnant et en assurant sa protection.

Il nous incombe aussi d'examiner jusqu'à quel point la Commission internationale du peuplier et ses divers organismes répondent aux besoins de la populiculture. Nous chercherons, le cas échéant, à perfectionner institutions et systèmes, de façon à satisfaire pleinement et de tous les points de vue les exigences légitimes de ceux qui accordent à la populiculture l'intérêt qu'elle mérite, et qui lui est de plus en plus largement reconnu dans le monde entier.

Je suis persuadé que quand les travaux de cette Dixième Session seront conclus, le 7 octobre prochain, nous aurons tous la certitude d'avoir accompli une oeuvre importante pour l'économie de nos pays respectifs : le pays qui vous reçoit, l'Italie, a le plus vif désir de contribuer à cette oeuvre, et témoignera de ce désir en vous exposant ce qu'elle a déjà fait et ce qu'elle se propose de réaliser à l'avenir. A ce désir sincère s'ajoute celui de vous exprimer tout notre plaisir de vous recevoir ici ; que les souhaits les plus chaleureux accompagnent vos travaux pour qu'ils soient couronnés des plus brillants succès.

AGENDA

1. Adoption of Agenda
2. Election of Officers
3. Now Status of the Commission
4. Report of the Secretariat on the activities of the Commission and the Secretariat since the last Session
5. Reports on the activities of National Commissions for 1958 :
 - a) Note by the Secretariat
 - b) National reports
6. Diseases - Report of the Working Party
7. Exploitation and utilization of poplar wood - Report of the Working Party
8. Insect Pests - Report of the Working Party
9. Poplar Statistics - Report of the Study Group
10. Statistical methods in experiments - Report of the Study Group
11. Registration of poplar names
12. Study Tour
13. Other business
14. Date and place of next session.

LISTE DES DOCUMENTS
LIST OF DOCUMENTS

a) Documents présentés à la 10ème Session de la Commission
Documents submitted at the 10th Session of the Commission

- Ordre du jour provisoire / Provisional Agenda (Document FAO/CIP/94 : Français et Anglais / French and English)
- Rapports d'activité des Commissions nationales en 1958 - Rapport de M. J. Pourtet / Reports on the Activities of the National Commissions in 1958 - Report by Mr. J. Pourtet (Doc. FAO/CIP/95 : Français et Anglais / French and English)
- Reports on the Activities of National Poplar Commissions - Period :1958 : AUSTRIA (Doc. FAO/CIP/95-A : English only / Anglais seulement)
- Rapports d'activité des Commissions nationales du peuplier - Période:1958 : ESPAGNE (Doc. FAO/CIP/95-B : Français seulement / French only)
- Rapports d'activité des Commissions nationales du peuplier - Période:1958 : FRANCE (Doc. FAO/CIP/95-C : Français seulement / French only)
- Reports on the Activities of National Poplar Commissions - Period: 1958 : UNITED KINGDOM (Doc. FAO/CIP/95-D : English only / Anglais seulement)
- Rapports d'activité des Commissions nationales du peuplier - Période:1958 : GRECE (Doc. FAO/CIP/95-E : Français seulement / French only)
 - Résultats préliminaires d'une plantation expérimentale de peuplier (Doc. FAO/CIP/95-E Add.1 : Français seulement / French only)
 - L'espacement dans la plantation de peupliers et la populiculture intensive (Doc. FAO/CIP/95-E Add.2 : Français seulement / French only)
- Rapports d'activité des Commissions nationales du peuplier - Période:1958 : ITALIE (Doc. FAO/CIP/95-F : Français seulement / French only)
 - De la détermination exacte de la rotation de production maximum des plantations de peuplier (Doc. FAO/CIP/95-F Add.1 : Français et Italien avec Résumé en Anglais / French and Italian with Summary in English.)
 - Appunti su una popolazione di Populus L. delle Sila (Calabria) (Doc. FAO/CIP/95-F Add.2 : Italien et Résumé en Anglais / Italian with Summary in English)
 - Influenza di alcune anomalie strutturali del terreno sull'accrescimento del pioppo in vivaio (Doc. FAO/CIP/95-F Add.3 : Italien et Résumé en Anglais / Italian with Summary in English)

- Il Populus deltoides Bartr. nel suo paese di origine - Nota preliminare su un viaggio di studio. (Doc. FAO/CIP/95-F Add.4 : Italian et Résumé en Anglais / Italian with Summary in English)
- Observations préliminaires sur l'activité du cambium dans Populus x curamericana (Dodo) Guinier cv. 'I-214' (Doc. FAO/CIP/95-F Add.5 : Français seulement / French only)
- Observations sur le P. tremula en Italie méridionale (Doc.FAO/CIP/95-F Add.6 : Français seulement / French only)
- Importance de la topophysio sur le port des plantes obtenues par bouture (Doc. FAO/CIP/95-F Add.7 : Français seulement / French only)
- Reports on the Activities of National Poplar Commissions - Period 1958 : UNITED ARAB REPUBLIC : EGYPTIAN REGION . (Doc. FAO/CIP/95-G : English only / Anglais seulement)
- Rapports d'activité des Commissions nationales du peuplier - Période:1958 : SUISSE (Doc. FAO/CIP/95-H : Français seulement / French only)
- Rapports d'activité des Commissions nationales du peuplier - Période 1958 : ALLEMAGNE (Doc. FAO/CIP/95-I : Français seulement / French only)
- Rapports d'activité des Commissions nationales du peuplier - Période 1958 : REPUBLIQUE ARABE UNIE : REGION SYRIENNE. (Doc. FAO/CIP/95-J : Français seulement / French only)
- Rapports d'activité des Commissions nationales du peuplier - Période 1958 : YOUgosLAVIE (Doc. FAO/CIP/95-K : Français seulement / French only)
- Informes sobre las actividades de las Comisiones nacionales del chopo - 1958: ARGENTINA (Doc. FAO/CIP/95-L : Espagnol seulement / Spanish only)
 - Rosaña sobre cultivo y mejoramiento de alamos y sauces en la Republica Argentina. (Doc. FAO/CIP/95-L Add.1 : Espagnol seulement / Spanish only)
 - Un nuevo sauce híbrido de valor ornamental obtenido en la Republica Argentina. (Doc. FAO/CIP/95-L Add.2 : Espagnol seulement / Spanish only)
 - Germinación del polen de algunas especies del genero Salix (Doc. FAO/CIP/95-L Add.3 : Espagnol seulement / Spanish only)
- Reports of the Activities of National Poplar Commissions - Period 1958 : NETHERLANDS . (Doc. FAO/CIP/95-M : English only / Anglais seulement)
- Rapports d'activité des Commissions nationales du peuplier - Période 1958 : TURQUIE. (Doc. FAO/CIP/95-N : Français seulement / French only)
- Reports on the Activities of National Poplar Commissions - Period 1958 : JAPAN. (Doc. FAO/CIP/95-O : English only / Anglais seulement)

- Reports on the Activities of National Poplar Commissions - Period 1958 :
PAKISTAN (Doc. FAO/CIP/95-P : English only / Anglais seulement)
- Rapports d'activité des Commissions nationales du peuplier - Période 1958:
PORTUGAL (Doc. FAO/CIP/95-Q : Français seulement / French only)
 - O Choupo (Doc. FAO/CIP/95-Q Add.1 : Portugais seulement / Portuguese only)
- Rapports d'activité des Commissions nationales du peuplier - Période 1958 :
MAROC (Doc. FAO/CIP/95-R : Français seulement / French only)
- Nouveau statut de la Commission - Note du Secrétariat / New Status of the
Commission - Note by the Secretariat (Doc. FAO/CIP/96 : Français et Anglais,
French and English)
 - Projet de recommandation présenté par le Comité exécutif permanent
à la Commission / Draft Recommendation Presented to the Commission
by the Standing Executive Committee (Doc. FAO/CIP/96 Add.1 : Fran-
çais et Anglais / French and English)
- Nomenclature et enregistrement - Note du Secrétariat / Nomenclature and
Registration - Note by the Secretariat (Doc. FAO/CIP/97 : Français et
Anglais / French and English)
- Activités de la Commission et de son Secrétariat - Note du Secrétariat /
Activities of the Commission and of its Secretariat - Note by the Secretaria-
(Doc. FAO/CIP/98 : Français et Anglais / French and English)
 - Note sur le Populetum méditerranéen (Doc. FAO/CIP/98 Add.1 : Fran-
çais seulement / French only)
- Liste des documents / List of Documents (Doc. FAO/CIP/99 : Bilingue/Bilingue
Français-Anglais / French-English)

b) Documents présentés à la 15^{ème} Session du Comité exécutif permanent
Documents submitted to the 15th Session of the Standing Executive Committee

- Sous-Comité des statuts - Rapport Final / Sub-Committee on Statutes - Final
Report (Doc. FAO/CIP/CP/22 : Français et Anglais / French and English)
- Enregistrement des clones de peupliers / Note on the Registration of Poplar
Clones (Doc. FAO/CIP/CP/23 : Français et Anglais / French and English)
- Les statistiques du peuplier - Note du Secrétariat sur les activités du
Groupe d'étude / Poplar Statistics - Note by the Secretariat on the
Activities of the Study Group (Doc. FAO/CIP/CP/24 : Français et Anglais /
French and English)
- Méthodes employées dans les expériences - Rapport d'activité du Groupe
d'étude / Methods employed in Poplar Experiments - Progress Report of
Study Group (Doc. FAO/CIP/CP/25 : Français et Anglais / French and English)

c) Documents présentés à la 6ème Session du Groupe de travail de l'Exploitation et de l'Utilisation

Documents submitted to the 6th Session of the Working Party on Exploitation and Utilization

- Ordre du jour provisoire / Provisional Agenda. (Doc. FAO/CIP/UT/6 : Français et Anglais / French and English)
- Indagini tecnologiche sul legno di alcuni ibridi euramericani di pioppo - I - Caratteristiche fisiche e meccaniche. (Doc. FAO/CIP/UT/7-A : Italien et Résumé en Anglais / Italian with Summary in English)
- Indagini tecnologiche sul legno di alcuni ibridi euramericani di pioppo - II - Dati anatomici. (Doc. FAO/CIP/UT/7-B : Italien et Résumé en Anglais / Italian with Summary in English)
- Trends in Poplar Wood Utilization - Note by the Secretariat (Doc. FAO/CIP/UT/8 : English only / Anglais seulement)
- Variazioni dimensionali delle fibre nel fusto in Populus x euramericana cv. 'I-214'. (Doc. FAO/CIP/UT/9-A : Italien et Résumé en Anglais / Italian with Summary in English)
- La variation de la résistance au cisaillement en fonction de la température. (Doc. FAO/CIP/UT/9-B : Français seulement / French only)
- Importance des études microtechnologiques pour une utilisation rationnelle du bois. (Doc. FAO/CIP/UT/10 : Français seulement / French only)
- La conservation du bois de peuplier dans les stocks - Note du Secrétariat (Doc. FAO/CIP/UT/11 : Français seulement / French only)
- Primo contributo allo studio della conservazione del legno di pioppo - Gli agenti di alterazione. (Doc. FAO/CIP/UT/11-A : Italien seulement / Italian only)
- Rapport de la 6ème Session du Groupe de travail de l'exploitation et de l'utilisation / Report of the 6th Session of the Working Group on Exploitation and Utilization. (Doc. FAO/CIP/UT/12 : Français et Anglais / French and English)

d) Documents présentés à la 2ème Session du Groupe de travail des maladies
Documents submitted to the 2nd Session of the Working Party on Diseases

- Ordre du jour provisoire / Provisional Agenda (Doc. FAO/CIP/MAL/6 : Français et Anglais / French and English)
- The Urgency and Possibility of undertaking fundamental research - Note by the Secretariat. (Doc. FAO/CIP/MAL/7 : English only / Anglais seulement)
- Recherche sulla necrosi corticale del pioppo da Dothichiza Populca Sacc. et Briard. (Doc. FAO/CIP/MAL/8-A : Italien avec Résumé en Anglais / Italian with Summary in English)

- La cosiddetta batteriosi del pioppo. (Doc. FAO/CIP/MAL/9-A : Italien avec Résumé en Anglais / Italian with Summary in English)
- Contribution à l'étude des maladies cryptogamiques des rameaux et des jeunes plants de peupliers. (Doc. FAO/CIP/MAL/10 : Français seulement / French only)
- Rapport de la 2ème Session du Groupe de travail des maladies / Report of the 2nd Session of the Working Party on Diseases. (Doc. FAO/CIP/MAL/11 : Français et Anglais / French and English)
- Aspects biologiques de la maladie du chancre suintant du peuplier, (Doc. FAO/CIP/MAL/12 : Français seulement / French only)
- Renseignements sur les insectes et maladies des peupliers dans la région syrienne (R.A.U.). (Doc. FAO/CIP/IN/6 : Français seulement / French only)
FAO/CIP/MAL/13

e) Documents présentés à la 1ère Session du Groupe de travail des insectes
Documents submitted to the 1st Session of the Working Party on Poplar Insect Pest

- Ordre du jour provisoire / Provisional Agenda (Doc. FAO/CIP/IN/1 : Français et Anglais / French and English)
- Danni prodotti da roditori su pioppo e ontano. (Doc. FAO/CIP/IN/2 : Italien avec Résumé en Anglais / Italian with Summary in English)
- Contributo alla conoscenza della biologia della Gypsonoma acoriana Dup. (Doc. FAO/CIP/IN/2-A : Italien avec Résumé en Anglais / Italian with Summary in English)
- Efficacia immediata e residuale di tre insetticidi clororganici sulla Plagiodera versicolor Leich. (Doc. FAO/CIP/IN/2-B : Italien avec Résumé en Anglais / Italian with Summary in English)
- Aggiornamenti sulla biologia e la lotta contro la Saperda maggiore del Pioppo (Saperda carcharias L.). (Doc. FAO/CIP/IN/3-A : Italien avec Résumé en Anglais / Italian with Summary in English)
- Projet d'enquête sur les capnodes du peuplier dans le Proche-Orient - Note du Secrétariat. (Doc. FAO/CIP/IN/4 : Français seulement / French only)
- Rapport de la 1ère Session du Groupe de travail des insectes / Report of the 1st Session of the Working Party on Insect Pests. (Doc. FAO/CIP/IN/5 : Français et Anglais / French and English)
- Renseignements sur les insectes et maladies des peupliers dans la région syrienne (R.A.U.). (Doc. FAO/CIP/IN/6 : Français seulement / French only)
FAO/CIP/MAL/13

f) Documentations diverses distribuées au cours du Voyage d'études
Miscellaneous Documentation distributed in the course of the Study Tour

- Brochure publiée par la Commission nationale italienne du peuplier et intitulée: "Xo Session de la Commission internationale du peuplier" /
Brochure published by the Italian National Poplar Commission, entitled :
" Tenth Session of the International Poplar Commission"
- Documentation distribuée par l' "Ente Nazionale per la Cellulosa e la Carta"
Documentation distributed by the "Ente Nazionale per la Cellulosa e la Carta"
 - Plans des fonds et des plantations de peuplier : Morongo-Valenza-Casale.
 - L'expérimentation en Italie des clones de peuplier sélectionnés par l'Institut d'expérimentation pour la populiculture de Casale Monferrato, par M. Sokawin.
 - Prove tecnologiche per alcuni cloni di pioppo (Estratto da "Cellulosa e Carta" N.11-12 novembre-dicembre 1958)
 - Pioppicoltura e coltura accelerata delle piante da legno a rapido incremento in Italia.
 - Aspetti ed indirizzi tecnici e produttivi della pioppicoltura piemontese e della coltivazione accelerata di altro piante da legno, par/by Prof. G. Piccarolo, P. Francardi, C. Frogola e G. Borzini. (Estratto da "Annali dell'Accademia di Agricoltura di Torino - Volume centunesimo 1958-1959)
 - Coltura di ripa del pioppo e sua influenza sulla produzione di alcune piante erbacee, by/par Michele Provosto.
 - Somenzaio - Vivaio di un anno - Vivaio di due anni - Arboreto di coltura.
 - Note sulla "batteriosi del pioppo" (Estratto da "Cellulosa e Carta" N.2- febbraio 1959), par/by W. Vivani
 - Sviluppo di alcuni cloni nel pioppeto sperimentale di Torviscosa, par/by Silvio May (Estratto da "Cellulosa e Carta" N.2 - febbraio 1958)
 - Una manifestazione di bisessualità nel pioppo nero americano, par/by Silvio May (Estratto da "Cellulosa e Carta" N.7 - Luglio 1959)
 - La proprietà agricola "Nobili-Nichetti" berceau d'un système original de culture de peuplier, par/by Silvio May.
 - Note pédologique sur les terrains de la propriété "Nobili-Nichetti" (Ariano Polesino - Rovigo), par/by Andrea Giordano.
 - "Cellulosa e Carta" N.9, Anno X, Settembre 1959 : " La tenuta agraria Nobili-Nichetti sulla di un originale sistema di coltivazione di pioppo" di Silvio May , et/and " Nota pedologica sui terreni dello Tenuta Nobili Nichetti" di Andrea Giordano.
 - Observations préliminaires sur l'appareil racinaire du peuplier dans les plantations en profondeur dans le Delta du Pô, par/by E. Avanzo et C. Scaramuzzi.
 - etc, etc...
- Documentation distribuée par la SNIA VISCOSA et la SAICI
Documentation distributed by the SNIA VISCOSA and SAICI
 - Communications diverses / Miscellaneous papers

- g) Publications diverses distribuées directement aux participants par les Délégations au cours des sessions de la Commission et des groupes de travail
Publications distributed directly to the Participants by the Delegations during the course of the sessions of the Commission and Working Parties.

(i) Maladies et insectes / Diseases and Insect Pests

- The treatment of decayed wood from dead trembling aspen trees for growth-ring analysis, by/par Arthur W. Ghent (Reprinted from the Forestry Chronicle, September 1954, Vol.30, No.3) (Canada)
- Extent of decay in poplar as indicated by the presence of sporophores of the fungus fomes igniarius Linn., by/par C.G.Riley and J.E.Bier. (Reprint For.Chron. XII-249-255. 1936) (Canada)
- Suptoria Canker of introduced and native hybrid poplar , by/par J.E.Bier (Reprinted from the "Canadian Journal of Research" C.17:195-204,1939) (Canada)
- Studies in Forest Pathology - III. Hypoxylon canker of poplar, by/par J.E.Bier. (Dominion of Canada - Dept. of Agriculture - Publication 691 Technical Bulletin 27 - Issued March 1940)
- Studies in Forest Pathology - IX: Fomes Igniarius decay of poplar, by/par C.G. Riley (Reprinted from "Canadian Journal of Botany - 30:710-734. 1952)
- Studies in Forest Pathology - XI : Decay in black cottonwood in the Middle Fraser Region, British Columbia, by/par G.P.Thomas and D.G.Podmore (Reprint from "Canadian Journal of Botany - 31:675-692.1953)
- Studies of Western Tree Rusts - II. Melampsora occidentalis and M.Albertensis, two needle rusts of Douglas Fir, by/par W.G. Ziller. (Reprinted from "Canadian Journal of Botany - 33:177-188.1955)
- Decay of Trembling Aspen, by/par J.T. Basham (Reprinted from "Canadian Journal of Botany - 36,491(1958)
- Forest Resources Inventory - 1958 - Report No. 25 - Cull Studies , by/par Z.J.R. Morawski; J.T.Basham and K.B. Turner, of the Division of Timber, Ontario Dept. of Lands and Forests.
- Parasitic Diseases of poplars in Japan , by/par Kazuo Itô. (Forestry Agency - Ministry of Agriculture and Forestry, Tokyo - June 1959)
- Über die auf Salix und Populus vorkommenden Arten der Gattung Cryptodiaporthe Petr., by/par H. Butin (Sonderdruck aus "Phytopathologische Zeitschrift" Band 32, Heft 4 (1958), S.399-415, Verlag Paul Parey, Berlin und Hamburg. (Suisse/Switzerland)
- Untersuchungen über ein Toxin in Kulturfiltraten von Dothichiza populea Sacc. et Br. , par/by H. Butin (Sonderdruck aus "Phytopathologische Zeitschrift" Band 33, Heft 2 (1958), S.135-146, Verlag Paul Parey, Berlin und Hamburg. (Suisse/Switzerland)
- Forest Research Notes : Rating Poplars for Melampsora - Leaf Rust Infection, by/par Ernst J. Schreiner, Northeastern Forest Experiment Station, Forest Service, U.S. Dept. Agriculture (No.90,1959)
- The Life History and Some Aspects of the Ecology of the Large Aspen Tortrix, Choristoneura conflictana (Wlkr.) (N.Comb.) (Lepidoptera: Tortricidae), by/par R.M. Proutice (Reprinted from "The Canadian Entomologist, Vol. LXXXVII, N.11, November 1955)
- Air-Mass Climatology of Ontario North of Lake Huron and Lake Superior before outbreaks of the spruce budworm, Choristoneura fumiferana (Clom.) and the Forest Tent caterpillar, Malacosoma disstria Hbn. (Lepidoptera: Tortricidae; Lasiocampidae), by/par W.G. Wellington (Reprinted from "Canadian Journal of Zoology" 30:114-127. April 1952)
- Etc....

(ii) Autros sujets / Others

- Xb. Pappeln und Pappelanbau, par/by R. Müller (Sonderdruck aus "Grundlagen der Forstwirtschaft" - Verlag M. H. Schaper - Hannover) (Allomagne/Germany)
- Root Formation of Black Cottonwood Cuttings in relation to Region of Parent Shoot, by/par W.J. Bloomberg (Reprinted from the Forestry Chronicle, March, 1959, Vol. 35, No. 1 (Canada))
- Working Plan for Hybrid Poplar Clonal Tests, November 10, 1950, by/par Ernst J. Schreiner, Northeastern Forest Experiment Station, Upper Darby, Pa. (USA)
- How Sod affects establishment of Hybrid Poplar Plantations, by/par Ernst J. Schreiner, Northeastern Forest Experiment Station, Philadelphia, Pa. (USA)
- A Tool for Planting Cuttings, by/par Ernst Schreiner (Reprinted from the "Journal of Forestry", Vol. 57, No. 3, March 1959. (USA))
- Holz-Forschung. 11. Band - Heft 5/6 Februar 1958 - Technischer Verlag Herbert Cram, Berlin W 35.
- etc., etc..

CONVENTION PLACING THE INTERNATIONAL POPLAR COMMISSION
WITHIN THE FRAMEWORK OF FAO*

The Contracting Nations,

CONSIDERING

the statutes of the International Poplar Commission established in 1947 in pursuance of a proposal by the French Government following an International Poplar Week held in Paris,

the intention of the founders of the International Poplar Commission to establish it under the aegis of the Food and Agriculture Organization of the United Nations,

the views expressed by the Ninth Session of the Conference of the Food and Agriculture Organization of the United Nations in Resolution 47/57 regarding the desirability of avoiding any ambiguity with respect to the legal status of bodies promoted by the Food and Agriculture Organization of the United Nations and of clarifying their legal relationship with the Food and Agriculture Organization of the United Nations, and

REAFFIRMING

the desirability of promoting international cooperation in the study of all scientific, technical, social and economic aspects of Poplar cultivation,

Have agreed as follows :

ARTICLE I - Status

The International Poplar Commission (hereinafter referred to as "the Commission") shall be placed within the framework of the Food and Agriculture Organization of the United Nations (hereinafter referred to as " the Organization") and the present Convention whose object is to achieve that purpose shall be governed by the provisions of Article XIV of the Constitution of the Organization.

ARTICLE II - Membership

1. Member Nations of the Commission shall be such Member Nations of Associate Members of the Organization as accept this Convention in accordance with the provisions of Article XIII of this Convention.

* This Convention has been approved by the FAO Conference at its 10th Session, held in Rome in November 1959, and the present text takes into account the amendments approved by this Conference, following the proposal of the International Poplar Commission.

2. The Commission may, by a two-thirds majority of its membership, admit to membership such other Nations that are Members of the United Nations as have submitted an application for membership and a declaration made in a formal instrument that they accept this Convention as in force at the time of admission.

ARTICLE III - Functions

The functions of the Commission shall be :

- (a) to study the scientific, technical, social and economic aspects of poplar and willow cultivation,
- (b) to promote the exchange of ideas and material between research workers, producers and users,
- (c) to arrange joint research programs,
- (d) to stimulate the organization of congresses combined with study tours,
- (e) to report and make recommendations to the Conference of the Organization, through the Director-General of the Organization, and
- (f) to make recommendations to National Poplar Commissions, through the Director-General of the Organization and the governments concerned.

ARTICLE IV - Establishment of National Poplar Commissions

Each contracting Nation shall make provision as soon as possible and to the best of its ability, for the establishment of a National Poplar Commission and shall transmit a description of the competence and scope of the National Commission and of any changes thereto to the Director-General of the Organization, who shall circulate this information to the other Member Nations of the Commission. Each contracting Nation shall communicate to the Director-General the publications of its National Commission.

ARTICLE V - Seat of the Commission

The seat of the Commission shall be in Rome at the Headquarters of the Organization.

ARTICLE VI - Sessions

1. Each Member Nation of the Commission shall be represented at sessions of the Commission by a single delegate who may be accompanied by an alternate and by experts and advisors. Alternates, experts and advisors may take part in the proceedings of the Commission but not vote, except in the case of an alternate who is duly authorized to substitute for the delegate. Each Member Nation of the Commission shall have one vote. Decisions of the Commission shall be taken by a majority of the votes cast except as otherwise provided in this Convention. A majority of the Member Nations of the Commission shall constitute a quorum.

2. The Director-General of the Organization in consultation with the Chairman of the Executive Committee of the Commission shall convene a regular session of the Commission once every two years. Special sessions of the Commission may be convened by the Director-General in consultation with the Chairman of the Executive Committee, or if requested by the Commission, or by at least one-third of the Member Nations of the Commission.

3. The sessions of the Commission shall be held at the place determined by the Commission within the territories of its Member Nations or at the seat of the Commission.

4. The Commission shall elect, at the beginning of each session, from amongst the delegates, a Chairman and two Vice-Chairmen.

5. There shall be a General Committee of the session consisting of the Chairman and the two Vice-Chairmen of the session and the Chairman and the Vice-Chairman of the Executive Committee.

ARTICLE VII - Executive Committee

1. There shall be an Executive Committee of the Commission consisting of 12 members and up to 5 co-opted members.

2. Twelve members of the Executive Committee shall be elected by the Commission from among individuals nominated by Member Nations of the Commission upon the suggestion of their respective National Popular Commissions. Members of the Executive Committee shall be appointed in their personal capacity because of their special competence, and shall serve for a period of six years. Members of the Executive Committee shall be eligible for re-election.

3. The Executive Committee may, in order to ensure the cooperation of the necessary specialists, coopt one to five additional members under the same conditions as are provided for in paragraph 2 above. The term of office of the additional members shall expire with the term of the elected members.

4. The Executive Committee shall, between sessions of the Commission, act on behalf of the Commission as its executive organ. The Executive Committee shall in particular make proposals to the Commission regarding the general orientation and the program of work of the Commission, study technical questions and implement the program as approved by the Commission.

5. The Executive Committee shall elect from amongst its Members a Chairman and a Vice-Chairman.

6. Sessions of the Executive Committee may be convened as often as necessary by the Director-General of the Organization in consultation with its Chairman. The Committee shall meet in connection with each regular session of the Commission. It shall also meet at least once between two regular sessions of the Commission.

7. The Executive Committee shall report to the Commission.

ARTICLE VIII - Secretary

A Secretary of the Commission shall be appointed by the Director-General of the Organization from amongst the senior staff of the Organization and shall be responsible to the Director-General. The Secretary shall perform such duties as the work of the Commission may require.

ARTICLE IX - Subsidiary Bodies

1. The Commission may, if necessary, establish sub-commissions, committees or working parties, subject to the availability of the necessary funds in the relevant chapter of the approved budget of the Organization. Sessions of such sub-commissions, committees or working parties shall be convened by the Director-General of the Organization in consultation with the Chairman of such body.

2. Membership in subsidiary bodies shall be open to all Member Nations of the Commission, or shall consist of selected Member Nations of the Commission, or of individuals appointed in their personal capacity, as determined by the Commission.

ARTICLE X - Expenses

1. Expenses incurred by delegates of Member Nations of the Commission and of their alternates and advisors, when attending sessions of the Commission, or subsidiary bodies, as well as the expenses incurred by observers, shall be borne by the respective governments or organizations.

2. Expenses of all the Members of the Executive Committee when attending sessions of the Executive Committee shall be borne by the countries of which they are nationals.

3. Expenses incurred by individuals invited in their personal capacity to attend sessions or participate in the work of the Commission or its subsidiary bodies shall be borne by such individuals except when they have been requested to perform a specific task on behalf of the Commission or its subsidiary bodies.

4. The expenses of the Secretariat shall be borne by the Organization.

5. When the Commission or Executive Committee hold sessions elsewhere than at the seat of the Commission, all additional expenses related to such sessions shall be borne by the host government. The expenses for publications relating to sessions of the Commission other than the reports of such sessions, of the Executive Committee and subsidiary bodies shall be borne by the host government.

ARTICLE XI - Rules of Procedure

The Commission may, by a majority of two-thirds of its membership, adopt and amend its own Rules of Procedure, which shall be consistent with the General Rules of the Organization. The Rules of the Commission and any amendments thereto shall come into force upon approval by the Director-General of the Organization, and as from the date of such approval, subject to confirmation by the Council.

ARTICLE XII - Amendments

1. This Convention may be amended by the Commission by a two-thirds majority of the membership of the Commission.
2. Proposals for amendments may be made by any Member Nation of the Commission in a communication addressed to the Director-General of the Organization not later than 120 days before the session at which the proposal is to be considered. The Director-General shall immediately inform all Member Nations of the Commission of all proposals for amendment.
3. Amendments shall become effective only with the concurrence of the Conference of the Organization and as from the date of such concurrence. The Director-General of the Organization shall inform all Member Nations of the Commission, all Member Nations and Associate Members of the Organization and the Secretary-General of the United Nations of such amendments.
4. Amendments involving new obligations for Member Nations of the Commission shall come into force in respect of each Member Nation only upon acceptance by it. The instruments of acceptance of amendments involving new obligations shall be deposited with the Director-General of the Organization. The Director-General of the Organization shall inform all Member Nations of the Commission, all Member Nations and Associate Members of the Organization and the Secretary-General of the United Nations of such acceptance. The rights and obligations of any Member Nation of the Commission that has not accepted an amendment involving additional obligations shall continue to be governed by the provisions of the Convention in force prior to the amendment.

ARTICLE XIII - Acceptance

1. Acceptance of this Convention by any Member Nation or Associate Member of the Organization shall be effected by the deposit of an instrument of acceptance with the Director-General of the Organization and shall take effect on receipt of such notification by the Director-General.
2. Acceptance of this Convention by non-member nations of the Organization shall become effective on the date on which the Commission approves the application for membership in conformity with the provisions of Article II of this Convention.
3. The Director-General of the Organization shall inform all Member Nations of the Commission, all Member Nations and Associate Members of the Organization and the Secretary-General of the United Nations of all acceptances that have become effective.
4. Acceptance of this Convention may be made subject to reservations which shall become operative only upon unanimous concurrence by the Member Nations of the Commission. The Director-General of the Organization shall notify forthwith all Member Nations of the Commission of any reservation. Members of the Commission not having replied within three months from the date of the notification shall be deemed to have accepted the reservation.

ARTICLE XIV - Territorial Application

Member Nations of the Commission shall, when accepting this Convention, state explicitly to which territories their participation shall extend. In the absence of such a declaration, participation shall be deemed to apply to all the territories for the international relations of which the Member Nation of the Commission is responsible. Subject to the provisions of Article XVI, paragraph 2 below, the scope of the territorial application may be modified by a subsequent declaration.

ARTICLE XV - Interpretation and Settlement of Disputes

Any dispute regarding the interpretation or application of this Convention, if not settled by the Commission, shall be referred to a committee composed of one member appointed by each of the parties to the dispute, and in addition an independent chairman chosen by the members of the Committee. The recommendations of such a committee, while not binding in character, shall become the basis for renewed consideration by the parties concerned of the matter out of which the disagreement arose. If as the result of this procedure the dispute is not settled, it shall be referred to the International Court of Justice in accordance with the Statute of the Court, unless the parties to the dispute agree to another method of settlement.

ARTICLE XVI - Withdrawal

1. Any Member Nation of the Commission may give notice of withdrawal from the Commission at any time after the expiry of one year from the date of its acceptance of this Convention. Such notice of withdrawal shall take effect six months after the date of its receipt by the Director-General of the Organization who shall inform all Member Nations of the Commission, all Member Nations and Associate Members of the Organization and the Secretary-General of the United Nations of such receipt.

2. A Member Nation of the Commission that is responsible for the international relations of more than one territory shall, when giving notice of its own withdrawal from the Commission, state to which territory or territories the withdrawal is to apply. In the absence of such a declaration, the withdrawal shall be deemed to apply to all the territories for the international relations of which the Member Nation of the Commission is responsible. A Member Nation of the Commission may give notice of withdrawal with respect to one or more of the territories for the international relations of which it is responsible. Any Member Nation of the Commission that gives notice of withdrawal from the Organization shall be deemed to have simultaneously withdrawn from the Commission, and this withdrawal shall be deemed to apply to all the territories for the international relations of which the nation concerned is responsible, with the exception of Associate Members.

ARTICLE XVII - Termination

This Convention shall be considered terminated if and when the number of Member Nations of the Commission falls below 6 unless the remaining Member Nations of the Commission unanimously decide otherwise subject to the approval of the Conference of the Organization. The Director-General of the

Organization shall inform all Member Nations of the Commission, all Member Nations and Associate Members of the Organization and the Secretary-General of the United Nations of such termination.

ARTICLE XVIII - Entry into force

1. This Convention shall enter into force as soon as twelve Member Nations or Associate Members of the Organization have become parties to it by the deposit of an instrument of acceptance in accordance with the provisions of Article XIII.1 of this Convention.

2. With respect to such nations as are already Members of the Commission and who become parties to the present Convention, the provisions of this Convention shall replace the provisions of the statutes of the International Poplar Commission adopted at the second session of the Commission held on 20 to 28 April 1948 in Italy.

ARTICLE XIX - Authentic Languages

The English, French and Spanish texts of this Convention shall be equally authentic.

REPORTS ON THE ACTIVITIES OF THE NATIONAL COMMISSIONS
AND ACTIVITIES IN NON-MEMBER COUNTRIES IN 1958

ACTIVITIES IN MEMBER COUNTRIES

Fifteen of the eighteen Member Countries of the International Poplar Commission have submitted reports; these may be summarized as follows :

I. ACTIVITIES OF THE NATIONAL POPLAR COMMISSIONS

a) Administration and operation

All the Commissions met once or several times during the year and it appears that the difficulties reported in 1957 by various Commissions have been overcome. The Chairmen of the German and Spanish Commissions have changed : prominent administrative officers or politicians have been appointed. Several other Commissions report an increase in membership through nomination (Italy, Yugoslavia) or adhesion (Switzerland). A National Poplar Commission was set up in Japan and in Pakistan. In Japan, the Poplar Planters' Association of Japan (P.P.A.J.) was created previously to the Commission.

b) Work accomplished and projects envisaged

Work has been intensive in many countries : meetings or study tours have been held in Austria, Germany (national and regional excursions, poplar-growing courses), France, Italy, U.A.R. (Syria), Switzerland (courses for technical advisers) and Yugoslavia (excursions and courses).

Many pamphlets have been published, and lectures and publicity talks have been given in Germany, Spain, U.A.R. (Syria), Turkey and Yugoslavia, their aim being improvement of nursery and cultivation practice, detection of diseases, etc.. Many of the initiatives taken are excellent : radio talks, training courses for advisers, the dispatch to poplar growers at critical post infestation times of a card calling their attention to the need for keeping a watch on their stands, etc.

Regional Sub-Commissions have been set up in the larger countries with a federal form of government or where problems differ from one part of the country to another (Argentina, Germany, Italy, Yugoslavia).

Research on poplar growing has been clearly planned in the Netherlands.

c) Action taken to follow up the recommendations of the
International Commission

i) Distribution of identification cards and national inventory

In Italy, identification cards for a certain number of poplars previously submitted to the International Poplar Commission, have been published.

ii. Proposals for the registration of types

Italy is completing the experimental study of 7 poplars with a view to their registration. Switzerland has decided to submit the clone called 'Yvonand' for registration.

iii. Measures for the adoption of varietal control

In Germany, varietal control with a labelling system is rigorously applied; in France, the checking of nursery catalogues has been extended; in Italy, more nurseries have been brought under the supervision of the Casale and Rome institutes, and the requests for such supervision and for certified cuttings have increased.

iv. Survey on Dothichiza

Central and Northern Europe countries are greatly concerned about this disease, although reports indicate that better tending has caused it to decline somewhat. In Austria, an engineer has been engaged for this study. Germany was unable to undertake an overall survey, but much research is being done locally; in France, the danger is very serious only in the northern half of the country; severe attacks of the disease occurred in north-western Switzerland after the 1956-57 frosts; in Yugoslavia, 5 professional officials have been engaged to carry out the survey.

v. International exchange of cuttings and plants

Activity in this sector continues to be intensive, especially for cuttings, the main purpose for which the stock is required being always for comparative plantations and various experiments. However, as in previous years, it has been found that some countries distribute abroad clones that they themselves have received from another country. In some cases, the official bodies have not been responsible for these exchanges, but the fact remains that this practice has been a regrettable source of errors. It is thus that the U.A.R. (Syria) received Italian and Dutch clones from Germany, hybrids obtained in the United States by Stout and Schreiner from Austria, and Italian clones from Spain. Cuttings of 12 exotic poplars have been received in Pakistan from Italy, Sweden, Spain and the Netherlands. Pakistan offers Pakistan cuttings to other countries.

II. NATIONAL ACTIVITIES CONNECTED WITH POPLAR CULTIVATION

A. General information

a) Legislation

In Germany, the ordinance implementing the forestry law was promulgated on January 30, 1958; in Argentina, loans may be granted for growing poplar and willow; in Spain, legal provisions delimit the river bank areas that may be planted to poplar; in France, a Ministerial Order of 21 February 1958 has made the regulations governing the trade in planting stock and cuttings consistent with the international nomenclature, and has certified the I-214 poplar as a forest species; in the United Kingdom, a text gives the list of the 12 poplar cultivars (including 3 "balsam" and one "white" poplar) for which subsidies

are authorized in approved reforestation sectors; lastly, in Yugoslavia, the Republic of Slovenia has issued regulations for the types of poplar that can be planted. In Pakistan, plants and cuttings cannot be imported or exported without passing through the plant quarantine. Legislation is being drafted to ensure that only certified planting material from research nurseries be planted.

b) Publications and literature on poplars

Abundant literature is being published, consisting mainly of articles which vary greatly in length, subject matter and manner of distribution (from the general press to highly specialized reviews). In Argentina, very important studies on poplars and willows and their improvement have been published by A. Ragonese and Rial Alberti in the 'Revista de Investigaciones agrícolas'; the same review gave an article on poplar growing by L. Golfari. In Italy, publication of two specialized periodicals 'Il Pioppo' (The Poplar) and 'Pioppicoltura' (Poplar growing) has begun recently, in Milan and Parma respectively. In the United Kingdom, the list of poplars that the Forestry Commission has available has been circulated. In Switzerland, an excellent study by J.B. Chappuis on the mapping of a poplar site is a model of its kind, and shows the diversity of poplar soils. In Yugoslavia, the FAO study on poplars has been published in Sorbo-Croat.

c) Relations with other countries

Relations are becoming increasingly numerous and frequent - trips made by experts (E. Schreiner in Yugoslavia, an Italian representative of the 'Ente Nazionale per la Cellulosa e per la Carta' (National Cellulose and Paper Agency) in the United States), fellowships abroad, group or individual visits to nearby countries followed by widely circulated reports, exchange of correspondence, articles of reviews, planting stock or the findings of specific studies, etc..

In Italy, the Mediterranean Populetum to which many cuttings continue to be sent, has been transferred from near Rome to the vicinity of Salerno, where the area available is more extensive. In Japan, the P.P.A.J. publishes a quarterly newsletter (since October 1958). Two studies have been published, one on defoliation and one on parasitic diseases of poplars in Japan (respectively in 1958 and 1959).

B. Technical data

a) Identification, inventory and varietal control

In Germany, poplars of 230 different origins have been studied; R. Müller is the author of an important publication, with photos, in which 16 types of the 'old elite races of Populus nigra hybrids' are described.* In Spain, now selected types of P. nigra have been included in experiments and 700,000 cuttings

* It is to be regretted that the Author retained, for one of these types, the cultivar name 'Eucalyptus' formerly used in France, but officially rejected by the International Code of Nomenclature for Cultivated Plants.

of selected clones have been distributed. In France, 71,000 certified cuttings have been distributed to 70 growers. In Greece, Dr. Allegri noted the presence of P. nigra var. caudina, which is more drought-tolerant than the P. nigra type; the cultivation of I-214, I-262 and I-455, as well as 'robusta' is recommended, the last two being suitable for row plantations. In Italy, more especially in the south: Sicily, Calabria, etc., the inventory of aspens has been continued; a new variety has been described in Calabria. In the Netherlands, the list of 10 nursery-inspected clones and the number of young plants thus certified for sale (465,000 in 2 years) have been published; the Populatum has now 84 clones. In the U.A.R. (Syria), an inventory of cultivated poplars gives 3 times more P. 'roumi' than P. 'Hamoui'. In the United Kingdom, 373 clones are represented in collections and are being studied. Inventories are being made in Yugoslavia, where clone collections have been established; a new kind of grey poplar has been described: P. x canscons 'fraxinoides'. In Turkey, an inventory begun in 1956 has resulted in the establishment of a collection of 95 clones; these have provided planting stock for setting up a nursery for the production of cuttings, a nursery for the raising of young plants and a collection plantation of 61 clones. In Belgium, the 'Office National des Débouchés Agricoles et Horticoles' is carrying out a control of growing stock. Over two million poplars have thus been controlled.

b) Cultivation

i. Nursery practices and propagation techniques

In Germany, studies have been carried out at Freiburg on the specific differences in the rooting of poplars in nurseries on different types of soil; in Italy, the importance of the quality of nursery stock is being increasingly recognized, and the spacing between plants in the rows is being increased; in the Netherlands, however, one-year old planting stock is preferred; in the United Kingdom, good results have been obtained by propagating plants from cuttings at the beginning of June in heated frames in which the air is humidified, using 10 cm. herbaceous shoots of refractory species such as F. tremula, P. tremuloides and P. grandidentata; chemical woodkillers in nurseries have proved worthwhile; lastly, in Yugoslavia, French and Italian nursery practice is being increasingly followed, and irrigation is becoming more general. In the U.A.R. (Syria), 4 experimental nurseries have been set up to demonstrate the method of using rooted planting stock instead of direct propagation by cuttings.

ii. Plantations

Experimental plantations are being established in a certain number of countries (France, Germany, Italy, Switzerland, United Kingdom, Yugoslavia):

a. Layout and spacing :

Wider spaced plantations, although not the rule, are becoming more numerous in Mediterranean countries: in Spain, 4 types of plantation - pollarded or spaced 2 x 2m, 3 x 3m, and 4 x 4m. - have in 10 years given an annual yield per hectare of respectively 5.9, 6.8, 10.1 and 13.6 m³; the last three yields included wood over 20 cm. in diameter in the following proportions: 12.5%, 38% and 82%. In Italy, spacing is still too close and the trees are cut too early. In Yugoslavia, the new plantations are usually spaced 6 x 6m. or 7 x 7m. In Turkey, a series of research studies has been undertaken to determine the best spacing to be used in relation to the particular cultivar grown, and the site

and the local market. In Pakistan, a maximum growth of 16' in 6 months has been recorded for Populus x euramericana cv.'I-214' and 'I-154' in nursery conditions in Lahore. The height growth is directly proportional to the elevation of the station. Increment plots of P. euphratica are under observation. Provisional growth data are being compiled for all indigenous species.

b. and c. Soil preparation and tillage

Soil tillage and cultivation care are becoming more general in countries where formerly they were little practised, for example, in Yugoslavia; farm crops are grown in association with poplars. In the United Kingdom, mulching trials with or without fertilizer are being undertaken.

d. Pruning

Studies on pruning and extension work promoting its efficient practice are reported in various countries, in particular in Italy and in the Netherlands. In Yugoslavia, pruning is inadequate.

e. Fertilization

The experiments under way are being continued. In Germany, abundant liming is found to be worth while when the pH is close to 4. In the Netherlands, the value of potassium applications in rust control has been noted; foliar diagnosis has proved very useful for detecting mineral deficiencies.

f. Management

In Greece where very small wood (even fagots) still finds buyers, heavy thinnings starting when the grove is 5 years old are recommended, so that at 7 years it will be possible to obtain some boxboard wood.

iii. Forest stands

In the U.A.R. (Syria), an inventory on natural stands of Populus euphratica is being made.

In Yugoslavia, the poplar is still being used in forest plantations in association with the ash and the elm, although now to a lesser extent.

In Turkey, attention is being given to the improvement of methods for the treatment, felling and restocking of natural stands of P. tremula. An endeavour is also being made to use this species more extensively in reforestation and for coppice improvement.

e) Protection

i. Pest and disease control

In Italy, plant protection is being well organized : warning services, equipment, joint control measures.

Insect pests : These are much more dangerous in the southern countries. The pests most frequently mentioned in the reports of the national commissions are the wood-eating insects (France, Italy, Netherlands, Spain, U.A.R. (Syria),

Yugoslavia), but they can be effectively controlled by synthetic insecticides. Centres of infestation by leaf-eating insects have been observed in France (Stilpnolia) and in Yugoslavia (Stilpnolia and Nyctcola asiatica). Aphids have caused damage only in Italy and the U.A.R. (Egypt). In Belgium, infection by Stilpnolia salicis is recorded. It seems to be checked by natural agents. However, biological control is advisable rather than the use of insecticides which may be dangerous. In Argentina, leaf fall caused by a scale insect (Quadraspidiotus ostraciformis) is reported.

Diseases: These are most dangerous in northern countries.

- Dothichiza : The exact identification of the causal agent has been specified in France and Germany ; the perfect form of the parasite is Cryptodiaporthe populca Sacc. (Butin) : it would therefore be desirable if the incorrect term Dothichiza were no longer used for this disease. In Italy, this parasite, as well as Cytospora, have been observed in Tuscany. Much practical advice is given in most of the countries where this disease is prevalent in order to prevent it causing damage; the disease seems to have undergone a marked decline in 1958 as a result of better planting stock, improved cultural care, control treatments with various products, and planting at the right time (spring).

- Rusts : Heavy Melampsora infestation occurred in 1958 owing to the wet summer. In France and the United Kingdom, the balsam poplars lost nearly all their leaves in August (however, a clone of P. trichocarpa, Number 126, supplied by S. Pauley, proved to be resistant); in France, the P. x curamericana of the 'serotina' group also suffered and its growth was slowed down. In Austria and the Netherlands, attacks by Dothichiza are attributed to the weakness caused by rusts. In Japan, the three predominant clones are subject to leaf rusts. Septotinia leaf blotch has also been observed.

- Bacteriosis or 'brown spot' disease : This disease is particularly widespread in France, Italy and Yugoslavia.

- Bacterial canker : In France, Mr. Ridé has proved that the true causal agent of bacterial canker is a bacterium of the Aplanobacterium genus, as the disease can be induced by pure cultures of this bacterium, and its ecology (development stopped by high temperatures) seems to explain its geographical distribution in the northern and maritime areas only.

ii. Other damage

Mammals : In Austria, rolling strips of paper round the trunks to protect them from nibbling by animals is recommended.

Atmospheric conditions : In Argentina, the very heavy floods in the Plata Delta showed Salix alba var. calva to be very resistant, while Salix x argentinensis 'hibride' suffered severely. In Austria, efforts are being made to find clones best suited to a continental climate, namely, those that bear fruit and shed their leaves early. In France, severe damage has been caused by storms, while the 1956 winter and 1957 spring frosts, followed by a cold and wet spring in 1958 killed off P. robusta stands over 20 years old in the north-eastern part of the country; most of these stands were too closely spaced and set out on poorly drained soils. Intensive logging had to be carried out.

d) Genetics and selection

In many countries artificial hybridization in the laboratory is being continued, the plant material used being flower-bearing branches in pots (Leuce section) or grafted branches (other sections) : crossings are being made both within and between sections. Excellent rooting of seedlings derived from the alba x trichocarpa crossing is reported in Germany; in Spain, tremula x 'carolin' hybrids produce satisfactory cuttings and crossings; in the United Kingdom, a P. x genorosa x P. nigra charkoviensis seedling has proved resistant to canker.

i. Aigeiros Section

In Italy, the program under way is being continued, and 276 clones have been selected from the 1957 seedlings. Some of the new clones, particularly one tetraploid, appear to be very good. In the comparative arboretum, the I-214 poplar which was the largest at 2 years has been outgrown, in diameter, by I-45/51, but the bark of the latter poplar is thicker. Attempts are being made to graft quick-growing clones on to P. nigra with a view to improving its adaptability.

In Pakistan, 9 exotic poplars have been tried in 10 stations.

Numerous seedlings have been obtained in Spain and also in Yugoslavia (6,900 hybrids) where Italian methods are used and where X-ray treatment is also being tried out.

In the Netherlands, many hybrids have been produced ; in addition, a certain number of P. 'golrica' and 'scrotina' have been collected for identity checking and comparative trials; the existing stock of P. nigra has been inventoried.

ii. Leuce Section

In Germany, 25 stands of P. tremula are under observation. In Spain, white poplar x aspen hybrids have been planted in Guipuzcoa to replace the Pinus radiata killed off by frost in 1956. In Italy, work is being carried out on the hybridization of white poplars with aspens to obtain trees suitable for poor soils. In the Netherlands, 32 types of aspen have been identified. In Turkey, a method has been perfected for the propagation of P. tremula from seedlings and suckers. In Pakistan, four distinct species exist; hybrids have not been isolated. Three exotic species have been tried.

iii. Other Sections

There is little to report for these Sections; crossings have been made between the above sections and the balsam poplars mentioned at the beginning.

e) Exploitation and utilization of poplars

In Spain, poplar pulp trials are being made ; in Italy, a study is being made of the quality of the wood of the principal hybrids grown under various conditions ; in Yugoslavia, the pulp mills are required to use 30% poplar wood

this wood is being increasingly used in the furniture industry. In Japan, laboratory tests for matchwood, pulp and fibreboards have been successful with 4 years old trees of 'I-214'.

Lastly, in Argentina, it is hoped to be able to mechanize drainage operations and stand working in the Delta area : information on European machinery will be appreciated.

f) Willows

In Austria, Germany, Italy, Netherlands, Spain, Switzerland and the United Kingdom, attention is being turned to the study of willows and fairly large collections of selected and introduced stock are being assembled. In the United Kingdom, it has been found that Salix aquatica gigantea comprises a mixture of clones. In Yugoslavia, production tables have been published for natural stands of Salix alba. In Argentina, selection and hybridization work are being pursued.

C. Statistical and economic data

a) Statistical data

Only a few countries supplied data on production and consumption, namely:

Country:	Total production m3.	Saw timber or industrial wood					Pulp	Fuelwood	Observations
		Fly- wood	Furni- ture	Sawwood of different types	of Pack- ing				
Spain	197,426	4%	43%	42.5%	18%	2.5%	-	Increase 40%	
France	2,076,000	6%		52%	42%	-	-	46% produced in 8 Depart- ments of the Paris region.	
Greece	33,000			21,155 m3		-	11,950	Cuttings by peasants not estimated	
Italy	1,450,000			?		?			
Turkey	500,000								

Some data were also given on the increase in plantations or on their area : in Greece 1,147 ha. of stands have been planted, 23,000 trees have been planted in rows, while many private plantations have been set up on farm land (the figure given appears to be erroneous); in Italy, where there are 46,000 ha in stands and the equivalent of 110,000 ha planted on farms, a further 3,000 ha are planted every year.

b) Brief analysis of production, consumption and marketing trends

With regard to consumption, the countries may be divided into two groups: those where consumption is on the increase and those where, on the contrary, consumption is stationary while production is on the increase.

The Mediterranean countries mostly fall into the first group: Greece, Italy, Spain, Switzerland, U.A.R. (Syria), Turkey and Yugoslavia. In Spain, however, prices are not rising perceptibly with consumption, while in Italy, the increase in prices has been just as high as the demand, which leads to very premature cutting (as early as 6-8 years!). In U.A.R. (Syria), it has been found that the cash income per hectare per year from a poplar stand is more than double the return on a farm crop; there is also an increase in the demand for large, assorted, wood timber. In Turkey, the demand for poplar wood for the veneering, lumber and packing industries has markedly increased and the home market cannot supply the large-diameter wood required owing to the cultivation system practised. So far the pulp and paper industry has used very little poplar wood, but there are indications that the use of poplar wood by this industry will increase very rapidly. In Belgium, a 5 - 10% price decline has been recorded between 1957 and 1958 for most categories.

In the second group of countries there is an appreciable reduction in consumption or at least in prices. This is definitely the case for the Netherlands, where production is increasing but the market has declined. In Germany, the poplar growers are worried by the fall in prices for beech. In France, consumption remains stationary or is increasing, but there has been a decided drop in prices, due partly to the volume put on the market as a result of the large number of trees killed by frost, and partly to the use now being made of tropical woods. Lastly, in Argentina, it is considered efforts should be made to find new markets for willow and poplar wood. In Japan, poplar wood (maximowiczii, sieboldii and tremula davidiana) is used mostly for matchwood. Production does not cover requirements.

With regard to production trends, attention should be called to the plan for the expansion of poplar growing mentioned in the Turkish report. This plan, which is part of the FAO Mediterranean Development Project, provides for both a short-term (1960-75) and a long-term (1975-2000) project. In the short-term project, poplar stands will be expanded mainly by better utilization of the available soil and water resources, by using more efficient methods and by giving the growers technical and financial assistance; it will thus be possible to increase annual production to 1 million m³. The long-term project is bound up with the national irrigation program, which will double the irrigated area (at present 1 million hectares); annual production will then increase to 2 million m³.

D. Special studies recommended by the International Commission

- a) Blackheart : Nil
- b) Frost-crack : Nil
- c) Poplar growing on farmland and grassland

In Germany, a study has been made on the growing of poplars as wind-breaks in beet fields.

P. alba and P. nigra are said in Pakistan to be the host plants of the borers and aphids, causing serious damage to fruit trees (poplars are grown as windbreaks in fruit gardens).

In Franco, a fair number of poplar stands have been established as windbreaks between rice fields or orchards in Languedoc, but timber production is considered of secondary importance.

d) Economic aspects of poplar cultivation

The propaganda for wider spacing is based on economic factors in Spain, U.A.R. (Syria), Turkey, etc..

ACTIVITIES IN NON MEMBER COUNTRIES

Ireland

Starting with the beginning of the 1958/59 season, the Irish Government grants a subsidy of £15 per acre for poplars planted in compact blocks, and of 3/- per tree for poplars planted in rows or lines, provided the said plantations conform to certain standards established by the Forestry Service (approved canker-resistant types, commercial value of the wood, spacing, etc..). Two thirds of the grant are payable upon satisfactory establishment of the plantation, and the balance after five years. The Forestry Service has published a pamphlet to promote such plantations, and gives free advice to planters.

Poland

A National Poplar Commission is to be established soon, and will collaborate with the International Poplar Commission.

Variety control has been introduced in 1955. State nurseries (265 hectares and 52 hectares of stool-beds now provide for the whole domestic requirements of cuttings. The main types are P. 'robusta', P. 'serotina', P. 'reconerata' (German origin), P. 'marilandica' and P. 'gallica'. In forest stands proper, P. tremula is the only species used (1 or 2-year plants). The multiplication of hybrids has been carried out for the past two years.

The present trend is to promote intensive cultivation, with emphasis on row plantations rather than on blocks (in 1958, 1,835 hectares have been planted in blocks, and 1,391,000 trees in rows).

Saperda carcharias is the most dangerous poplar pest for Polish plantations.

Portugal

Only recently has the attention of the Portuguese authorities been drawn to the interest of poplar cultivation. Four nurseries have been established in 1958. A collection of clones has been started as a basis for experimentation.

The inventory of indigenous and imported poplars has also been compiled.

P. 'I-214' and 'Campeador' have been tried with success in the nurseries. The classification of several P. tremula, P. canoscons, of one P. nigra 'italica', of various P. alba, subintogerrina, hickoliana, microphylla, etc., has been undertaken.

White poplars are especially important in Portugal. The value of aspen is being investigated.

Strange mutations (pubescent petiole) have been observed on one P. nigra grown as a support for vines in the Minho Province. The possibility of cross-breeding it with 'I-214' is being considered.

Extension work for promoting poplar cultivation (by pamphlets, films, etc.) has been very active in the past two years. Plants are distributed free of charge. This propaganda apparently has excellent results.

In view of the irrigation projects (150,000 hectares), of the possibility of using the bottom of valleys and of establishing wind-breaks for the protection of crops, and also of the wood requirements, the prospects of poplar cultivation in Portugal are good.

REPORT OF THE WORKING PARTY ON DISEASES
2nd. SESSION

1. The Working Party met at the Headquarters of FAO the 24 and 25 September 1959, under the chairmanship of Dr. van Vloten. The list of participant is given in Annex 7-a.

After approval of the agenda*, the Working Party considered the following items :

- I. QUESTIONNAIRE ON DOTHICHIZA POPULEA

2. During the First Session of the Working Party (France, April 1957), it was decided to send out new questionnaires on Dothichiza populea, as the first enquiry made in 1956 had only resulted in a limited number of replies. The new enquiry was based on the questionnaire published as Annex 7-b of the " Actes du V^o Congrès international du peuplier et de la IX^e Session de la Commission internationale du peuplier ", Paris, 1957.

The report on the replies to the questionnaires was presented by Mr. Paris (Annex 7-b) .

3. Following a discussion in which Messrs. Sibilis, Horbignat, Vivani, Krstić and Donaubaueer participated, the conclusions of the report were accepted with some observations on points of detail. The Working Party agreed on the following points :

- a) The report constitutes an important contribution to present knowledge of Dothichiza . However, it is not to be considered as a final study on the subject; on the contrary, it should be utilized as a basis for the collection of more precise and comprehensive information. To this end the report should be distributed to the members of the Working Party and the National Poplar Commissions with a request for amendments in the light of the most recent research data.

- b) Following this, a pamphlet should be prepared. It should be in a clear and simple style, condensing the practices to be observed and intended essentially for the non-professional poplar grower. For this purpose, advantage should be taken of existing brochures and pamphlets. Several members of the Working Party expressed their desire to cooperate or contribute to the preparation of such a pamphlet.

* Considering the statutory changes of the International Poplar Commission envisaged at the time of the meeting, the Working Party re-elected its Chairman, Vice-Chairman and Rapporteur-Technical Secretary.

II. PRESENT RESEARCH ON DISEASES OF POPLARS AND WILLOWS - REPORTS OF THE MEMBER COUNTRIES

4. The Working Party examined those sections of the reports of the National Poplar Commissions which concerned diseases. Reports were tabled by Argentina, Austria, France, Germany, Greece, Italy, the Netherlands, Spain, Switzerland, Turkey, UAR (Egypt and Syria), the United Kingdom and Yugoslavia. The representatives of several countries made interesting statements on the more important diseases in their respective countries.
5. Mr. Zycha (Germany) dealt with the conditions under which the Dothichiza develops, such as the water content, the temperature and the possibility of a rapid penetration of the mycelium from the surface to the interior tissue. Certain strains of this fungus behave differently under natural conditions and in vitro. Research activities further concern Septoria populiperda, Cytospora chrysosperma and Melampsora larici-populina.
6. Mr. Krstić (Yugoslavia) stated that the Dothichiza is found all over the territory of Serbia and that it showed pronounced intensity fluctuations. The cultivar marilandica is rather resistant, while the planting of balsam and nigra italica is being discouraged. The spring season is the period of the greatest susceptibility to infection, but contamination is possible all the year round. Certain micro-elements such as cadmium and tin are possibly of importance. Other diseases presently under study are those caused by Cytospora chrysosperma and Melampsora, as well as the "brown spots", the latter at present being rather serious, in particular on 'robusta' and 'serotina' of 10-20 years of age.
7. Mr. Hilwa (U.A.R. - Syria) drew attention to a disease which is at the moment serious in Syria. The responsible agent seems to be Cytospora chrysosperma. He also mentioned attacks of rust (Melampsora) on white poplars. With regard to the European clones, no diseases are found on plants of 5 years or more.
8. Mr. Donaubaer (Austria) reported on the work of determination of resistance to Dothichiza, and the varying results obtained with the Wettstein and Stout and Shreiner selections as well as those from Italy. The susceptibility of these clones to the attacks of Septoria populiperda is different from that observed with Dothichiza. It would be advisable to be more precise with regard to the most important data relating to research on resistance to diseases. Further, more detailed and precise descriptions on the site of the experiments were desirable.
9. Mr. Ridé (France) reported on the conclusions drawn from the studies of the "sweating canker" on poplars.

It appears that one single organism belonging to the genus Aplanobacterium is the cause of this disease. By inoculation of susceptible clones, a true reproduction was obtained of the two phases of the attack found under natural conditions (sticky exudations in the spring, and development of chronic canker). The Pseudomonas syringae seems to appear in particular in the necrotic phase in spring. The period of susceptibility of the trees is not limited to the months of April, May and June ; the most virulent inoculations are those made

in September/October. The leaf scars may be the points of penetration for the bacteria, but any wound, made for example by insects, may likewise offer entrance ways for this organism.

It is possible to produce in the laboratory a constant and virulent material which should permit susceptibility tests to be undertaken on any new cultivar introduced in France. It is desirable that such tests be made under as varied ecological conditions as possible.

Mr. Régnier (France) stated that it was precisely this disease of the "sweating canker" which originally caused the foundation of the French Poplar Commission.

10. Mr. Ragonese (Argentina) gave a description of the most important poplar diseases in Argentina, together with details of the susceptibility of different selections or clones to canker and rust, as well as particulars of the diseases of willows. He proposed that the International Poplar Commission should establish an international "bank" of the poplar clones most resistant to diseases. Lists of these clones should be distributed to all interested research workers.

11. Mr. Nordin (Canada) emphasised that until recently practically all research work had been concerned with natural stands of poplar and aspen. However, plantations are now being established on a large scale and the diseases known from Europe have also established themselves in Canada, with the exception of the bacterial canker. On the whole, research activities are following the same lines as in Europe; as additional items may be mentioned the ecology of branch stub infection in the case of Populus tremuloides, biological studies of Venturia tremulae, and the systematic disease surveys undertaken on a continuous basis and covering the whole country.

III. INDIVIDUAL DISEASES

12. Mr. Paris (France) read his report on the three important diseases, viz. Dothichiza, Cytospora chrysosperma and Fusarium avenaceum (Annex 7-c).

13. Following this, the discussion centred on the "brown spot" disease, which is on the increase in many countries. The Working Party was of the opinion that it was very desirable that practical and theoretical studies of this disease be undertaken. The work could start with dissemination of existing information on resistant clones. At the same time, research should be undertaken into causes of the disease. A meeting of specialists would be useful when more progress had been made in research work.

IV. FUNDAMENTAL RESEARCH

14. The Chairman, Mr. van Vloten, gave a detailed summary of the methods used by Professor Bier in order to determine the relative turgidity of plant material. Professor Bier has established and demonstrated the close relations which exist between this relative turgidity and the degree of susceptibility of the plant to diseases. He is of the opinion that the relative turgidity could be an important factor in the determination of the susceptibility of the different poplar clones to the attacks of certain parasites (Dothichiza, Cytospora, etc..)

15. During the following discussions, in which Messrs. Zycha, van Vloten, Krstić, Herbignat, Wettstein, Nordin and Tavis participated, it was recognized that this work was of interest but also that it was necessary to be prudent in regard to a generalization of this testing method. The Working Party felt that the specialists of the National Commissions should take note of the method and apply it to certain aspects of their problems.

V. LIAISON

16. The Working Party considered the means of liaison between its members and found that closer contacts were desirable. While difficulties, mainly of a financial nature, will tend to prevent frequent meetings, there would be no obstacle to the issuance of a short Newsletter. This Newsletter could be based on communications transmitted approximately every six months to the Secretary of the Working Party, who would collate, reproduce and distribute the communications to all members of the Working Party. Even if no progress had been made in the research work during these six months, a brief note could be sent; if new results were obtained during the period, a more complete report could be made. Questions could also be posed in the reports, and in this way all the participating countries would be kept up to date on the problems, results, difficulties and progress reported during a six months period.

17. The Secretariat was requested to examine the possibility of issuing such a Newsletter twice between now and the next session (probably in two years).

The members of the Working Party were invited to send a first report to the Secretariat before the end of April 1960 and a second report before the end of January 1961.

VI. MISCELLANEOUS

18. The delegate of Argentina again expressed the wish that exchanges between the different member countries of cuttings tested as being resistant to the various parasites would take place on a sharply increasing scale in the coming years (for poplars as well as for willows). Mr. Ragonese proposed, and the Working Party agreed, that the International Poplar Commission should make efforts towards the establishment of study centres concerned with resistance to diseases in places where such centres do not exist, and for exchange of cuttings on a large scale.

VII. STUDY TOUR

19. Mr. Krstić was entrusted with the task of drawing up a note on the diseases observed during the study tour organized on the occasion of the tenth session of the Commission. This note is reproduced in Annex 7-d of this report.

LIST OF PARTICIPANTS

Chairman : H. van Vloten (Netherlands)
Vice-Chairman : H. Zycha (Germany)
Rapporteur-Technical : B. Taxis (France)
Secretary : M. Anderson (FAO)

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Messrs. E. Allegri (FAO)
E. Donaubaucr (Germany)
A. Herbignat (Belgium)
A.H. Hilwa (UAR - Syria)
T. Inokuma (Japan)
M. Krstić (Yugoslavia)
G. Magnani (Italy)
V.J. Nordin (Canada)
A. Ragonese (Argentina)
R. Régnier (France)
M. Ridé (France)
C. Sibilis (Italy)
W. Vivani (Italy)
W. Wettstein (Austria)

SURVEY ON DOTHICHIZA POPULAE Sacc. and Briard

On the occasion of the Fifth International Poplar Congress (Spain, April 1955), the ad hoc Working Party on Poplar Diseases which met at the same time, decided to request the International Poplar Commission to send out a survey questionnaire on Dothichiza populea ; this was done and a certain number of replies were received.

Two years later, when the Permanent Working Party on Poplar Diseases held its first meeting (France, April 1957), it was resolved to circulate another questionnaire. Although this survey has not given all the results expected, some interesting information has been obtained and specific data have been confirmed.

If we go through the questionnaire, item by item, we come to the following conclusions :

1. Occurrence

Dothichiza occurs mainly in the following countries (we refer only to the member countries of the International Poplar Commission) :

Austria
Belgium
France
Germany
Netherlands
Switzerland
United Kingdom
Yugoslavia

that is to say, roughly in the countries lying north of the 45th parallel. Apart from other factors, the climatic conditions in this zone are particularly propitious for the spread of this disease.

2. Environment

The plantations most severely attacked by Dothichiza are located in marshy, very wet, waterlogged soils, or by contrast, on excessively dry land. This parasite is rife in plantations established on these types of land without special precautions and proper soil preparation.

Few replies gave any specific information on the subsoil.

Late frosts and periods of abnormal drought also greatly favoured the spread of the disease.

This abnormal weather has weakened the trees through adverse growing conditions, and at the same time facilitated the spread of Dothichiza; various countries have reported severe infection in such cases.

3. Plants

In general, 3-year old plants appear to be less susceptible than 2-year old stock (this still has to be confirmed however); the best plants are those which have well balanced foliage-root systems; plants that have been cut back seldom appear to be attacked.

The replies given under this heading confirm that in most cases, sets should not be used for planting stock, except in very wet soils where they take more easily.

Proper choice of cultivars according to type of soil and environment appears to be an extremely important factor in reducing disease hazard.

Although there is need for caution in this respect, the replies to the questionnaire show a variation in susceptibility of different cultivars.

P. italica, P. simonii and, in general, all the balsam poplars, appear to be highly susceptible.

P. nigra, 'scrotina', 'robusta', 'Leipzig', P. deltoides 'virginiana' seem to be moderately susceptible.

P. tremula, P. trichocarpa, 'I-214', 'I-154', P. 'Oxford' appear to be relatively resistant.

These data are in no way final nor exclusive as we have merely given the information culled from the different replies received.

The replies make it clear that the parasite must have an accessible point of entry to penetrate into the tissues of the host plant. Infection mostly occurs in pruning scars and in the transition zones of the shoots' growth from one year to the next. Every precaution should be taken, therefore, to prevent the parasite from gaining entrance.

In order not to forego useful pruning, apparently, the plants should be pruned severely in August or lightly at planting time.

4. Circumstances of planting

Infection is least or absent when stock is planted :

- in November and December, on good soils ;
- in March, on poor soil.

It is most severe when the ground is not properly cleared or prepared.

Heeling in or bunching of the young stock, and delay in planting after the plants have been lifted from the nursery have, in many cases, left them open to severe infection.

Trees should therefore be planted out as soon as possible after lifting them from the nursery. When planting in the field is carried out in spring, it should in particular be avoided to lift the trees before winter and to heel them in until spring.

5. Plantation design

Few replies gave any worth-while details on this point ; it is plain, however, that the homogeneous, very dense plantations suffered the most severely from infection (the replies with regard to this item, however, are rather vague).

6. History of the plantation

The replies indicate that in the plantations which were badly infected, nearly always some 'mistake' had been made or there had been a 'want of care' or else the weather conditions were abnormal.

Some interesting points may be noted.

Late frosts and early droughts, by hampering the rooting of the young plants, favoured the extensive spread of the parasite, as we have already mentioned.

Nothing can be done about the late frosts, but during abnormally dry periods, growers are urged to hoe the soil frequently in order to conserve the moisture as much as possible. Plantations which are properly tended (soil well tilled and manured, possibly intercropped with suitable farm crops for the first few years) have never been attacked by Dothichiza populca.

The importance of proper post-planting care for the young poplars cannot be emphasized too strongly.

In most plantations in areas where drainage is inadequate, the plants showed poor growth and infection was frequent.

Few replies made any mention of fungicidal treatments.

In most nurseries, Dothichiza populca infection occurs when (very often) practical plant protection precautions have not been taken.

We call the attention of nurserymen to the following essential points :

- vigorous cultivars must be chosen ;
- cuttings must be taken in the proper way ;
- good-sized cuttings must be chosen (do not take any that are too small in size or too narrow in diameter) ;
- even if fungicidal treatments are rather difficult to carry out in the plantations, cuttings should be properly disinfected ;
- the soil of the nursery should be carefully prepared by deep ploughing and suitable fertilizer applications ;
- the cuttings should not be set out too closely, spacing should be adequate ;
- subsequently, the nursery should be kept well tended (frequent cultivation....).

We again stress that the lack of standard tending practices is often the underlying cause of the severe infection observed in nurseries.

This survey reveals that the serious damage caused by Dothichiza populca Sacc. and Briard can be considerably reduced when poplars are grown with proper care in both the nursery and in plantations.

One of the merits of this survey has been to make this point clear, and it would be highly desirable if a simple and concise booklet, setting forth in condensed form the practices to be followed, could be widely circulated among the member countries of the International Poplar Commission.

MEMORANDUM ON THREE IMPORTANT DISEASES :
DOTHICHIZA, CYTOSPORA CHRYSOSPERMA and FUSARIUM AVENACEUM

by
B. Taris.

In the last few years research has been conducted mainly on the laboratory and field behaviour of three parasites which heavily infect the branches of poplar trees and young stock : Dothichiza populca Sacc. and Briard, Cytospora chrysosperma (Pers.) Fr., and Fusarium avenaceum (Fr.) Sacc.

For these three parasites, we have endeavoured to specify the :

- 1) periods during which infection takes place ;
- 2) way in which the parasite gains entrance ;
- 3) course of the disease ;
- 4) predisposing or adverse influence of climatic factors ;
- 5) degree of susceptibility of the principal cultivars grown in France ;
- 6) influence of tilling the soil.

A combined laboratory and field study was useful in showing the influence of various physico-chemical factors (light, temperature, pH, etc..) on these parasites.

Very briefly, the findings were as follows :

A - Dothichiza populca Sacc. and Briard.

1) Field experiments

- Contamination is extremely easy owing to the remarkable viability of the spores and their occurrence throughout the year ;
- The parasite must have a point of entry ;
- Susceptibility is maximum during the dormant period of vegetation ;
- Course of the disease varies in accordance with site and conditions of establishment ;
- The development of Dothichiza is favoured by :

Atmospheric moisture above 80%
Temperature between -6° and 12°C.
Lack of proper cultivation care in nurseries and plantations.

2) Laboratory experiments

These proved the resistance of the parasite to very low temperatures and the favourable effect of darkness ; the spores germinate well when the pH is 6.5.

In addition, the spores were found to be long-lived and the mycelium ramified quickly.

We may mention that Dothichiza has often been found in the fungic flora isolated from 'brown spots'.

B - Cytospora chrysosperma (Pers.) Fr.

We found from the experiments that this parasite has requirements and a biological cycle similar to those of Dothichiza. Its constant occurrence and wide distribution are partly explained by its considerable resistance to variations in environmental factors and the longevity of its spores.

C - Fusarium avenaceum (Fr.) Sacc.

This parasite has become widespread in recent years in the north of France. The following are the main features of this Fusarium with regard to poplars :

- There must be a point of entry for it to penetrate into the tissues ;
- The period of maximum susceptibility of the trees occurs in June and July ;
- After infection the disease continues its course until September-October and ends in the formation of a cankered facies ;
- It is very active when the temperature is above 12°C. and the atmospheric moisture above 80%.

In the laboratory it was found that this parasite is less adaptable to changes in temperature, light intensity, etc. than Dothichiza and Cytospora. The conditions governing its development are more or less rigid (pH = 7, darkness, fairly rich medium, etc.)

Control treatment with, and testing of, fungicides have been carried out and are still under way.

These experiments have proved the efficacy of mercurials in controlling the above three parasites.

Repeated applications of fungicides in nurseries appear to be efficacious as well as necessary. Studies in this aspect will be continued.

REPORT ON THE PHYTOSANITARY CONDITIONS OF POPLARS AND WILLOWS
IN THE NURSERIES AND PLANTATIONS VISITED DURING THE STUDY TOUR

by
M. Krstić

During the study tour organized by the Italian authorities on the occasion of the Tenth Session of the International Poplar Commission, we gave particular attention to diseases in nurseries and plantations. Our interest was due mainly to the fact that it is Italian practice to grow clones, chiefly clone 'I-214', and that clone growing has been introduced in recent years to a large number of countries in Europe and into other continents.

We visited the following sites :

- 1) Plantations of the Torviscosa farm.
- 2) Plantations at Cà Rosa, near the Tagliamento River.
- 3) Nursery at Volpares, owned by the 'Ente Nazionale per la Cellulosa e per la Carta' (National Pulp and Paper Agency).
- 4) Row plantations of the Lugugiana 'Consortium' (Landowners' Association).
- 5) Olmazzo nursery of the 'Ente Nazionale per la Cellulosa e per la Carta', near Mantua.
- 6) Plantations of the Solo farm at Moringo, and
- 7) Poplar and willow plantations belonging to the Valenza-Po Company.

Although we could not make a more detailed study of the diseases owing to the very short stops we made at these sites, we were able to see that plantations and nurseries were in a very healthy condition. We plainly saw that the poplars in these sites were free of bark necrosis, caused by Dothichiza populca and so frequent in some other European countries, and had little or no 'brown spot' disease. We noted that some slight damage had been caused by fungi, mostly to the leaves, but it did not involve any great economic loss. No lignicolous fungi were seen.

In short, the diseases and defects observed were the following :

- 1) Melampsora rust on leaves

Clones : 'I-214' and 'CB'
Age : 2-8 years

- 2) Blackish-brown leaf necrosis, probably due to a Marssonina sp.

Clones : 'I-214' and 'I-455'
Age : 2 years.

- 3) Concentric, brown, necrotic spots, due apparently to Septotinia populiperda

Clone : 'I-214'
Age : 5 years (Valenza-Po)

- 4) Brown spot disease : cause unknown

Poplar:

Clone : 'I-214' (SAICI Farm)
Age : 8-12 years

Willow : (Valenza-Po) : age unknown

Among the other diseases of leaves and the bark, we noted sooty moulds, the Alternaria and Cytospora, which occur sporadically and are of little practical importance.

To sum up, we consider that the very satisfactory condition of the poplars should be attributed not only to the general climatic and soil conditions, as well as cultivation care, but largely to the disease-resistance of the clones grown.

REPORT OF THE WORKING PARTY
ON UTILIZATION AND EXPLOITATION

6th SESSION

1. The Working Party met at FAO Headquarters in Rome on 24 September 1959 under the chairmanship of Prof. G. Giordano. The list of participants is given as Annex 8-a of the present report.

2. After approving the provisional agenda prepared by the Secretariat, the Working Party considered the various items of this Agenda.

I. RESEARCH DEALING WITH THE PHYSICAL AND MECHANICAL PROPERTIES
OF DIFFERENT CLONES

3. From an examination of the progress reports of the National Committees, it was apparent that research has been conducted particularly in Italy where very important work has been under way since 1957 on the various Italian clones. In Switzerland work is going on with regard to indigenous clones and in France the Centre Technique du Bois is continuing its program of work on poplar clones and in the study of the "serotina du Poitou".

4. The Working Party noted that the work carried out in Italy emphasizes the importance of location and growth conditions and recommended that due consideration should be given to these basis factors.

II. UTILIZATION PROBLEMS

5. The Working Party further noted that for many countries in the Near East and in southern Europe poplars often constitute the principal local source of wood, in particular for construction purposes which is of great social and economic importance to the rural population. The rural population could be called upon to cooperate directly with the consuming industries in the supply of wood which would be of benefit to both parties.

6. The Working Party then considered present uses of poplar wood. The use of such wood for particle board showed considerable increase in most of the producing countries. For fibreboard production, the use of wood residue from plywood manufacture and of unbarked round wood of very small diameters was reported in Italy and the use of poplar wood mixed with other broadleaved species in Germany. In Italy the use of poplar for the manufacture of wood wool boards has increased considerably, employing wood of small dimensions and of second quality.

7. For other uses the following trends were noted in the various countries.

In Italy, there is a strong demand for poplar wood, particularly for plywood manufacture for which even wood of very small diameters is used.

In France, because of the high price of poplar wood there is a trend towards replacing it with tropical woods for certain uses (plywood and packaging).

8. In most countries poplar wood is in good demand for the manufacture of matches, plywood, packing containers, furniture and for construction purposes. Its use for paper pulp is generally increasing.

9. It was noted that there is now an export of poplar logs from the large producing countries in Europe to the Near East and North Africa (for the manufacture of matches, plywood, and packing containers).

10. The Working Party recommended that the National Commissions present annual reports on the utilization of poplar wood specifying the volumes consumed for each type of industry and stating the trends of the market.

III. EXPLOITATION OF POPLAR STANDS

11. The Working Party noted that the introduction of rational methods of extraction and transport is easier in the case of plantations than in natural stands; it underlined the interest shown in the removal of stumps at the time of felling when this is economically feasible.

IV. STUDIES OF THE PHYSICAL AND MECHANICAL PROPERTIES OF WILLOW WOOD

12. The survey made by the Argentinian delegation not only demonstrated the importance of willow wood to that country but also its interesting properties as well.

The Working Party recommended that the various member countries study the technological properties of willow wood.

V. PROGRAMME OF WORK

13. Considering the points raised during the discussions and the documentation presented by the Italian delegation on :

- the close connection between the mechanical and the macro-technological properties of wood from one clone ;
- on the effects of the conditions of seasoning and storage of logs before use (humidity, temperature) and on the importance of micro-technical studies for determining the fundamental characteristics of wood for its rational utilization;

the Working Party included in its programme of work :

- 1) The continuation and acceleration of the studies of the various poplar clones taking into account the location and growth conditions and using as far as possible the technological test form adopted by the Working Party.

- 2) The study of the relation between mechanical and microtechnical characteristics of wood and the conditions of seasoning and storage of logs before utilization.
 - 3) Microtechnical studies of wood (structure of wood and its components and the chemical constitution and distribution of components in the cell walls in relation to the technological properties).
 - 4) The protection of poplar wood during storage (study of fungi and insects that develop during storage and methods of protecting the wood).
 - 5) The use of wood for telephonic poles (strength tests and possibilities for preservation).
 - 6) The use of all technical methods to diminish costs of exploitation and site preparation (stump removal, levelling, felling log transport); the study of stump removal at the time of exploitation by extraction or the destruction of stumps by physical or chemical means after the exploitation.
 - 7) Study of the machines used in the various countries for digging and cleaning ditches or small canals for draining easily flooded soils, as well as all other kinds of agricultural machines used in the cultivation or the transport of poplars and willows in this type of soil. All this information would then be collected and printed in a pamphlet, suitably illustrated.
14. Practical demonstrations along the lines used by the ECE/FAO Joint Committee on Forest Working Techniques would be extremely useful.

VI. DATE AND PLACE OF NEXT MEETING

15. The Working Party, because of the importance of its programme, considered it useful to hold a meeting in 1960. The Secretariat in collaboration with the Chairman was given the task of consulting the countries interested regarding the date and place of this meeting : Geneva, Nancy or a city in Southern Germany or Northern Italy were suggested as possible sites.

LIST OF PARTICIPANTS

Chairman : G. Giordano (Italy)
Vice-Chairman : H. Mayer-Wogolin (Germany)
Rapporteur : B. Quiquandon (France)
Secretary : E. Garnum (FAO)

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Messrs. O.A. Badran (UAR - Syria)
J. Chardenon (France)
P. Currò (Italy)
E. Gaillard (Switzerland)
F. Jaime Fanlo (Spain)
A. Mosseri (Italy)
A.E. Ragonaco (Argentina)
G. Scaramuzzi (Italy)
A.C. Shaw (USA)
J. de Thésut (France)

REPORT OF THE WORKING PARTY ON INSECT PESTS
1st SESSION

1. The Working Party on Poplar Insect Pests held its First Session in Venice at the Fondazione Cini on 28 September, following a plenary meeting of the 10th Session of the Commission. Most of the participants at the plenary meeting were present at this session of the Working Party.
2. After approving the Agenda prepared by the Secretariat, Mr. Régnier (France) and Mr. Vivani (Italy) were elected unanimously as Chairman and Vice-Chairman respectively. Mr. Allegri (FAO) acted as Secretary.
3. After this meeting of the Working Party, a small group composed of Messrs. Régnier, Vivani, Maksymov and Allegri met at Grado on 29 September in order to finalize the recommendations adopted in the plenary meeting. The members of the group also kept in touch with the various delegations in order to gather up the observations made during the study tour.

I. GENERAL SITUATION

4. The Chairman gave a report (Annex 9-a) on the sanitary situation and on the evolution of problems since the last meeting of the ad hoc Working Party in 1957.
5. The Working Party, on the basis of the Chairman's report and statements made during the meetings, noted with interest :
 - a) the research carried out in Yugoslavia on the destruction of Saperda populnea by means of the following insecticides :
 - 0.1% of lindane HCH in oil emulsion
 - 2.5% of DDT
 - 0.15% of parathion
 - b) the current work being undertaken at the Research Institute of Warsaw for the destruction of the larvae of Saperda carcharias with Ring Detexel (product derived from HCH and DDT, used in the amount of 0.06 litres per tree) ;
 - c) the new studies being carried out by the two sections of the "Ente Nazionale per la Cellulosa e per la Carta", the reports of which have been submitted by the Italian delegation.

II. FUTURE ACTIVITIES

6. The Working Party recommended that Member Nations who have not already done so, should answer the questionnaires on Saperda carcharias L. (Cerambycidae), Trochilium (Aegeria) apiforme L. (Sesiidae) and Phloeomyzus passerinii Signore (Thelaxidae), prepared by Mr. Régnier at the request of the Standing Executive Committee.
7. The Working Party also proposed that the information gathered from this first survey should be completed by three other surveys :
 - a) on 'Capnodes' which are of interest to the Near East and the Mediterranean Basin ; the ecological conditions and susceptible species to be indicated ;
 - b) on Cryptorrhynchus lapathi ;
 - c) on Sciapteron tabaniforme.
8. The Working Party drew the attention of the delegates to the part that Semasia (= Gypsonoma) can play in the propagation of bacterial diseases.

III. ORGANIZATION OF A SYMPOSIUM

9. The Working Party proposed to undertake in cooperation with the International Commission for Biological Control the study of bacterial diseases and viruses for the destruction of woodborers, especially Stilpnosis salicis.
10. With reference to the great woodborers, the Working Party pointed out that the difficulty lies in the collection of an adequate number of larvae for pathological observation. On the other hand it seems possible that the study of the diseases of Cryptorrhynchus could be started without delay.
11. The Working Party suggested the organization of a Symposium in Turin in the spring of 1960 for the drafting of a programme of work with specialists in these biological studies.

IV. DATE AND PLACE OF THE NEXT MEETING

12. The Working Party proposed to hold its next session in 1961 concurrently with the 11th Session of the International Poplar Commission.

POPLAR PESTS

by
R. Régnier

The International Poplar Commission set up an ad hoc Working Party on Poplar Pests which met in April 1957.

The following conclusions can be drawn from the ample review of the question made by the Working Party :

1. With regard to root borers and leaf-eating pests, research is considerably advanced and in the nursery they can easily be controlled with synthetic organic chemicals. By contrast, larvae of Stilpnotia (Leucoma) salicis which has two generations in Italy, and sawflies, are difficult and expensive to destroy owing to the large-scale control operations needed. As, however, parasites (Hymenoptera, Diptera, bacterial diseases) help to eradicate them, their chemical control is recommended only when infestation starts.

Further, it would be advisable to specify the most harmful species of Tenthredinidae (sawflies) and the types of poplars they attack. The number of generations and their harmfulness vary extremely from one country to another and from one year to the next. Their occurrence on both poplars and willows is another important factor which should be taken into account.

2. The Semasia species which attack the buds are now being studied in western Europe, but it seems essential to extend research to the biology of the different species. The Working Party noted with interest the results obtained in the control of Semasia aceriana in Italy by applying diazinon just before the buds open, and in the Netherlands by spraying with 0.1% DDT. S. incarnata, which has two generations, is now being studied in Italy.

3. The attention of member countries is drawn to the problem of the woolly poplar aphid (Phlocomyzus) whose centres of infestation in western Europe may spread still further. Ph. passorinii can heavily infest the Euramerican clones. So far, however, the insect which we find in upper Normandy has never been dangerous, though the same is not true in northern Italy. Parathion control is effective.

4. The mites (Eriophyes), seem to attack only the P. nigra group; the Euramerican clones are not touched.

5. Scale insects are abundant only in sporadic cases, and can be controlled with phosphorus ester preparations.

6. Wood-boring insects still give the most trouble to poplar growers. The Working Party has noted with much satisfaction, however, the recent progress obtained in the control of Cryptorrhynchus lapathi and Sciapteron tabaniforme in Italy. In the period when the vegetation becomes active again, the small larvae of Cryptorrhynchus under the bark of the trees can be successfully

controlled by 0.1% applications of parathion, while the Sciapteron caterpillars can be checked by blocking the galleries with an anti-larva mastic.

The control of Saperda carcharias, the large poplar longhorn beetle, and Cossus, which attack big trees, is not completely satisfactory. The use of zinc phosphide coated match-sticks raises the question of poisons, which prevents their adoption in some countries owing to the laws on use of poisons and toxic substances. It seems that they can be replaced by other less dangerous products, and experiments in this direction should be continued. Further, it has been confirmed that while the large poplar longhorn beetles and the Sesiidae attack healthy trees, Cossus infestation generally occurs when the tree trunks have been damaged by other xylophagous insects or by diseases such as canker.

Owing to the importance of the problem of wood-boring insects, it would be desirable for research workers in the nations concerned to specialize in their study and, in particular, for a technique to be perfected for breeding the large poplar longhorn beetle in the laboratory, in order to study its biology, and conduct experiments for its control.

7. The capnodes problem is of concern throughout the Mediterranean basin. The identification of the Buprestidae species likely to attack poplars should be revised, as opinions differ in this respect. The fact that an insect is occasionally found in a poplar plantation should not automatically lead one to conclude that it is harmful to poplars. Fuller information is needed on: the type of damage done, the clones attacked, and the condition of these trees when infested.

8. Greece reports damage by a scarabid Pentodon idiota in a young poplar plantation outside Salonika; the adult insect gnaws the stems and causes the death of the trees.

This exchange of views has shown the extent of the problem of poplar pests, the need for intensifying biological research as well as methodical experiments on control measures, for perfecting techniques for breeding wood-boring insects and, lastly, for increasing contacts among specialists in this field.

The extension of poplar growing and the possible further development of the Salix species raise many entomological problems which can be solved only by intensifying research and by obtaining closer international co-operation, since the experts in this field are few in number.

