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Rome, Italy, 9-11 September 1997

FAO Panel of Experts on Forest Gene Resources

Tenth session



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Report of the Tenth Session of the FAO PANEL OF EXPERTS ON FOREST GENE RESOURCES

Rome, Italy

9-11 September 1997

including Forest Genetic Resources Priorities

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ACRONYMS1

CBD Convention on Biological Diversity (Canada)

CGIAR Consultative Group on International Agricultural Research (USA)

CIFOR Centre for International Forestry Research of the CGIAR (Indonesia)

CIRAD-Forêt Centre de Coopération Internationale en Recherche Agronomique pour le

Développement (France)

CSIRO Commonwealth Scientific and Industrial Research Organization (Australia)

DFSC DANIDA Forest Seed Centre (Denmark)

FAO Food and Agriculture Organization of the United Nations (Italy)

IPGRI International Plant Genetic Resources Institute of the CGIAR (Italy)

ICRAF International Centre for Research in Agroforestry of the CGIAR (Kenya)

IPF Inter-Governmental Panel on Forests (USA)

IUCN World Conservation Union (Switzerland)

IUFRO International Union of Forestry Research Organizations (Austria)

UNCED United Nations Conference on Environment and Development

(Rio de Janeiro, Brazil 3-14 June 1992)

UNDP United Nations Development Programme (USA)

UNEP United Nations Environment Programme (Kenya)

Unesco United Nations Educational, Scientific and Cultural Organization (France)

WCMC World Conservation Monitoring Centre (U.K.)

WWF World Wide Fund for Nature (Switzerland)

Location of Headquarters is given in brackets.

SUMMARY OF RECOMMENDATIONS

The Panel:

- * recommended that increased efforts be made to help raise awareness and inform decision makers, the general public, and professionals within and outside the forestry sector, of issues related to the conservation, management, sustainable utilization and enhancement of forest genetic resources, based on sound scientific and technical understanding, and drawing special attention to potential consequences of in-action or neglect;
- ▶ recommended that FAO, in collaboration with relevant Centres of the CGIAR and other interested institutes, continue to play an active role in assisting member countries to carry out exploration, evaluation and domestication of fruit and food bearing forest trees, and help raise awareness of the important, direct role that these species play in food security and rural development.

- ▶ recommended that FAO continue to provide strong international leadership and a point of reference for the world community in the field of forest genetic resources, in which the competence of the Organization was widely recognized;
- ▶ recommended that the traditional major focus on collaboration with national institutes and the active promotion of partnerships and networks be maintained, to facilitate transfer of technologies and information, to ensure complementarity of action, and to help avoid wasteful duplication of effort;
- ▶ recommended that close cooperation be maintained at international, regional, sub-regional and ecoregional levels between FAO and other international governmental and non-governmental institutes and action frameworks; and that collaboration continue to be fostered for mutual benefit with mechanisms such as the Convention on Biological Diversity and the UN Convention to Combat Desertification;
- ▶ requested that efforts be made to sustain present levels of funding for FAO's forest genetic resources programme in order to allow activities to continue in line with recommendations by concerned Statutory and Governing Bodies;
- ▶ recommended that close linkages, at appropriate levels and using pertinent mechanisms, continue to be maintained between FAO Headquarters, its Regional and Sub-Regional Offices and FAO coordinated field programmes in forest genetic resources, and that the need for close synergy between normative and field activities be adequately reflected in the Forestry Strategy presently under preparation;
- ▶ recommended that FAO, in collaboration with international and national partners, help promote the development, adoption and implementation of sound forest genetic resources strategies as part of overall, national and regional development plans, with due consideration to the complementarity of conservation, management and enhancement of genetic resources on the one hand, and the management and sustainable utilization of forest resources on the other;
- ▶ recommended that a balance be maintained between support to forest genetic resources activities in dry and moist tropical forest ecosystems, and that due attention be given also to Mediterranean, temperate and boreal forests, taking advantage of networking and twinning opportunities, whenever possible:

- ► <u>recommended</u> that FAO and IUFRO, in collaboration with other relevant institutes, review and help revise and update existing terminology in the forest genetic resources field, concentrating initially on a core set of basic terms and concepts;
- * recommended that FAO's Forestry Department continue to keep itself closely informed about developments at national and international levels related to access to plant and forest germplasm, and to inform member countries and collaborating institutes of new developments of relevance to forest genetic resources activities;
- ▶ <u>recommended</u> that FAO and IPGRI continue to pursue the organization of workshops on the Safe Movement of Forest Germplasm, in close collaboration with other concerned national and international institutes:
- recommended that increased attention be paid to efforts to quantify costs and benefits of genetic conservation and of the management, enhancement and wise utilization of forest genetic resources; and that attention be drawn at policy and decision-making levels to potential risks and economic, social and environmental costs of neglect or mismanagement of these resources, possibly through the elaboration of case studies;
- recommended that FAO play an active role in helping to raise awareness of the place and role of new biotechnologies within overall tree improvement strategies and in dynamic *in situ* conservation and gene management programmes, with special reference to the need for balance in resource allocation between traditional and new technologies;
- ▶ requested that early attention be given to the recommendations of the Thirteenth Session of the Committee on Forestry related to the convening of regional, country-driven and action-oriented forest genetic resources workshops, to be organized in collaboration with countries and regions that wished to pursue the issue, under the overall umbrella of the Regional Forestry Commissions and with the technical and scientific guidance and support of the present Panel;
- recommended that full use be made of existing networks of institutes and experts in the regions and at international level to help ensure that relevant and scientifically sound information be available in support of the decision-making process in the regional workshops;
- recommended that in discussing forest genetic resources priorities, countries pay attention to those key elements in genetic management strategies which can be considered common to all regions, placing these within the context of prevailing ecological, social and economic needs and priorities of the regions and countries concerned;
- recommended that the know-how, experience and expertise available in countries and regions, and expertise available in IUFRO and other relevant organizations, be drawn upon in the development of a flexible, easy-to-apply, technically and scientifically sound matrix for determination of priority species and genetic resources activities, for adaptation and use as a common framework in the regional forest genetic resources workshops, taking into due consideration the format of the priority lists by region, species and activity regularly elaborated by the present Panel;

▶ recommended that development of the FAO World Wide Information System on Forest Genetic Resources, REFORGEN, be vigorously pursued, with due consideration to the need to ensure timely up-dating and verification of the information by countries concerned; and that, where possible, efforts be made to link the system directly with other related information systems for maximum benefit to users;

- * recommended that FAO in collaboration with other relevant organizations continue to inform users of existing international and regional forest genetic resources data bases and information systems, providing information on their respective characteristics and focus; and that coordination of efforts be actively pursued;
- ► <u>recommended</u> that FAO and its international partners continue to provide leadership and support to activities of the International Neem Network;
- ▶ recommended that efforts be made to generate outside support and finance for priority activities to be carried out within the framework of the proposed Mahogany Network, based on the documentation and the project document prepared for the Neotropical species of the Meliaceae following the recommendations of the Ninth Session of the Panel;
- ▶ recommended that early action within the Mahogany Network focus on coordination and support to national and regional institutes in research underlying sound conservation and utilization of mahogany genetic resources, aimed notably at increasing the knowledge of the status, variation and biology of target species, and issues related to regeneration biology, silvicultural management, and disease resistance.
- ► <u>recommended</u> that FAO help support inter-regional collaboration and linkages between the three tropical regions within the overall framework of the Mahogany Network;
- ▶ recommended that publication in English, French and Spanish of the annual newsbulletin, *Forest Genetic Resources*, be continued; and that FAO pursue its policy of publishing well-focused guides, manuals and handbooks for use by technical staff, policy makers and the general public, covering various aspects of conservation, management, collection, testing, breeding and enhancement of forest genetic resources.

FAO PANEL OF EXPERTS ON FOREST GENE RESOURCES

REPORT ON THE TENTH SESSION

Rome, Italy 9-11 September 1997

I. <u>INTRODUCTION</u>

The FAO Panel of Experts on Forest Gene Resources was established in accordance with the directives of the Fourteenth Session of the FAO Conference (November 1967), which read as follows:

- "244. Forest Tree Genetic Resources. The Conference requested the Director-General to take into account Recommendation Nº 62 of document C67/AG/FO/1 in formulating the Programme of Work and Budget 1970-71. It recognized that, as development proceeds in the less as well as in the more advanced areas of the world, the reserves of genetic variation stored in the natural forests have been or are being displaced on an increasing scale. Moreover, efforts to explore and collect forest genetic resources were, on a world scale, inadequate and inadequately concerted.
- 245. The Conference <u>requested</u> the Director-General to establish a <u>Panel of Experts on Forest Gene Resources</u> to help plan and coordinate FAO's efforts to explore, utilize and conserve the gene resources of forest trees and, in particular, help prepare a detailed short-term programme and draft long-term programme for FAO's action in this field and to provide information to Member Governments."

The Director-General established the Panel in 1968. A list of current members of the Panel is shown in Appendix 1.

The Panel held its First Session in Rome, Italy in October 1968, its Second in Macon, Georgia (USA) in March 1971, its Third in Rome (Italy) in May 1974, its Fourth in Canberra (Australia) in March 1977, its Fifth in Rome (Italy) in December 1981, its Sixth in Rome (Italy) in December 1985, its Seventh in Rome (Italy) in December 1989, its Eighth in Rome in June 1993, and its Ninth Session in Rome (Italy) in October 1995. Reports of these Sessions have been published (FAO, Rome 1969, 1972, 1974, 1977, 1984, 1988, 1990, 1994, 1996).

The Tenth Session of the Panel was held at FAO Headquarters, Rome, Italy from 9 to 11 September 1997.

Members attending the Tenth Session of the FAO Panel of Experts on Forest Gene Resources were:

Mr. S.J. Midgley (Australia) - Vice-Chairman Mr. P.Y. Kagevama (Brazil) Mr. Wang Houran (China) Mr. F. Mesén (Costa Rica) Mr. B.A. Ditlevsen (Denmark) Mr. V. Koski (Finland) Ms. H.I. Joly (France) Mr. B.N. Gupta (India) Mr. R. Morandini (Italy) Mr. D. Baskaran K. (Malaysia) Mr. F. Patiño Valera (Mexico) - Chairman Mr. R.D. Barnes (U.K.) Mr. Gene Namkoong (Canada/USA) Mr. D.P. Gwaze (Zimbabwe).

Mr. A. Issa (Burkina Faso/Mali), was unable to attend due to last-minute visa problems.

The following observers/resource persons attended the meeting:

Mr. A.S. Ouedraogo (IPGRI)²
Mr. J. Turok (IPGRI)³
Mr. T. Boyle (CIFOR)
Mr. E. Teissier du Cros (IUFRO)

Ms. Christel Palmberg-Lerche, Chief Forest Resources Development Service (FORM) acted as Secretary of the Panel, assisted by Mr. Pierre Sigaud, Forestry Officer (Forest Genetic Resources) and Mr. Christian Hansen (Associate Professional Officer, Plantation Forestry and Forest Genetic Resources), FORM. Mr. D.A. Harcharik, Assistant Director-General, Forestry Department; and Mr. H. El Lakany, Director Forest Resources Division (FORD), attended parts of the Session, further joined occasionally by colleagues from the Agriculture and Sustainable Development Departments.

The Panel unanimously re-elected Mr. Fernando Patiño Valera of Mexico Chairman, and Dr. Steven Midgley of Australia Vice-Chairman. The Agenda adopted is shown in <u>Appendix 2</u>.

A list of Secretariat Notes discussed by the Panel, is given in <u>Appendix 3</u>. In addition, each Panel member made a brief presentation and submitted information on the region or sub-region covered by him or her. Observers also made brief statements. Such information usefully supplemented the information provided in the Secretariat Notes on the present state of forest genetic resources in the world, programmes, priorities and desirable action. A presentation on the Draft Forestry Department Strategy, presented by the ADG, helped place the discussion into the overall context of FAO's work in support of priorities of Member Nations.

² Joined, during part of the meeting, by other colleagues from IPGRI, including Mr. M. Iwanaga, Deputy Director-General (Programmes), who made a statement on behalf of IPGRI during the Opening Session.

³ Coordinator of the European Forest Genetic Resources Network, EUFORGEN.

II. CONCLUSIONS AND RECOMMENDATIONS

- 1. The Panel noted the steadily increased attention which had over the past years been given to the state, functions and management options for forests and forest ecosystems in international and national debate. It further noted the increased diversity of a growing number of organizations and agencies concerned with forest-related issues. Institutions involved in decision-making, opinion-building and on-the-ground action varied greatly among them in philosophy, focus, objectives and operations. Ensuring concerted, technically and scientifically sound action in the forest genetic resources field within this overall, highly diversified scenario posed an unprecedented challenge to the forestry community in general and to forest geneticists in particular.
- 2. While there was a need to further forcefully promote overall understanding and to increase trust and coordination between sectors and among actors concerned, this situation also provided a potential for developing and making use of innovative mechanisms for collaboration and funding support. This was especially welcome at a time when priorities of many traditional partners and funding agencies were undergoing changes in emphasis and scope. The Panel stressed that new mechanisms should be considered complementary to already existing ones, and underlined the need to ensure the sustainability of such new mechanisms prior to discarding already proven ways of action.
- 3. Similarly, while institutional renewal was welcomed as a means for stimulating and reinvigorating action, the Panel stressed the need for countries to carefully consider and analyze the possible longer-term implications of changes proposed. There was a need for forest geneticists to closely monitor effects of decentralization, privatisation of forest resources and other institutional and macro-economic shifts, and to raise the awareness of national policy and decision makers of their actual or potential effects on forest genetic resources programmes which, by definition, were long-term in nature. The Panel highlighted the role that national forest action programmes and similar coordination mechanisms could play in this regard.
- 4. While, in many countries, constructive dialogue was developing between institutes focused on various sectoral issues and between e.g. Ministries of Environment and Ministries in charge of forestry development; and while there was an increasingly informed public debate at both national and international levels, much still needed to be done to increase awareness and understanding, from policy to grass-roots levels, of forest genetic resources issues and their linkages to the protection of nature and conservation on the one hand, and sustainable forest management, silviculture, plantation forestry and tree improvement on the other.
- 5. The Panel noted that the forest genetic resources community, FAO's Forestry Department, and the members of the Panel of Experts on Forest Gene Resources, individually and collectively, faced a major challenge in this regard.
- 6. The Panel <u>recommended</u> that increased efforts be made to help raise awareness and inform decision makers, the general public, and professionals within and outside the forestry sector, of issues related to the conservation, management, sustainable utilization and enhancement of forest genetic resources, based on sound scientific and technical understanding, and drawing special attention to potential consequences of in-action or neglect.

7. The Panel made special mention of the need to raise awareness of the importance of forests in the provision of environmental services, such as protection of soil and water, provision of shade and shelter; and of the role of trees and shrubs in supplying a range of "non-traditional" goods and products in addition to timber, wood and fuel, such as food, fodder and medicines.

- 8. The contribution of forests to food security was especially highlighted. The Panel stressed the need to raise awareness both of direct contributions of forests in this regard (provision of food and vitamins, and the role of forests as a provider of emergency food in times of drought and other calamities); and of indirect contributions, such as the provision of fuelwood, fodder, medicines, shade and shelter, and the generation of income and revenue.
- 9. The Panel <u>recommended</u> that FAO, in collaboration with relevant Centres of the CGIAR and other interested institutes, continue to play an active role in assisting member countries to carry out exploration, evaluation and domestication of fruit and food bearing forest trees, and help raise awareness of the important, direct role that these species play in food security and rural development.
- 10. The Panel took note of the fact that new forestry decrees and legislation, and legislation dealing with the conservation of the environment and nature had, in some countries, recently been developed concurrently. In other cases, legislation in these fields was not harmonized, and was at times contradictory. This latter situation was detrimental for all sectors concerned. Raising of awareness about complementarity of action was a first step towards harmonization of legislation and its implementation in support of sustainable development at national level.
- The Panel welcomed information on collaboration between FAO and other international, governmental and non-governmental organizations. It acknowledged the value of collaboration with national institutes and of promotion of partnerships and networking to facilitate transfer of technologies, knowhow and information, and to ensure complementarity of action and avoidance of wasteful duplication of effort in the forest genetic resources field.
- 12. The Panel <u>recommended</u> that FAO continue to provide strong international leadership and a point of reference for the world community in the field of forest genetic resources, in which the competence of the Organization was widely recognized;
- 13. The Panel <u>recommended</u> that the traditional major focus on collaboration with national institutes and the active promotion of partnerships and networks be maintained, to facilitate transfer of technologies and information, to ensure complementarity of action, and to help avoid wasteful duplication of effort
- 14. The Panel further <u>recommended</u> that close cooperation be maintained at international, regional, sub-regional and eco-regional levels between FAO and other international, governmental and non-governmental agencies, institutes and action frameworks; and that collaboration continue to be fostered, for mutual benefit, with mechanisms such as the Convention on Biological Diversity and the UN Convention to Combat Desertification.
- 15. The Panel welcomed the support to the work of FAO in the forest genetic resources field by the Thirteenth Session of the Committee on Forestry (COFO); and by the Seventh Session of the Commission on Genetic Resources for Food and Agriculture. The overall importance given by member nations to the programme was reflected in the fact that the level of resources available to it within the overall Regular Programme budget of FAO, had been maintained practically un-changed over the past years.
- 16. The Panel <u>recommended</u> that efforts be made to sustain present levels of funding for FAO's forest genetic resources programme in order to allow activities to continue in line with recommendations by concerned Statutory and Governing Bodies.

- 17. Maintaining funding levels for the normative programme of FAO in the forest genetic resources field (financed by the Regular Programme) was especially important in view of the decrease over the past years in the field programme, caused largely by factors outside of FAO's control. The Panel noted with concern the decrease in field projects coordinated by FAO in general, including projects focused on forest genetic resources and those with important forest genetic resources components.
- 18. The Panel took note of recent organizational changes in FAO and of the transfer of responsibilities for overall administration and backstopping of field projects from FAO Headquarters to the Regional and Sub-Regional Offices. The Panel highlighted the complementarity of technical work carried out as part of normative and field programme activities, and the proven mutual benefits which had been derived from closely integrating work in these two programmes in the past.

- 19. The Panel <u>recommended</u> that close linkages, at appropriate levels and using pertinent mechanisms, continue to be maintained between FAO Headquarters, its Regional and Sub-Regional Offices and FAO coordinated field programmes in forest genetic resources, and that the need for close synergy between normative and field activities be adequately reflected in the Forestry Strategy presently under preparation.
- 20. To counteract recent, decreased attention and priority by countries and donors to sectoral or more narrowly focused projects, the Panel suggested that integrated approaches be pursued more vigorously, increasingly and explicitly incorporating forest genetic resources components into overall rural and national development plans and programmes. Increased reliance on complementary support from the private sector and NGOs in project execution was likely to enhance the success and sustainability of forest genetic resources projects and programmes in many countries.
- 21. The Panel took note of recently published, up-dated information on the state of the world's forests (FAO 1997), and noted with concern the continually high levels of deforestation and degradation of forest ecosystems. The problems were most acute in the tropics, where the largest proportion of forest biological diversity was found.
- 22. The Panel noted that calls to intensify action in sustainable forest management at UNCED had resulted in world-wide efforts to define criteria for sustainable forest management and to identify corresponding indicators for monitoring of trends in sustainability. On-going work highlighted the need to sustain a range of social, economic and environmental values of forests in a balanced manner, paying due attention to the various functions of forests and forest ecosystems.
- 23. The Panel noted that the conservation of biological diversity at the levels of ecosystems, species and intra-specific variation had been identified as one of the criteria of sustainability in all of the on-going international processes. These developments afforded a possibility to strengthen conservation and genetic management within the overall framework of sustainable forest management. In this regard the Panel forcefully stressed that management of resources, in which due consideration was given to genetic aspects, was à key to conservation.
- 24. The Panel stressed the complementarity between conservation and genetic improvement on the one hand, and management and sustainable utilization of forest resources on the other. It noted that it was essential that genetic resources activities were closely integrated with on-going efforts at international and national levels aimed at the sustainable management of forests and woodlands and at increased plantation establishment.

- 25. The Panel <u>recommended</u> that FAO, in collaboration with international and national partners, help promote the development, adoption and implementation of sound forest genetic resources strategies as part of overall, national and regional development plans, with due consideration to the complementarity of conservation, management and enhancement of genetic resources on the one hand, and the management and sustainable utilization of forest resources on the other.
- 26. In this regard, the Panel <u>recommended</u> that a balance be maintained between support to forest genetic resources activities in dry and moist tropical forest ecosystems, and that due attention be given also to Mediterranean, temperate and boreal forests, taking advantage of networking and twinning opportunities, whenever possible.
- 27. The Panel stressed the importance of conserving not only ecosystems, species and genetic variation, but also information on traditional systems of management. The use of *Acacia* seeds as a source of food among local communities was mentioned as an example of such uses. The Panel noted that Australia is presently promoting exchange of community level information on such use between Australia and Dry-Zone African countries.
- 28. The Panel noted recent research work, *i.a.* work coordinated by IPGRI and CIFOR, on various aspects of effects of human impacts on genetic resources and forest biological diversity. It stressed the need to further pursue these and other studies which would contribute to the overall understanding of ecosystem functions, species and genetic diversity, and of processes underpinning the maintenance of variation at different levels.
- 29. The Panel drew the attention to the need to agree on basic concepts and to streamline terminology in the forest genetic resources field to facilitate international dialogue and understanding within and among professional and popular groups. It recommended that FAO and IUFRO, in collaboration with other relevant institutes, review and help revise and update existing terminology in the forest genetic resources field, concentrating initially on a core set of basic terms and concepts.
- 30. In regard to ownership and access to genetic resources, the Panel noted that debate on the issue had matured over the past years, and that it was presently more factual and better informed than had been the case at the time of the previous, Ninth Session of the Panel in 1995. Attention was drawn to on-going work in Australia and New Zealand, where reviews of policies of access to forest genetic resources had been explicitly discussed in connection with the debate on access to plant genetic resources in general. The preliminary outcome of the discussions in these countries had forcefully stressed that there were advantages, as well as some drawbacks, in allowing free, unregulated access.
- 31. The Panel noted that preliminary discussions on access had taken place also in a number of other countries, including Brazil, India, Malaysia, Papua New Guinea, resulting in a number of new rules and regulations in this regard.
- 32. While, at the present time, access to small quantities of germplasm for traditional forestry research remained largely unimpeded, restrictions were in some cases being placed on access to genetic resources used as pharmaceuticals and in horticulture. It was noted that the issue of access was linked patents and patenting, presently under discussion in many countries.

- 33. The Panel <u>recommended</u> that FAO's Forestry Department continue to keep itself closely informed about developments at national and international levels related to access to plant and forest germplasm, and to inform member countries and collaborating institutes of new developments of relevance to forest genetic resources activities.
- Regarding safe movement of forest germplasm from a forest health point of view, the Panel noted that relatively large quantities of forest tree seed were exported from countries like Australia; the issue of germplasm health was an important issue for both exporter and importer.
- 35. The Panel <u>recommended</u> that FAO and IPGRI continue to pursue the organization of workshops on the *Safe Movement of Forest Germplasm*, in close collaboration with other concerned national and international institutes. It stressed the need to ensure the wide dissemination of the *Technical Guidelines* which these Workshops produced (to date published on eucalypt and pine germplasm, planned for *Acacia* germplasm, 1998).
- 36. The Panel noted a recently finalized revision of the OECD Scheme on Forest Reproductive Materials Moving in International Trade.
- 37. The Panel noted that the Economic and Social Department of FAO was working on the quantification of the economic value of genetic resources for food and agriculture, and that the Forestry Department was planning to collaborate more actively in this work in the future. It took note of the FAO/DFSC documentation on *in situ* and *ex situ* conservation of forest genetic resources presently *in press* which would, to some degree, address the issue of costs and benefits of conservation. The Panel stressed the need to widely disseminate available information on the subject through refereed and technically credible journals and through other channels, placing the issue of economics within a larger context of social, ecological, aesthetic, ethical and spiritual values provided by forest ecosystems and the resources they housed.
- 38. The Panel <u>recommended</u> that increased attention be paid to efforts to quantify costs and benefits of genetic conservation and of the management, enhancement and wise utilization of forest genetic resources; and that attention be drawn at policy and decision-making levels to potential risks and economic, social and environmental costs of neglect or mismanagement of these resources, possibly through the elaboration of case studies.
- 39. The Panel recognized that the most secure route to conservation of a species was its sustainable use. It emphasized the importance of developing and implementing forest management and tree breeding strategies which incorporated provisions for conservation of genetic resources and which helped maintain a broad genetic base in target species. Information on available, flexible approaches such as the multiple breeding population strategy, needed to be further disseminated and their use promoted.
- 40. The Panel discussed developments in the application of biotechnologies in forest tree improvement and the potential of new developments in this rapidly advancing field. While acknowledging that biotechnologies placed in the hands of the breeder new and powerful tools which could have major, beneficial impacts, it noted the need to balance the allocation of resources for research underpinning tree improvement and classical tree breeding on the one hand, and for new biotechnologies on the other. The former included, notably, botanical and genecological exploration; research on breeding systems, variation and variation patterns, and processes maintaining and enhancing genetic variation; and the collection and exchange of seed and other reproductive materials followed by systematic field testing and evaluation at the levels of provenance and progeny.

- The Panel stressed that the application of new biotechnologies was a tool which had to be used within the framework of already on-going genetic improvement programmes, rather than implying a switch of effort away from classical tree breeding measures. It was noted that meaningful results for practical application, regardless of methods used, required adequate field testing, and that tree improvement and breeding therefore always implied a continuing and long-term commitment. The Panel warned that temporary or more permanent cut-backs in resources for established tree improvement programmes would jeopardize benefits which would accrue from earlier investments.
- The Panel <u>recommended</u> that FAO play an active role in helping to raise awareness of the place and role of new biotechnologies within overall tree improvement strategies and in dynamic *in situ* conservation and gene management programmes, with special reference to the need for balance in resource allocation between traditional and new technologies.

- 43. The Panel noted that the Fourth Technical Conference on the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture (Leipzig, June 1996) had adopted a costed, global plan of action which excluded forest genetic resources. The Leipzig Plan of Action, in its introduction, stated that the need for action in the forest genetic resources field should be reviewed in the light of the outcome of the work of the Inter-Governmental Panel on Forests of the Commission on Sustainable Development (IPF). The IPF did not discuss this issue in any of its four sessions.
- 44. The issue of forest genetic resources had been included as a substantial issue for discussion at the Thirteenth Session of the Committee on Forestry, COFO (March 1997). The Panel noted that COFO had recommended that "FAO, in conjunction with Regional Forestry Commissions and countries that requested it, could convene regional and sub-regional forest genetic resources workshops".
- The Panel noted that action was to be pursued in a step-by-step manner. Regional proposals were to be defined building on national priorities and programmes. Regional responsibilities for coordination and follow-up action would be decided upon by countries concerned based on national capacities and wishes to take the lead in given areas of work, or in given species-based activities.
- 46. The Panel welcomed early steps taken by FAO to seek funding for the planned workshops, and noted that contacts had been established with a number of international and bilateral agencies for support and collaboration in follow-up to the above recommendation, including IPGRI and ICRAF.
- The Panel <u>requested</u> that early attention be given to the recommendations of the Thirteenth Session of the Committee on Forestry related to the convening of regional, country-driven and action-oriented forest genetic resources workshops, to be organized in collaboration with countries and regions that wished to pursue the issue, under the overall umbrella of the Regional Forestry Commissions and with the technical and scientific guidance and support of the present Panel.
- 48. The Panel recalled that a number of forest genetic resources workshops had been held in 1995 in preparation for the Leipzig Conference, including those covering boreal forests; temperate North America; and Europe. In addition, a number of countries had organized forest genetic resources workshops at the national level, aimed at developing participatory, scientifically and technically sound and economically feasible national forest genetic resources programmes.

- 49. The Panel <u>recommended</u> that full use be made of existing networks of institutes and experts in the regions and at international level to help ensure that relevant and scientifically sound information be available in support of the decision-making process in the forthcoming regional and sub-regional forest genetic resources workshops.
- 50. The Panel recognized that action plans for the management of genetic resources would differ between countries and between regions according to the biological characteristics of target species and that these would need to be further adjusted in accordance with prevailing social, economic and environmental conditions, national priorities and institutional capacities of countries concerned. This being the case, the Panel however noted that there was a need to harmonize overall approaches and to agree on mechanisms for priority-setting between the various regions, to facilitate international dialogue and understanding.

- The Panel <u>recommended</u> that in discussing forest genetic resources priorities, countries pay attention to those key elements in genetic management strategies which can be considered common to all regions, placing these within the context of prevailing ecological, social and economic needs and priorities of the regions and countries concerned;
- 52. The Panel <u>recommended</u> that the know-how, experience and expertise available in countries and regions, and expertise available in IUFRO and other relevant organizations, be drawn upon in the development of a flexible, easy-to-apply, technically and scientifically sound matrix for determination of priority species and genetic resources activities, for adaptation and use as a common framework in the regional forest genetic resources workshops, taking into due consideration the format of the priority lists by region, species and activity regularly elaborated by the present Panel.
- 53. The Panel noted that the outcome of the regional and sub-regional workshops could, if countries so wished, be used for the elaboration of a country-driven, action-oriented global framework, established in support of the conservation and sustainable utilization of forest genetic resources.
- Noting that activities related to the forest genetic resources workshops implied substantial additional work at the level of the Secretariat at FAO, the Panel suggested that provision for an overall coordinator be made in the requests for external funding to the workshops. In addition to overall coordination, a coordinator could assist countries concerned in the elaboration of requests for outside funding for the implementation of specific components of the regional action plans to be elaborated at the workshops.
- 55. The Panel welcomed the recommendation of COFO that action in this regard "should proceed within the overall framework of the FAO Commission on Genetic Resources for Food and Agriculture, and with the technical and scientific advice of the Panel of Experts on Forest Gene Resources".
- 56. In discussions on technical and scientific support to the workshops, it was suggested that IUFRO might establish a Task Force to further help strengthen the scientific basis for their work. Such a Task Force could, conceivably, assist in the development of a matrix for defining species priorities by country and region; in reviews of mechanisms and processes underlying the maintenance of genetic diversity; in efforts to quantify economic consequences of neglect in the management of forest genetic resources; and in the definition of optional conservation and genetic management strategies for defined groups of species.

- 57. The Panel welcomed information on a planned IUFRO/FAO World Consultation on Forest Tree Breeding, tentatively scheduled to be held in August 1998 in China. It noted that this Consultation would dedicate one session to discussions on the planned regional forest genetic resources workshops and to discussing the role which existing national, regional and international institutes, organizations and mechanisms could play in promoting action to ensure success in this undertaking.
- 58. The Panel expressed it satisfaction with advances made in the development of the *World Wide Information System on Forest Genetic Resources*, REFORGEN. It appreciated the efforts made by FAO over the past years to make the system complementary to other, existing or incipient, related data base systems, such as that of the World Conservation Monitoring Centre (Cambridge, UK) and the TREESOURCE data base of IPGRI.
- 59. The Panel stressed that regular updating of information was crucial to ensure reliability and usefulness of a data base system. In this regard it was it noted that user-friendly electronic mechanisms were becoming available which could, in the future, facilitate the process of direct updating of data.
- 60. The Panel <u>recommended</u> that development of REFORGEN be vigorously pursued, with due consideration to the need to ensure timely up-dating and verification of the information by countries concerned; and that, where possible, efforts be made to link the system directly with related information systems for maximum benefit to users.
- 61. The Panel <u>recommended</u> that FAO in collaboration with other relevant organizations continue to inform users of existing international and regional forest genetic resources data bases and information systems, providing information on their respective characteristics and focus; and that coordination of efforts be actively promoted.
- 62. The Panel commended the advances made within the framework of the *International Neem Network*, coordinated at international level by FAO, in which also IPGRI, DFSC and Cirad-Forêts collaborated. It noted that action had greatly benefited from collaboration between FAO Headquarters and FAO coordinated field programmes such as FAO project RAS/91/004, "*Improved Productivity of Man-Made Forests trough Tree Breeding*" (FORTIP); and that it provided a good example of a case in which the benefits of such collaboration greatly superseded the sum-total of inputs. Noting that national institutes in 22 developing countries presently collaborated in network activities.
- 63. The Panel <u>recommended</u> that FAO and its international partners continue to provide leadership and support to activities of the International Neem Network.
- 64. The Panel noted with appreciation advances made towards the establishment of a *Mahogany Network in the Neotropics*, including the publication of a series of papers and documents on status of the resources, on-going programmes in the region and outside of it, and proposals for coordinated action in the conservation, sustainable utilization and enhancement of mahogany genetic resources in Latin America.
- 65. The Panel <u>recommended</u> that efforts be made to generate outside support and finance for priority activities to be carried out within the framework of the proposed *Mahogany Network*, based on the documentation and the project document prepared for the Neotropical species of the Meliaceae following the recommendations of the Ninth Session of the Panel.

- 66. The Panel further <u>recommended</u> that early action within the <u>Mahogany Network</u> focus on coordination and support to national and regional institutes in research underlying sound conservation and utilization of mahogany genetic resources, aimed notably at increasing the knowledge of the status, variation and biology of target species, and issues related to regeneration biology, silvicultural management, and disease resistance.
- 67. The Panel emphasized that species of the genus Meliaceae were of high priority also in other tropical regions, including Asia, the Pacific and Africa, in which both native mahoganies and mahogany species of the main, neotropical genera were widely used in plantation establishment. It noted that countries in these regions often independently grappled with similar problems related to the conservation, sustainable management, enhancement and use of genetic resources of these species, and that coordination of research efforts would be of benefit.
- 68. The Panel <u>recommended</u> that FAO help support inter-regional collaboration and linkages between the three tropical regions within the overall framework of the Mahogany Network.
- The Panel was informed of emerging genetic resources networks for sandalwood, already flagged as a priority species during its Ninth Session. Activities were underway in countries in Australia and the Pacific (Vanuatu, Tonga, Fiji, W. Samoa; networking supported by Australia); in New Caledonia (supported by Cirad-Forêts, France); and in India (supported by ICFRE, Dehra Dun, India; the University of Agricultural Sciences, Bangalore, India; the University of Massachusetts, USA; and IPGRI). The Panel expressed its support, in principle, to the continuation, expansion, and inter-linking of related activities.

- 70. The Panel acknowledged the usefulness of FAO technical documents and publications in the forest genetic resources field; these documents, usually available in several languages, were widely used both in support of practical field work and in University and vocational level teaching.
- 71. The Panel stressed the need for rapid publication of the step-by-step Guide to the *in situ* Conservation of Forest Genetic Resources (FAO/IPGRI/DFSC/CIFOR/IUFRO), presently being finalized; and of the need to pursue the work of FAO and DFSC in documenting experiences and drawing up guidelines for action in the *in situ* and *ex situ* conservation of forest genetic resources presently underway based on work in these fields started already in the 1970s.
- 72. The Panel commended the annual newsbulletin, *Forest Genetic Resources*, which was considered a useful means of communication and dissemination of information; it noted that the bulletin was widely used within and outside of the forest genetic resources community.
- 73. The Panel <u>recommended</u> that publication in English, French and Spanish of the annual newsbulletin, *Forest Genetic Resources*, be continued; and that FAO pursue its policy of publishing well-focused guides, manuals and handbooks for use by technical staff, policy makers and the general public, covering various aspects of conservation, management, collection, testing, breeding and enhancement of forest genetic resources.

- 74. In reviewing the priority lists regularly up-dated by the Panel, it was noted that these should be focused on a limited number of species of actual or potential socio-economic value, rather than being all-inclusive lists of species in need of attention. The Panel further noted that these lists were not meant to be a substitute for national and local lists of priority species and/or species in need of attention at these, latter levels; on the contrary, it was hoped that the lists elaborated by the Panel would help catalyze the preparation of more detailed local/national lists. The Panel lists were also no substitute for more narrowly sectoral lists, and should be seen as complementing *e.g.* the lists of agroforestry species under preparation under the overall coordination of ICRAF.
- 75. While fully recognizing the need for increased attention to so-called "minor" species and species of local value, it was noted that the Forest Gene Panel lists concentrated on species of regional or eco-regional interest, which could most tangibly benefit from international support and attention.

APPENDIX 1.

Membership of the

Panel of Experts on Forest Gene Resources

Period 1 July 1997 - 30 June 2000

Composition du

Groupe d'experts des ressourcs génétiques forestières

Période I^{et} juillet 1997 - 30 juin 2000

Composición del

Cuadro de Expertos en Recursos Genéticos Forestales

Período 1 de julio de 1997 - 30 de junio de 2000

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APPENDIX 2.

FAO PANEL OF EXPERTS ON FOREST GENE RESOURCES Tenth Session

Rome, Italy 9-11 September 1997 Ethiopia Room (C-285)

<u>AGENDA</u>

- 1. Opening of the Meeting
- 2. Election of Chairman and Vice-Chairman
- 3. Adoption of the Agenda
- 4. Progress since the 9th Session of the Panel (October 1995):
 - (i) Brief statement by individual members (regional/sub-regional issues)
 - (ii) FAO Regular Programme
 - (iii) FAO Field Programme activities in forest genetic resources
- 5. Work of the FAO Commission on Genetic Resources for Food and Agriculture: Implementation of the broadening of the mandate of the Commission
- 6. Towards a coherent framework for the conservation and sustainable utilization of forest genetic resources
- 7. REFORGEN: The FAO world-wide information system on forest genetic resources
- 8. Discussion of Priorities for Future Action:
 - (i) Species priorities
 - (ii) Priority operations/activities
- 9. Proposals for FAO Regular Programme Activities:
 - (i) Short-term
 - (ii) Medium and long-term
- 10. Miscellaneous and Other Business
- 11. Next Session of the Panel
- 12. Closing of the Meeting

LIST OF SECRETARIAT NOTES

AGENDA ITEM	SECR. NOTE Nº	TITLE	LANGUAGES
*	FORGEN/97/Inf. 1	List of Secretariat Notes	E,F,S
1	FORGEN/97/Inf. 2	List of Documents Distributed at Meeting	E,F,S
			Triling.
	FORGEN/97/2A	List of Panel Members	Triling.
	FORGEN/97/2B	List of Participants	immg.
2			nre
3	FORGEN/97/1A	Tentative Agenda	E,F,S
	FORGEN/97/1B	Provisional Timetable	E,F,S
4(i)	=		
4(ii)	FORGEN/97/3	Follow-up to Recommendations of the Ninth Session of the Panel	E,F,S
	FORGEN/97/4A	FAO Regular Programme Activities in Forest Genetic Resources 1995-1997	E,F,S
	FORGEN/97/4B	Financial Contributions in Forest Genetic Resources: non-staff resources. FAO's Regular Programme (RP) (Sub-programme 2412)	E*
4(iii)	FORGEN/97/5	FAO Field Programme in Forest Genetic Resources	E*
5	FORGEN/97/6	Work of the FAO Commission on Genetic Resources for Food and Agriculture: Implementation of the broadening of the mandate of the Commission	E*
6	FORGEN/97/7	Towards a coherent global framework for the conservation and sustainable utilization of forest genetic resources	E*
7	FORGEN/97/8	REFORGEN: The FAO world-wide information system on forest genetic resources	E*
8	••	Appendices 6 and 7: Forest Genetic Resources Priorities (by region, species and operation): 9th Session of the Panel (for up-dating)	E,F,S
9-12			

^{*} Summaries available in French and Spanish.

FOLLOW-UP TO RECOMMENDATIONS OF THE NINTH SESSION OF THE PANEL

This note summarizes the main recommendations addressed to FAO by the Ninth Session of the Panel of Experts on Forest Gene Resources in October 1995 and action taken in response to these recommendations (1995-1997).

The Panel:

1. Recommended that the distinctive nature of work in the forest genetic resources field, which required specialized technical and scientific knowledge, continue to be reflected in the work programme of FAO; and that the increased demands for support to global action and expansion in scope of activities, be acknowledged and adequately catered for.

Recognizing the distinctive nature of strategies and methodologies in the conservation and sustainable utilization of genetic resources of woody perennials and forest genetic resources, the 13th Session of FAO's Committee on Forestry; and the 7th Session of the Commission on Genetic Resources for Food and Agriculture (CGRFA), recommended that the FAO Panel of Experts on Forest Gene Resources continue to provide technical and scientific advice in this field, including advice to the CGRFA. While establishment of an inter-governmental technical sectoral working group in forest genetic resources under the Commission was considered premature at the present time by some delegations, other delegations suggested that FAO "review the institutional options and Terms of Reference of a possible inter-governmental technical working group on forest genetic resources, if established". While such a WG would help underline the need for specialized technical and scientific know-how in the forest genetic resources field, it should be noted that there is, to date, no agreement on the general type of mandate these sectoral WGs should have, nor on timing of their establishment.

The distinctive nature of forest genetic resources activities have been recognized in discussions regarding the new functions of the Commission on Genetic Resources for Food and Agriculture⁴. It has been forcefully stressed, at top level that, in the event of moving the Secretariat of the expanded Commission from the Plant Production and Protection Division of the Agriculture Department, to the Department of Sustainable Development, the Forestry, Fisheries and Agriculture Departments "should retain full responsibilities for genetic resources in their respective fields".

While there has been an upsurge of manifested needs and activities in the fields of biological diversity and genetic conservation following the UNCED Conference in Rio in 1992, and while the scope of the technical work and its linkages with other fields of development have expanded greatly, available man-power and financial resources have been maintained at a *de facto* zero-growth level (see Secretariat Note FORGEN/97/4B). The scarcity of funds and manpower resources have also manifested themselves strongly in relation to the increased need and strong calls for collaboration and coordination among agencies and institutes at all levels, requiring considerable time, energy and resources.

⁴ The 28th Session of the FAO Conference (October 1995) decided to broaden the mandate of the commission on Plant Genetic Resources to cover all aspects of genetic resources of relevance to food and agriculture (including not only crop and forest genetic resources, but also domestic animal genetic resources and fish genetic resources).

2. <u>Recommended</u> that FAO continue to provide strong international leadership and a point of reference for the world community in the field of forest genetic resources, in which the competence of the Organization was commonly recognized.

See Secretariat Notes FORGEN/97/4A; and FORGEN/97/5 for an account of activities undertaken. While the level of Regular Programme, "normative" activities have been maintained at , the same levels as earlier, the field programme component has seen an unfortunate downward trend over the past two years. While the effects of this are not yet seriously felt, the potential future lack of two-way dialogue and collaboration with, and through, field projects could have considerable, negative effects in the longer term, unless compensated by other mechanisms.

3. <u>Recommended</u> that the collegial relations, mutual esteem and widespread goodwill which existed at all levels in the generally closely-knit forest genetic resources community, be fostered and drawn upon for the benefit of sustainable forestry development, worldwide.

See Section III (iii) of Secretariat Note FORGEN/97/4A. FAO's direct involvement in work of national institutes; and collaboration with international partners, such as Centres of the Consultative Group on International Agricultural Research (CGIAR), IUFRO and the Secretariat of the Convention on Biological Diversity, in the promotion, establishment and management of networks, in publication of guides and handbooks, and in the organization of meetings and workshops (including notably assistance to the Government of Turkey in the Organization of the 11th World Forestry Congress in Turkey in October 1997), and its collaboration with high-level bodies such as the UN Commission on Sustainable Development and the Inter-Governmental Panel on Forests, have helped promote and foster contacts and understanding between professionals in the forestry and related fields.

4. Recommended that FAO, supported by the global forest genetic resources community, help ensure that technically and scientifically solid information on genetic conservation aspects was made available to fora in which decisions were made on criteria and indicators for sustainable forest management and on variables to be assessed in national, regional and global resource surveys.

FAO's Forestry Department, and more specifically the Forest Resources Development Service, which also is in charge of forest genetic resources activities, has been closely involved in all six post-UNCED international processes aimed at the development of criteria and indicators for sustainable forest management. These include: (i) The Helsinki (the Pan-European) process, dealing with European forests; (ii) the Montreal process, dealing with temperate and boreal forests outside of Europe; (iii) the Tarapoto process, dealing with forests of the Amazon Basin; (iv) the FAO/UNEP coordinated Dry-Zone Africa process, dealing with dry-zone formations in sub-Saharan Africa; (v) the FAO/UNEP coordinated Near East process, dealing with dry-zone formations in the Near East; and (vi) the FAO/CCAD Central American process of Lepaterique, dealing with forests in the seven member countries of the Central American Commission for Environment and Development. In each of these processes, the maintenance and sustainable use of biological diversity is one of the criteria which define sustainable forest management, or (in one case) have been strongly emphasised as an essential component of one of the criteria identified.

In addition to direct and continuing involvement in the above processes, FAO co-sponsored the Inter-Governmental Seminar on Criteria and Indicators for Sustainable Forest Management (ISCI), organized by the Government of Finland in August 1996; and has over the past years prepared all background and Secretariat Notes on the subject for the Secretariat of the Inter-Governmental Panel on Forests, which included this item on its work programme.

FAO/FOR has kept itself informed, and provided support as/when requested, to attempts of CIFOR; and the Secretariat of the Convention on Biological Diversity, in their efforts to review, in more detail, indicators which could be used to define and monitor the criterion of biological diversity.

FAO's Forestry Department, and more specifically the Forest Resources Development Service, which also is in charge of forest genetic resources activities and issues, is presently preparing for the development and publication of "the Global Forest Resources Assessment 2000". Projected figures, with a baseline of 1995, were published in March 1997 in the document, "The State of the World's Forests".

In the new round of forest resources assessments FAO has been requested, in a number of international fora, to pay added attention to qualitative information, such as conservation of biological diversity in forests managed for productive or protective purposes. The bottleneck here is, without doubt, the lack of country-level information for aggregation at international level, and the need to analyse the soundness and usefulness of such aggregation.

In relation to the issue of biological diversity, contacts and contractual arrangements have been made by FAO with *i.a.* the World Conservation Monitoring Centre in Cambridge, U.K., which will help FAO in some special studies in this regard. These will include: the generation of maps of protected areas in the world, their category and area content of forests or other wooded land (this latter information is presently not available for any region in the world); changes in protection status of forests over time, and relationship between protected status and quality and condition of forests; the organization of workshops aimed at reaching agreement among the major international actors in this field on the delineation of eco-floristic zones; the development of a global land cover and an eco-floristic map of the world; analysis of the concerns of the international community over the issue of "naturalness", and advice on possibilities to address such concerns in a global context.

5. <u>Recommended</u> that FAO assist countries to develop or further strengthen national strategies and action plans for the conservation, development and sustainable use of forest genetic resources.

National Forestry Action Programmes (NFAPs) are increasingly acknowledged by countries and international agencies and donors, as a mechanism which can provide a good, holistic framework for national planning. The aim of NFAPs, within the framework of FAO's activities in this regard, is to help countries that request assistance establish a workable social and political framework for forest conservation, management and sustainable development. Policy statements, strategies, programmes and action plans, are measurable milestones of the NFAPs. The role and further development of NFAPs was included in the work programme of the Inter-Governmental Panel on Forests. FAO prepared the Secretariat notes discussed by the Panel in this regard.

National strategies and plans for the conservation, development and sustainable use of forest genetic resources will need to be a part of such overall planning and programming. Early linkages in this regard are presently being forged and pursued.

6. Recommended that FAO, in collaboration with its national and international partners, and with the active assistance of members of the present Panel, help raise awareness in member countries of the need to ensure the presence at the Fourth International Technical Conference on Plant Genetic Resources of country delegations covering, or aware of, forest genetic resource considerations and priorities, and aware of the contributions that the forestry sector can, and should, make to overall development of nations.

At the extra-ordinary session of the FAO Commission on Genetic Resources for Food and Agriculture, held in Rome in May 1996 in preparation of the Leipzig Conference, countries recommended that forest genetic resources not be included in the Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture to be discussed in Leipzig.

The presence of a number of forestry colleagues in the Leipzig Conference itself contributed to the fact that the Conference recognized the importance of forest genetic resources and that it, in principle, endorsed the statement of the Commission meeting mentioned above that "[a global plan of action for forest genetic resources] could be considered in the future, in the light of the work of the Inter-Governmental Panel on Forests...".

The IPF did not discuss forest genetic resources. FAO, therefore, placed the issue on the agenda of the 13th Session of COFO (see Secretariat Note FORGEN/97/7).

7. <u>Recommended</u> that, following the Fourth International Technical Conference on Plant Genetic Resources, FAO help convene workshops to discuss tropical and sub-tropical forest genetic resources programmes and priorities, on the same lines as those held, or planned to be held, in 1995 for boreal and temperate zones and for European forest genetic resources.

Arrangements are being made in this regard, following discussions at the 13th Session of the Committee on Forestry held in Rome in March 1997. See Secretariat Note FORGEN/97/4A (Appendix 1) and FORGEN/97/7.

8. Recommended that support continue to be given, in a balanced manner, to forest genetic resources activities in the humid tropics, the dry tropics and the sub-tropics, and that exchange of information and genetic materials among and between these zones, as applicable, be vigorously promoted.

See Secretariat Notes FORGEN/97/4A and FORGEN/97/4B. Main focus of activities over the past two years has been on the *Azadirachta indica* network, which involves countries in three tropical regions (Asia, Africa, Latin America/Caribbean); and on preparations for the development of a *Swietenia* genetic resources network in the Neotropics. In addition, the countries collaborating within the framework of existing networks dealing with various aspects of conservation, use and enhancement of *Quercus suber* (*Silva Mediterranea*, EUFORGEN), have received some support. Support has also been given to genetic resources activities carried out in developing countries within the framework of the International Poplar Commission. Finally, activities aimed at reporting and drawing recommendations from the *Acacia/Prosopis* dry-zone genetic resources activities, started in the 1980s, are under way in collaboration with the DANIDA Forest Seed Centre.

9. <u>Recommended</u> that FAO help support networking and twinning among and between developed and developing country institutions, and actively further the sharing and transfer of experiences, technologies and know-how.

See Secretariat Notes FORGEN/97/4A, FORGEN/97/4B and FORGEN/97/5; and point (8) above.

10. Requested that the importance of the role played by international agencies and by mechanisms operating under the auspices of these agencies, such as the FAO Panel of Experts on Forest Gene Resources, in buffering against negative effects caused by institutional instability or turmoil in individual countries, and in providing an "early warning system" and an element of continuity over time, be fully recognized by decision makers in the international agencies concerned.

The importance of continuity of resources and funding, and consequently of action, has been systematically stressed by FAO in all international fora, including political ones like the CSD and the IPF; and technical and scientific ones, such as IUFRO. The need for capacity building and for attracting good staff as a cornerstone for development has also been the basic message in discussions with countries and national institutes.

In a few cases, e.g. in the case of the Poplar Institute at Casale Monferrato, Italy, FAO has intervened directly by expressing the great concern of the Organization over the planned abolishment of a long-standing and solid institution, which is thought to have also potential international repercussions.

11. Recommended, in particular, that the below activities receive continued and increased attention.

See Secretariat Note FORGEN/97/4A for overall programmes and progress.

(i) Further development and documentation of methodologies and pilot activities in the *in situ* conservation of forest genetic resources, harmonized with sustainable forest management and wise use of the resources to meet present-day and future needs. Support to studies on *ex situ* conservation methods, as complements to *in situ* conservation.

Development of a "Step-by-step Guide to *In Situ* Conservation of Forest Genetic Resources"; and a "risk assessment framework" related to potential loss of genetic diversity and forest genetic resources as consequences of deforestation and forest degradation (expected to be finalized within 1997). In collaboration with DFSC and national institutes in a number of countries, activities are under way to review and analyze experiences with *in situ* and *ex situ* conservation of forest genetic resources.

Modest support has been provided to institutes in Brazil and Peru for research underpinning conservation; and pilot studies in *in situ* conservation of forest genetic resources.

(ii) Facilitation of exchange of forest reproductive materials, under mutually agreeable terms, for evaluation and conservation purposes:

Resources have been, to a large extent, pooled and activities have been carried out within the framework of species networks mentioned in point (8) above.

(iii) International coordination, and the provision of up-to-date information on the state of forest genetic resources, notably through continued development and regular up-dating of the FAO's Global Information System on Forest Genetic Resources;

Major efforts have been made over the past two years in software development, and in the inputting of country-derived information into the REFORGEN system. Despatch of available information to countries for verification and up-dating has been started.

In collaboration with CIRAD-Forêt, France a database system for seed stock management has been developed and distributed to a number of countries (GESSEM: Logiciel de gestion d'un stock de semences forestières et agro-forestières). It is planned to develop an English version of the system as well.

(iv) Raising of awareness through the dissemination of information by traditional and electronic means, focused on different levels of readership and a range of target audiences;

A number of papers for technical and scientific meetings have been prepared, presented and widely disseminated, in addition to regular publications (see 11(i) above, Secretariat Note FORGEN/97/4A, and list of publications and documents on forest genetic resources available to Panel Members).

The annual bulletin, "Forest Genetic Resources", and other relevant information, have recently been placed on the Internet. Action in this regard has been further supported by the development of a FAO Home Page on forest genetic resources:

http://www.fao.org/waicent/faoinfo/forestry/fogenres/homepage/content.htm

(v) Collaboration in international efforts to quantify the value of forest genetic resources and of conserving and developing such resources for their sustainable use.

No action taken due to lack of resources.

12. <u>Recommended</u> that FAO continue to coordinate activities within the framework of the "International Neem Network".

See point (8) above. The International Neem Network has been one of the major points of concentration of resources over the past two years. Main activities of the network in recent years are summarized in FORGEN/97/4A.

13. Recommended that FAO take steps to catalyze further action and to coordinate already ongoing work in the conservation and sustainable use of mahogany species, initially focusing attention on species of neotropical genera of the Meliaceae. Activities should, in subsequent phases of the work, be expanded to cover also the Asia-Pacific and the African regions.

See point (8) above. In addition to the International Neem Network, development of activities in the conservation and sustainable utilization of *Swietenia* and *Cedrela* genetic resources has been among the top priorities over the past two years.

FINANCIAL CONTRIBUTIONS IN FOREST GENETIC RESOURCES: NON-STAFF RESOURCES. FAO'S REGULAR PROGRAMME (RP) (SUB-PROGRAMME 2412)

The attached tables show RP expenditure in the forest genetic resources field in 1996 and 1997. Information on RP expenditure in previous years was published in Appendix 4 of the Report of the 9th Session of the Panel.

The figures include:

- (i) Collaboration with national institutes, through **direct financial support** to exploration and to seed collection, despatch; *in situ* and *ex situ* conservation; and establishment and evaluation of field trials;
- (ii) Expenditure for consultancies; or contractual services in support of specific studies related to forest genetic resources;
- (iii) Expenditure for the dissemination of information;
- (iv) Meeting costs and expenditure related to fellowships.

A summary sheet is also provided, showing sub-totals for the above items.

The tables contain details on expenditures which bear direct relation to the work and the recommendations of the FAO Panel of Experts on Forest Gene Resources. They do not include staff time and related travel; nor funding related to the FAO Field Programme, administrated by the TCO5 (the former Forestry Operations Service) and technically backstopped by the technical divisions of the Forestry Department.

RP expenditure for staff time for the biennium 1996/97 included one P4 Forestry Officer (Post occupied by Mr. O. Souvannavong until May 1996; at present vacant; in the interim period the RP activities have been assisted by short-term consultants), and part-time secretarial assistance; it further included a proportion of the time of Chief FORM (presently, Ms. C. Palmberg-Lerche, D1) who, according to programming, spent an estimated 10-15% of her time on support to RP forest genetic resources activities. A small percentage is spent by the Senior Forestry Officer (Plantations), P5 and the Forestry Officer (Forest Management), P4. In addition, the activities were supported, through Extra Budgetary (Danish) funding, by the services of an Associate Professional Officer (presently C. Pilegaard Hansen, P2).

FINANCIAL CONTRIBUTIONS IN FOREST GENETIC RESOURCES: NON-STAFF RESOURCES. FAO'S REGULAR PROGRAMME (RP), SUB-PROGRAMME 2412

(excludes time and travel of FAO staff; and activities carried out under FAO's field programme)

	SUMMARY TABLE	9661	1997	Est. (1998/99)
(1)	Contracts, Consultants	64 100	92 300	
(2)	Meeting Costs (incl. travel of Gene Panel members)	11 500	88 000	(291 000)
3	Dissemination of Information	29 700	65 700	(37 000)
	TOTAL EXPENDITURE:	105 300	246 000	(328 000)

NB1. Actual expenditure 1996, 1997, including commitments carried over from previous year.

1996 and 1997 figures include funds reimbursed to cover field backstopping. This addition is not reflected in 1998/99 igures as unknown. NB2.

NB3. Over-expenditure in publications 1996 and 1997 absorbed by Departmental funds.

NB4. Other RP subprogrammes which contributed to 2412 funded forest genetic resources activities in 1996 and 1997 may also do so in 1998/99 (not reflected in present figures).

NB5. 1998/99 figures shown correspond to 0% real growth scenario.

FINANCIAL CONTRIBUTIONS IN FOREST GENETIC RESOURCES: NON-STAFF RESOURCES. FAO'S REGULAR PROGRAMME (RP), SUB-PROGRAMME 2412 (excludes time and travel of FAO staff; and activities carried out under FAO's field programme)

(i) Direct support to national, international institutes Australia (CSRO-DFR) Australia (CSRO-DFR) Demnark (DFSC) Kenya (BERRI) Mexico (INIFAP) SUB-TOTAL (i): 15 500 SUB-TOTAL (i): 15 500 IS 500 Accidination Accidination Demnark (DFSC) Ghana (FD) China India Pakistan Senegal Sri Lanka Senegal Sri Lanka Senegal Sri Lanka Senegal Sri Lanka CATIE, Costa Rica (C. Navarro) F. Patiño, Mexico Interep. Mexico Interep. Perestry (ITTF), Puerto Rico E. Patiño, Mexico ITTF Perento Rico E. Patiño, Mexico ITTF Perento Rico E. Patiño, Mexico ITTF Pereto Rico E. Patiño, Mexico ITTF Perento Rico E. Patiño, Mexico ITTF Perento Rico E. Patiño, Mexico ITTF Perento Rico E. Patiño, Mexico	1996 1997 0 25 000 TBA(est) 1 1 000 1 1 700 1 1 700 1 1 400 1 400 1 400 1 400 1 5 000* 1 5 000* 1 5 000*	1996 1997 OBSERVATIONS
1 900* 3 000* 2 000 2 000 30 600	+ } 2 600 34 300 + 14 000 TBA (est)	Synthesis Doc + Development of Project Document } Participation in network meetings (EUFORGEN) and } elaboration of national reports

*Previous years' commitment

FINANCIAL CONTRIBUTIONS IN FOREST GENETIC RESOURCES: NON-STAFF RESOURCES. FAO'S REGULAR PROGRAMME (RP), SUB-PROGRAMME 2412

(excludes time and travel of FAO staff; and activities carried out under FAO's field programme)

(1) CONTRACTS AND CONSULTANCIES (continued)	9661	1997	OBSERVATIONS
(iii) FAO/HQ Based Consultancies/Contracts			
- Data Base REFORGEN US Forest Service		*000 01	
US Forest Service G. Man, USA		3 000 * 6 000 *	
M. Bozzano, Italy T. Niemann, Canada	2 500 3 600		Travel to Rome for discussions re development of data base
- Preparation of Documents, Publications P. Kageyama & collaborators, Brazil	2 400		Practical guide to in situ conservation
L. Thomson, Australia B.A. Wilcox, USA	6 500 3 000		} Deforestation and forest genetic resources
SUB-TOTAL (iii):	18 000	19 000	7.

FINANCIAL CONTRIBUTIONS IN FOREST GENETIC RESOURCES: NON-STAFF RESOURCES. FAO'S REGULAR PROGRAMME (RP), SUB-PROGRAMME 2412

(excludes time and travel of FAO staff; and activities carried out under FAO's field programme)

OBSERVATIONS	Travel of participants paid by FAO. Interpretation provided English/French/Spanish					
1997	70 000		3 000			73 000 + 15 000 TBA(est)
1996			3 500 3 000		1 000 *** 1 000 *** 1 000 *** 1 000 ***	11 500
(2) MEETING COSTS (direct costs, excl. reporting costs)	10th Session of FAO Panel of Experts on Forest Gene Resources	Direct support to FAO/IPGRI Workshops on Safe Movement of Germplasm of forest tree species	- eucalypt germplasm - pine germplasm - acacia germplasm	"Global Plan of Action on PGR" - Regional Workshops: preparations for the Leipzig Conference	Gwaze (Southern Africa) Kageyama (Latin America) Morandini (North Africa) Tewari (South Asia) Wang Houran (China)	SUB-TOTAL:

Figures thus marked indicate FAO Regular Programme funding from other sub-programmes and/or Divisions in support of forest genetic resources activities in RP 2312; these amounts are included in Totals of RP expenditure at the bottom of the table. *** N.B.

FINANCIAL CONTRIBUTIONS IN FOREST GENETIC RESOURCES: NON-STAFF RESOURCES. FAO'S REGULAR PROGRAMME (RP), SUB-PROGRAMME 2412

(excludes time and travel of FAO staff; and activities carried out under FAO's field programme)

(3) DISSEMINATION OF INFORMATION	1996	1997	OBSERVATIONS
- Translation costs			
Forest Genetic Resources Annual Bulletin Gene Panel Background Notes and Report	8 700	8 700 8 000	
- Publication costs			
FGR Annual Bulletin In situ guide Deforestation and forest genetic resources Gene Panel Report (F. F. S.)	8 000 7 000 6 000	8 000 17 000 15 000 9 000	(Part cost, E,F,S; shared with IPGRI)
SUB-TOTAL:		65 700	N.B. Deficit in publication allocation 97 will
			have to be charged to contracts (= 1 above) (TBA) or Extra Budgetary funds

ACTIVITIES AND EXPENDITURE OF FAO'S FIELD PROGRAMME IN FOREST GENETIC RESOURCES

Secretariat Note FORGEN/97/5 briefly reviewed and summarized activities of FAO's field programme in forest genetic resources. It was noted that due to recent decentralization of field operations to FAO Regional and Sub-Regional Offices and temporarily insufficiently developed channels of communication between these offices and FAO HQ, the information at hand was incomplete and should only be considered indicative of the type of activities which were presently ongoing. In spite of acknowledged incompleteness of the document, a clear trend of decrease in field activities was noted. This decrease was evident not only in projects dealing directly or indirectly with forest genetic resources (shown in <u>Table 2</u>), but also in projects in the field of agriculture in general, in the broad sense (agriculture, fisheries and forestry).

As of 1 December 1996, there were 179 on-going and approved forestry projects with a total budget in 1996 of about \$US60.5 million. The number of projects and the annual budget for the forestry field programme had declined in recent years; over the years 1990-91, the mean annual expenditure for FAO field programme amounted to \$US 77.3 million divided to 273 projects, while in 1995 there were 219 projects with a budget of some \$US 67 million. It was noted that the size of the field programme was likely to be reduced further in the coming years as more projects would come to a conclusion, and new projects were being developed/approved at a slower pace, many donors shifting to country execution or direct, bilateral arrangements.

Approximately two thirds of the forestry field programme (in both funding terms and in terms of number of projects), in 1995/96 was related to forest resources management, utilization and conservation, followed by projects dealing with institutional and policy matters (approx 25% of projects); the remaining projects being focused on forest products.

In general, it was noted that projects in the fields of "development and management of forests", "national forest action programmes", "non-wood forest products" and "forest policies and information" had, in contrast to general trends in the field programme, increased in absolute terms, while especially projects in "forest conservation and wildlife" had declined in number and size.

The largest number of projects and highest expenditures was in the Asia-Pacific region, followed by Africa, and Latin America and the Caribbean. Compared with figures from previous years, a rather sharp decrease could be observed both in number of projects and in monetary terms for projects in the Near East region, whereas programmes in Asia-Pacific, Africa and Latin America regions had decreased to a lesser extent (Table 1).

<u>Table 1</u> Regional distribution of the forestry field programme in 1996 by categories of the Programme of Work and Budget

	Forest Res		Forest I	roducts	Forest Ins	titutions	1	OTAL by re	gion
REGION	No of projects	000 \$	No of projects	000 \$	No of projects	000 \$	No of projects	000 \$	% of total expenditure/ budget for 94-95
AFRICA	37	10 583	4	1 360	10	4 202	51	16 145	26.8
ASIA-PACIFIC	53	15 536	5	2 353	10	2 789	68	20 677	34.3
EUROPE	1	105	Ť	20	3	103	5	228	0.4
INTERREGIONAL	6	3 096	1	51	7	3 165	14	6 312	10.4
LATIN AMERICA AND CARIBBEAN	15	7 137 •	1	192	* *	5 795	27	13 124	21.7
NEAR EAST	12	2 850	~	-	2	1 027	14	3 877	6.4

Table 2. Number of projects in forest genetic resources by region and by main activities

MAIN ACTIVITY	Africa	Asia and Pacific	Latin America and Caribbean	Near East	TOTAL
Seed collection, production, storage and exchange	V	5	2	4	12
Testing/breeding	9	7	-	2	10
In situ conservation of FGR and forest management	10	7	6	5	28
Nature conservation, protected areas and national parks	2	5	I	4	12

FOREST GENETIC RESOURCES PRIORITIES (BY REGION, SPECIES AND OPERATION)

SPECIES IDENTIFIED AS TOP PRIORITY FOR FAO COORDINATED ACTIVITIES

NOTES

(i) General Observations

The present Appendix, complemented by <u>Appendix 8</u>, represents an up-dated and revised version of the earlier tables which appeared as <u>Appendix 6</u> in the Report on the 8th Session of FAO Panel of Experts on Forest Gene Resources (FAO 1994).

FAO's mandate, and that of the present Expert Panel, relates to genetic resources of species of socio-economic value for agricultural and forestry development, with special reference to intraspecific genetic variation found in these species. Endangered and vulnerable species, and species under threat of depletion listed *i.a.* in documentation published by the World Conservation Union (IUCN), are included only if they meet these basic development criteria. Similarly, although in exceptional cases referring to genera, the list does not refer to ecosystems or biota.

The Appendix does not present an exhaustive list of woody perennial species in need of attention at regional, ecoregional and global levels. The present list aims at providing information on those species and provenances which the FAO Panel of Experts on Forest Gene Resources, during its 9th Session in October 1995, considered should be given highest, relative priority in the forest genetic resources programme of FAO's Forestry Department. The list, arranged by regions and subregions, indicates priority on a scale from 1 to 3 (see below), for the various operational steps identified: exploration, evaluation, conservation and utilization of germplasm (including selection and breeding).

The Panel of Experts recognized that many of the priority ratings must be considered tentative; the list will need continuing up-dating and must be modified in the light of new information, knowledge and needs.

While not underrating the fundamental importance of locally occurring species and the need to gain more information and to ensure the conservation and wise use of this category of woody perennials, the present list focuses on those species which, in addition to their local importance, are of actual or potential value also in other countries or areas; or which may be of immediate importance in improvement and breeding programmes of related species in their country of origin and in other countries.

The present list should be reviewed in conjunction with the more detailed and complete lists of national, regional and global priority species and activities, shown in <u>Appendix 8</u>. There is, furthermore, a need to **supplement** both lists drawn up by the Panel (<u>Appendices 7</u> and <u>8</u>), with more detailed, **national lists** of priorities at local and national level.

(ii) "End Use of Species" (columns 1-4)

Only species of <u>highest</u> priority in one (or at times, several) of the four, general end use categories identified, are included. The present list includes those species/provenances which the Panel of Experts considered should receive maximum priority in the forest genetic resources programme of FAO (See <u>Appendix 8</u> for a complete list of priority species and operations).

<u>Column 1</u>, "Industrial Wood", includes those species whose main use is for sawn logs, timber, heavy construction wood, plywood, chip and particle board, wood pulp etc.

<u>Column 2</u>, "Industrial Non-Wood Products", includes those species which are mainly used for the production of gums, resins, oils, tannins or other products used in small, medium and large-scale local and non-local industries.

<u>Column 3</u>, "Fuelwood, Posts, Poles", includes those species producing mainly firewood and wood used for the production of charcoal and energy; and those used for the production of roundwood used on-farm.

<u>Column 4</u>, "Other Uses (goods, services)", is a category which includes species grown mainly for the production of food, fodder, and for land stabilization, soil amelioration, for shade, shelter and other environmental values.

Complementary information is given in the "Remarks"-column.

(iii) Operations/Activities

Three priority ratings are used, as follows:

- (1) Highest priority;
- (2) Prompt action recommended;
- (3) Action is important, but of less urgency than that for species listed as priority (1) and (2).

Complementary information is given in the "Remarks"-column.

(E) in the "Remarks"- column, signifies endangered with extinction or severe depletion of the gene pool (see also paragraph 2 of "General Observations" above).

LIST OF SPECIES IDENTIFIED AS TOP PRIORITY FOR FAO COORDINATED ACTIVITIES

1. Western USA/Canada	34
2. Eastern USA/Canada	34
3. Mexico	34
4. Caribbean, Central America, Colombia, Venezuela and Ecuador	34
5. South America (except Colombia, Venezuela and Ecuador)	35
6. Northern and Central Europe	35
7. Mediterranean Region, Southern Europe and Near East	35
8. South and East Asia (excl. China and India)	35
9. North, North-East and Central Asia (incl. China and India)	36
10. Africa	37
11. Australia and New Zealand	38
12. Pacific Islands	38

							Ol	eratio	ns/ Act	ivities			
SPECIES	End	use o	fspec	cies	Explo & col	ration ection	Eval	uation	Conse	rvation	Germp use	lasm	REMARKS
	1	2	3	4	5	6	7	8	9	10	11	12	
1. WESTERN USA/CANADA			Ì							,,,,,,			
No species were identified as top priority species for FAO coordinated activities	WEIGHT AND		military operature assessment as a constant				men (s) (resemble) assumment a mem (s) is deposed in the control of the control				The state of the s		
2. EASTERN USA/CANADA							ACCOUNTS AND ACCOU						TOTAL STREET
No species were identified as top priority species for FAO coordinated activities									A. T. C.				
3. MEXICO					STATE OF THE PARTY								o control and a
Astronium graveolens	1		VPIAAAAAAAAA		1	1		ĭ	1	1	1	1	(E). National interest
Cedrela odorata	1		W-1214-		1	1	1	· Port	4	4		1	PVT and PGT
Cupressus lindleyi	1				1	1	*	1	1	******		1	1.00 mm
Dendropanax arboreus	1				1	gung	1	1	2	2		1	PVT in progress
Pinus chiapensis	1				2		1		1			1	PVT and PGT
P. patula	1				2		1		1			1	PVT (Int.)
Swietenia macrophylla	-				1	1	1	*		1		1	PVT, PGT, SO. (E) certain populations
4. CARRIBEAN, CENTRAL AMERICA, COLOMBIA, VENEZUELA AND ECUADOR			THE RESIDENCE OF THE PROPERTY				Andreas de la companya de la company						
Bombacopsis quinata	_				ę	1	4	****	- independent	*****	2	1	PVT, PGT in progress. SO established. (E) in most parts of range
Cedrela odorata	1				T ures	40000	1	4	-Prince	4	3	1	PVT, PGT in progress. (E) in most parts of range
Cordia alliodora	The second secon			1		2			2	2	•	You.	PVT, PGT, CLT in progress. SO established. Breeding systems studies completed
Glíricidia sepium	www.decement.com.mc/com/com/com/com/com/com/com/com/com/c		·	•		2		2	2	2		2	PVT in progress. <i>In situ</i> and ex situ stands, SO established
eucaena leucocephala			1	1	1	1		1	1	1	1	*	PVT in progress. SO
Pinus caribaea var. hondurensis	*	1	**************************************		According to the property of t	2			2	2	According	4	PVT, PGT in progress. <i>In situ</i> and ex situ stands established
?, tecunumanii	1	1	erseumeetweetweet burdetschilde		Western Workshop and October States of States	1	Pr-D-1960AC/qmDominorPresspersons		1	1	· ·		PVT and PGT in progress. <i>In</i> situ and ex situ stands established
Swietenia macrophylla			**************************************	я Z.Со. (о) од му в официфи ф С (Volindelle Heleumpa A. (A) Z.Со. (о)	· ·	gener	4 000	And the second s	- Parece	Annual Commission of the Commi	3		PVT and genetic variability studies in progress. (E) in most parts of range. Resistance trials established

					 			Opera	tions	/ Act	ivities			1000
SPECIES	Enc	i use	of sp	ecies		oration election		aluatio	on III C	Conse	rvation	Germ use	plasm	REMARKS
		2	4	3 4	5	6	_ _	7 8		9	10	11	12	On the second
5. SOUTH AMERICA (EXCEPT COLOMBIA, VENEZUELA AND ECUADOR)					And the state of t				A TOTAL CONTRACTOR CON					
Aniba duckei	**************************************	1	- Land Applications and the Land		2	W		1 1		1	1	*	1	(E) all range. Medicinal products
Cedrela odorata	/					1		† 1		1	1	1	dom	(E) all range. Overexploitation
Dalbergia nigra	/		***************************************		2	1	1	1		1	1	1	1	(E) all range
Maytenus ilicifolia		1	***************************************	1	2	1	1	1		1	1	4	*****	(E) all range. Medicinal use
Micropholis meloniana	/				1	1	1	1		4	1	†	1	(E) in parts of range
Nothofagus alessandrii	1				X.	4	1	1		1	*	1	1	(E) all range
Swietenia macrophylla						1	1	*		*	*	1	1	(E) in parts of range
6. NORTHERN AND CENTRAL EUROPE			***************************************								The state of the s			
lo species were identified as op priority species for FAO oordinated activities							Andrews of the second s							
T. MEDITERRANEAN REGION, COUTHERN EUROPE AND JEAR EAST														
cacía nilotica			1	1	1	1	1	1				1		Int. PVT in progress
. saligna			1	1		1	1	1				1	1	Network Sylva Mediterranea
. senegai			1	1	1	1	1	1			,	1	1	The tribute of tribute of the tribute of tribute of tribute of the tribute of tribu
. tortilis (incl. ssp. raddiana)			1	1	1	1	1	1				1		Int. PVT in progress
edrus atlantica	1			/	2	2	2	2				2	l	Int. testing in progress
. libani	_			•	2	***	2	2		1	desiration in the second secon	2	2	Int. testing. National stands in Lebanon (E). Conservation priority activities apply to Lebanon
eratonia siliqua				1	1	1	1	1						Network Sylva Mediterranea
editsia triacanthos				1	1	1	1	1			**************************************			Network Sylva Mediterranea
osopis cineraria	***************************************		1	1	1	1	1	1	1		1	2	2	
uercus suber		1		-	2	2	2	2				2	2	
traclinis articulata				1	1	***	1	1	2		2			
SOUTH AND EAST ASIA CL. CHINA AND INDIA		***************************************		Manager et en									Communication of the Communica	
adirachta indica (incl. var. celsa)	1	/	1	/	2	*	3	3	2		7	4-	1	nt. PVT in progress
pterocarpus alatus	✓	чена Майайнур е е е е е е им им иминирую де	1	1	9	de ni	Apres	T	1		A. m	Y ellon	C	Excellent wood for construction and veneer ourposes

and the second s		on night of the state of the st	and spiritual economics to			are the second of the second o	Ор	eration	s/ Activ	ities			
SPECIES	End u	ise of	specie	s	Explora & colle		Evalu	ation	Conser	vation	Germp use	asm	REMARKS
	-	2	3	4	5	6	7	8	9	10	- 11	12	
E. urophylla		1	1	1	3	2	2	2	2	2	Vando	4	Int, PVT in progress. Work on hybridization required
Hopea odorata	1		1	1	1	· ·	Ť.	1	1	1	ęlino - elinos - elinos	1	Priority species for ASEAN. Excellent wood for furniture
P. macrocarpus					Works	Yeste	1	diene.	- Approximate and the state of	**	epines	***	Excellent for construction purposes. Priority species for ASEAN
Tectona grandis	*		*		And the second s	1	4100	1	400	1	4	1	Very important species
9. NORTH, NORTH-EAST AND CENTRAL ASIA INCL. CHINA AND INDIA	Anderson (Anderson (Anders		Sababasananan ya wa ta sababasan ya wa ta sababasan ya wa ta sababasan ya wa ta sababasan ya sababasan ya sabab										
Acacia auriculiformis	/		1	1	1	1	1	3	1	· ·	4111	1	Exotic, PVT in China
Acacia confusa	1		1	1	***	*	2	2	3	3	2	2	Taiwan acacia
Acacia crassicarpa	1	1	1		2	2	2	2	2	2	2	2	Exotic, PVT in China
Acacia manglum	1		1	1	1	1	1	1	1	1	1	1	Exotic, PVT in China
Acacia mearnsii	/		1	1		1	4	1	Commence of the commence of th	V volume	d have	1	Exotic, PVT and PGT in China
Albizia procera	/		1	1	1	1	1	1	1	4	1	1	China, Indía
Azadirachta indica		1	1	1	1	1	1	1	1	1	1	1	Int. PVT initiated
Bamboo (Bambusa, Dendrocalamus, Phyllostachys spp.)	•	1		1	2	1	7	1	V	1	4.00m	1	Important for SE Asia, China and India
Calamus piatyacanthoides	,		•			2	2	2	2	2	2	2	Overexploited, poor regeneration, recalcitrant seeds
C. tetradactylus	/		1			2	2	2	2	2	2	2	Overexploited, poor regeneration, recalcitrant seeds
Camellia japonica var, japonica	<i>'</i>	1	1	✓	When the second	1	1	1	ę w w	1	ų.	1	Oil and timber, China, Korea and Japan
Casuarina equisetifolia (exotic)	/	✓	/	1		1	WATER PROPERTY OF THE PROPERTY	1	August 100 March	1	1	1	PVT, PGT and vegetative propagation in China
C. glauca	/	1	1	1	Concess a security of Amily Concess a security of Amily	1	1	1	1	den	1	1	Exotic
C. junghuhniana (exotic)				1		· ·	1	1	1	1	1	1	Odd spinness and
Cedrus deodara	1		1	1	The state of the s		2				1		(E) in parts of range
Chamaecyparis obtusa	/	1	*	1	Appear	1	1	4	\$ Pro-	1	emmeter de des de des de des de des de des de des de	1	PGT/SO in Japan, exotic in China and Korea
Cryptomeria japonica	Series in a series de la constitución de la constit	1	·	1		1	medicación con commence describación con construentes	1	40.0	coordi	quint	1	PGT/SO in Japan, exotic in China and Korea
Dalbergia sissoo	·	1	/	J	A viscini Arrivo	2	2	2	1		According to the state of the s		Wide genetic variation
Fokienia hodginsi	/		idad.Mulling.Vijasooseessoon		vAAAOOOO po de Amerika marija marija marija marija da kan da Haliman	discon		î	*****	1	gione.		Monogenus, endemic to China
Fraxinus mandshurica	/		-		,		4000		1		Parameter (Parameter (Important for this region

	CO TO						0	peratio	ns/ Acti	ivities	····	···	
SPECIES	End	use	of spec	ies		ration lection	Eval	uation	Conse	rvation	Germt use	olasm	REMARKS
Westernamental phase processed stage control that determine an experience of the control of the		2	3	4	5	6	7	8	9	1:0	1.1	12	**************************************
Hippophae rhamnoides		✓	Signatura de Sancia de San	1	April 1990 - April		disent		Queen		1	- Parameter Company	Fruits with high vitamin content for drink and medicine, important for this region
Juglans mandshurica	•	1	······································	√			1		+	7	- Andrews	q.	Good timber in China, Japan and Korea
J. regia	1	1	·	1	4000	C	1	1	1	1	1		Timber and nut
Larix gmelini	/	1	1		The state of the s		1		1	A	4		PVT in China
L. kaempeferi	er († 1867 m.) m. op pleiste kommende beske ken er († 1867 m.) m. op pleiste kommende beske ken er († 1867 m.) m. op pleiste kommende beske ken er († 1867 m.) m. op pleiste kommende beske ken er († 1867 m.) m. op pleiste kommende beske ken er († 1867 m.) m. op pleiste kommende beske ken er († 1867 m.) m. op pleiste kommende beske ken er († 1867 m.) m. op pleiste kommende beske ken er († 1867 m.) m. op pleiste kommende beske ken er († 1867 m.) m. op pleiste kommende besk er († 1867 m.) m. op pl	1	1				the state of the s	or o	ą.		Yesser	7	SO, crossed with other larches
Michelia macclurei	Amendy by Charles (Arconner page quadratic property of the Charles (Arconner page quadratic property) (Arconner page quad	J		/	4	1	Years Years	2	1	2	1	Quant	Fast growing and valuable timber, subtropical species
Picea jezoensis	*	1	1	1			1	Ì	1		3	1	China and Korea
Pinus caribaea var, bahamensis	1	1	1				1			1	1	1	PVT/PGT in China
P. caribaea var. caribaea	I	✓	1	✓			1		1	*	1	1	PVT/PGT in China
P. densiflora	1	1	1	1	W	d de	1		1	1	1	1	PVT/PGT in Japan
P. koraiensis	, ,	1		·	1	*	- April 1	q doc	· ·	ę	1	1	Important for Korea, China and Japan
P. massoniana	*	1	·	/	1	*	1	7	**	Washington of the same	1	4	Cross breeding in Japan with P. densiflora
P. yunnanensis	1	1	1	/	1	1	1	4	1	-	1	1	PVT and SO ongoing
Toona microcarpa	1	1		1	1	1		4			1	1	MPTS
T. sinensis	1	1		1	†	1		1			1		MPTS
T. sureni	*			A CONTRACTOR OF THE CONTRACTOR	· ·	Artenior de la françois de la franço		**************************************				*	
10. AFRICA								discontinuos de la constanta d		HET THE STREET STREET			
Acacia karoo							1	ementer en			2		Gum being internationally traded
Acacia nilotica		<i>J</i>	J		2	3	3			en e	***	A CONTRACTOR OF THE CONTRACTOR	Int. PVT in progress. W. Africa to be completed. Problems with natural regeneration
A. senegai		-	✓	/	700	meioridininko kirjolojomara musikanda ile	Account	Anne de la companya d	1	Medylaryspanocochamboochamboochamboochamboochamboochamboochamboochamboochamboochamboochamboochamboochamboochamb	3	Oktober ((E) populations in N parts of range. Problems with natural regeneration
4. seyal		de la mone es de la		all to provide the manufacture particular		1	•	mente de describer de la constante de la const		Market desired by the manager of the second			Gum being internationally traded
4. <i>tortilis</i> (incl. ssp <i>raddiana</i>)		Portionary	1	d Proposition of the Control of the	2	Year.	2	di de dismensione de descripción de		The second second service of the second seco	3		Int. PVT in progress. W. Africa to be completed.
Azadirachta indica (exetic)		/	1	/		Yellow to monate	1	Y-	quan.	one and the second	que established	do not	Int. PVT in progress
Dalbergia melanoxylon	1	-		and the second s	*	Aur		2	1	1-1-1		Management of the state of the	(E)

							Ор	eration	ns/ Activ	ities			
SPECIES	Endi	ise of	specie	ŝ	Explora & colle		Evalu	ation	Conser	vation	Germp use	lasm	REMARKS
e de la companya del companya de la companya de la companya del companya de la co		2 .	3	4	5	6	7	8	9	10	11	12	
Faidherbia albida		······································	1	1	And the second sec		3	*	2		ipovo	499	Seed collections, PVT, PGT and population genetics studies in progress
Heritiera (syn. Tarrietia) utilis			A Company of the Comp		April 2	d.	4	1	1	3	Account of the control of the contro	1	Addition to the state of the st
Irvingia spo.			/	1	1	1	Q. Carrie	1	4.0	Age	Wanter to the state of the stat	·	(E)
Khaya spp.			de distinct de descriptions de services de la constitución de la const		r)-t	1	\$ char	1	4000	· ·	Attention of the state of the s	7	Selection for resistance to shoot borer. Seed collections initiated
Parkia biglobosa	de de la companya del la companya de		A THE COLUMN TO	\$			Annual Control of the	*			gioca Maria de la composito de	4	Prov. collections and gene ecological studies in progress
Prosopis spp. (exotic)				1		1		1			2	2	
Prunus africana	Anna construction of the c	1	AANTON CONTRACTOR OF THE PROPERTY OF THE PROPE	1	1	1	1	1	1	1	2		(E). Recalcitrant seed, Field genebank
Pterocarpus angolensis	Management Assessment					1		2	V-0-	1	manus (Coloro Coloro Co		<i>In situ</i> cons, in progress. Problem of die-back disease
Sclerocarya birrea	ozemie po predigojali internacional de la composito de la comp			J	Tana	2		2	Account of the contract of the	1	Accumination of the Commission	2	Recalcitrant seed. Field: ICRAF in SADC countries, FAO in CILSS countries
Tamarindus indica				1	***	1		2		1	4000	1	The second second
Vitemaria paradoxa		1				1	2	1	1	1			Used in cocoa manufacturin
11. AUSTRALIA AND													
NEW ZEALAND A. mangium	<i>*</i>		and the second s		(*)							3	Biogeographic descriptions completed, sampling, PVT. Hybrids being developed with <i>A. auriculiformis</i> . Advanced breeding underway
Grevillea robusta			Control of the Contro	s	3	2	2	2			and the managed of the state of	2	
12. PACIFIC ISLANDS	The second secon				Websterner (project Anton						Control of the Contro	_	CORPLE ANICHT
Santalum spp.	THE PROPERTY OF THE PROPERTY O	1	MANAGE PARTIES AND		2		2		And the second s			2	SPRIG priority
Swietenia macrophylla	1					2	3			2	lL	2	SPRIG priority

FOREST GENETIC RESOURCES PRIORITIES (BY REGION, SPECIES AND OPERATION)

SPECIES IDENTIFIED AS HIGH, GLOBAL, REGIONAL AND/OR NATIONAL PRIORITY

NOTES

(i) General Observations

The present Appendix, which complements <u>Appendix 7</u> and includes the species and provenances listed in it, represents an up-dated and revised version of the earlier tables which appeared as <u>Appendix 7</u> in the Report on the 8th Session of FAO Panel of Experts on Forest Gene Resources (FAO 1994).

FAO's mandate, and that of the present Expert Panel, relates to genetic resources of species of socio-economic value for agricultural and forestry development, with special reference to intraspecific genetic variation found in these species. Endangered and vulnerable species, and species under threat of depletion listed *i.a.* in documentation published by the World Conservation Union (IUCN), are included only if they meet these basic development criteria. Similarly, although sometimes referring to genera, the list does not refer to ecosystems or biota.

The Appendix does not present an exhaustive list of woody perennial species in need of attention at national, regional, ecoregional and global levels. The list is aimed at providing information on those species and provenances which the Expert Panel during its 8th Session in June 1993 considered to should be given highest, relative priority in the forest genetic resources programme of FAO's Forestry Department; and of other international, regional, bilateral and national institutions and agencies, including those of national and international non-governmental organizations and the private sector. The list, arranged by regions and sub-regions indicates, whenever possible, priority on a scale from 1 to 3 (see below), for the various operational steps identified: exploration, evaluation, conservation and utilization of germplasm (including selection and breeding).

The Panel recognized that many of the priority ratings must be considered tentative. At times, basic information necessary for precise rating was lacking, and in this case the list may include only a mention of the genus in question (implying an urgent need for exploration).

While not underrating the fundamental importance of locally occurring species and the need to gain more information and to ensure the conservation and wise use of this category of woody perennials, the present list focuses mainly on those species which, in addition to local importance, are of actual or potential value also in other countries or areas; or which may be of immediate importance in improvement and breeding programmes of related species in their country of origin and other countries.

There is thus a need to **supplement** the present list with more detailed, **national lists** of priorities for action at a local and national level.

(ii) "End Use of Species" (columns 1-4)

Only species of high actual or potential priority in one (or at times, several) of the four, general end use categories identified, are included.

Column 1, "Industrial Wood", includes those species whose main use is for sawn logs, timber, heavy construction wood, plywood, chip and particle board, wood pulp etc.

Column 2, "Industrial Non-Wood Products", includes those species which are mainly used for the production of gums, resins, oils, tannins or other products used in small, medium and large-scale local and non-local industries.

Column 3, "Fuelwood, Posts, Poles", includes those species producing mainly firewood and wood used for the production of charcoal and energy; and those used for the production of roundwood used on-farm.

Column 4, "Other Uses (goods, services)", is a category which includes species grown mainly for the production of food, fodder, and for land stabilization, soil amelioration, for shade, shelter and other environmental values.

Complementary information is given in the "Remarks"-column.

(iii) Operations/Activities

Three priority ratings are used, as follows:

- (1) Highest priority;
- (2) Prompt action recommended;
- (3) Action is important, but of less urgency than that for species listed as priority (1) and (2).

Complementary information is given in the "Remarks"-column.

(E) in the "Remarks"- column, signifies endangered with extinction or severe depletion of the gene pool (see also paragraph 2 of "General Observations" above).

LIST OF SPECIES IDENTIFIED AS HIGH, GLOBAL, REGIONAL AND/OR NATIONAL PRIORITY

1. Western USA/Canada	 4
2. Eastern USA/Canada	 44
3. Mexico	 45
4. Caribbean, Central America, Colombia, Venezuela and Ecuador	 46
5. South America (except Colombia, Venezuela and Ecuador)	 47
6. Northern and Central Europe	
7. Mediterranean Region, Southern Europe and Near East	 50
8. South and East Asia (excl. China and India)	
9. North, North-East and Central Asia (incl. China and India)	
10. Africa	
11. Australia and New Zealand	
12. Pacific Islands	66

THE STATE OF THE S

SPECIES End use of species Explore & collect 1 2 3 4 5 1. WESTERN USA/CANADA Abies amabilis A. bracteata A. concolor A. grandis A. lasiocarpa A. magnifica var. shastaensis A. procera Acer macrophyllum Alnus rhombifolia A. rubra A. sinuata A. tenuifolia Arbutus menziesii Betula fontinalis B. papyrifera Castanopsis chrysophylia Celtis douglasii Chamaecyparis lawsoniana Chamaecyparis nootkatensis C. macrocarpa Cornus nuttalli Crataegus douglasii C. columbiana Cupressus arizonica (complex) J J J J J J J J J J J J J J J J J J J		7 3 3 3	s 2	g	10	Germp use	12:	Int. PVT In situ cons. stands In situ cons. stands PVT. Seed in storage for int. PVT In situ cons. stands In situ cons. stands In situ cons. stands In situ cons. stands
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Fraxinus latifolía				3				and the second s
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J, scopularum / 3		allerin de la companya de la company		ununundadiye unundadi		minimus special specia		
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L. Iyallii		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		2	2	***************************************		Breeding trials.
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Libocedus decurrens Lithocarpus densiflorus								1

	- Constitution of Constitution						Ор	eratio	ns/ Act	ivities			The second secon
SPECIES	End	use o	fspe	cies		oration (lection	Evalu	ation	Conse	rvation	Germp use	lasm	REMARKS
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Picea breweriana							A CONTRACTOR OF THE PARTY OF TH		3				THE STATE OF THE S
Picea engelmannii	Valence de la constitución de la		0-mateuro		2						TOO CONTRACTOR OF THE CONTRACT		Int. PVT. Tests and collections
P. glauca			·						Y November				Int. PVT. Breeding.
P. sitchensis					OFFICE AND ADDRESS OF THE PARTY								Int. PVT. Tests.
Pinus albicaulis	/				3	3		3		3			100 t v 1 . 105t5.
^p . arizonica			/		2					~			
P. attenuata	to and a second				3						and the same of th	3	
² . chihuahuana	*		1		2					***************************************		3	
P. contorta	A communication of the communi		,		Andrew proprietation and Andrew Action and Act								Int. PVT. Recent bulk
. engelmanii			1		2								callections.
. flexilis		, in the second			_				3	***			
. jeffreyi	-	Antonio antonio alganga			2				J	West of the second		***************************************	
. lambertiana	**************************************	***************************************								***************************************		İ	
. monticola					A A A A A A A A A A A A A A A A A A A								Int. PVT
. ponderosa					2) j	Breeding progr.
radiata					-							- 11	Breeding progr.
washoensis	/	ļ	1		2								Int. PVT. Gene pool stands
ppulus tremuloides		-	•										
trichocarpa					3								Collections
seudotsuga menziesii					J							Water water	
macrocarpa		***************************************			2	2						1	Int. PVT. Breeding progr.
uercus chrysolepis	-				2	~		2				2	
garryana			/	Ť	2				3				
kelloggii			•	,	: 4	Waling		-	1	200			British Columbia, USA
amnus purshiana	***************************************	**************************************		,		ham population		AND DESCRIPTION OF THE PERSONS ASSESSMENT OF	3	AND COLUMN TO THE PERSON THE PERS			
lix amygdaloides	announce or or other control of the					of Personal Parkets				in processing of the second of			n situ cons. stands
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hookenana	The Control of the Co			,				STATE OF THE PARTY				1	n situ cons. stands
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lasiolepis	A March Constitution			*		N market manager		West Avenue		And the state of t		11	? situ cons. stands
scouleriana	- Control of the Cont	- Contraction of the Contraction				A CONTRACTOR OF THE CONTRACTOR		And the second s		erecit/shi magaa		lr	situ cons. stands
quoia sempervirens				•				**************************************		Westerna Commen			s/tu cons. stands
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www.westiana	With public to the property of thems	· .	S	mpotential and discontinuous	1	Anna	2	Michael Philippe Commission Commi	4			er	sternational att. needed to asure continued efforts in eveloping resistance

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SPECIES	End «	use of	specie	95	Explora & colle		Evalu	ation	Conser	vation	Germpl use	asm	REMARKS
		2	3	4	5	6	7	8	3 9	10	11	12	
Thuja plicata	1/			1	3	3		3					Collection and testing
,			re-ridered avolues		2								Collection and testing
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T. mertensiana	1		aprilation of the first		All Annie (Control of the Control of								In situ cons. stands
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2. EASTERN USA/CANADA	About the state of		Approximately the Control of the Con		editament delicated and the second				Months and a second				The state of the s
Abies balsamea	/			1		3		3			3		Breeding progr.
A. fraseri	1		anne de la constanta	1	2	3		3	2		3		Breeding progr.
Acer saccharum	/	1	1	I		2		3	2	2		3	The state of the s
Betula alleghaniensis	/		A THE PROPERTY OF THE PARTY OF		3				2		3	3	
Carya cordiformis			·		3	2		3		2			
C. illinoensis				1	3	3		3	TO THE PARTY OF TH				Of recent interest to China
C. ovata	/					2		3		2			
Castanea dentata	/	✓	1	s	2	1			4	1	****	1	International att. needed to ensure continued efforts in developing resistance
Celtis tenuifolia	1		1		2	3			2	3			
Fraxinus americana	1								3				
F. quadrangulata	1		1		2	2	- Landing and the second		2	2			
Gymnocladus dioieus	/		1			2			2	2			
Juglans cinerea	/					2		2	2	2			Ex situ cons. required in Canada
J. nigra	1			1							2	2	Real Property Control of the Control
Larix laricina	1					3		3			3	2	The state of the s
Liquidambar styraciflua	1					2		2			2	2	The second secon
Liriodendron tulipifera	/						AND THE PROPERTY OF THE PROPER		3		3	2	Collection and testing in Eastern U.S.
Magnolia acuminata	/		/			2	entinggood; characopida		2	2	Account of the second		non-many (reduction)
Picea glauca	/				S. C. La Commission of the Com								Breeding progr.
P. mariana	/								ATTENDED OF THE PARTY OF THE PA				Breeding progr.
P. rubens	/		-						parameter services and a service servi		3	2	
Platenus occidentalis	/				o populario de la companio de la com	2		2	March March March		2	2	CONTRACTOR
Pinus banksiana	/				Amiliativa canomidee				***************************************				Breeding progr.
P. clausa	•		and the state of t		No. of the second						3	3	***************************************
P. rigida	/		evenue správante	J	Washington (2000)	3		3					
P. echinata	1		All America House and America			2	AAAA SAASA AAAAA AAAAA AAAAA AAAAA AAAAA AAAAA AAAA	2	esemente de la competención de l		2		Breeding progr. in Eastern U.S.
P. elliottii	1	,	Là chadhlatte meant was		ALCOMOLOGICA PROPERTY AND		ACCOUNT (MANAGEMENT (MANAGEMENT (MANAGEMENT (MANAGEMENT (MANAGEMENT (MANAGEMENT (esserementeleiste ty-		gischich (girligh) werdenbesses werden geschicht verweitenbesses		Breeding progr. in Eastern U.S.

	entering property				-	***************************************	C	peratio	ns/ Ac	tivities			
SPECIES	End	use o	f spec	ies		ration lection	Eva	luation	Cons	ervation	Germ use	plasm	REMARKS
san da da da da sensa manusan kan kendada da pamijan ke meda kalaba ka pampikin kendada da da maha ke manusan	ig 	2	3	4	1 5	6] 7	8:	9	10	11	12	
P. palustris													Breeding progr. in Eastern
P. resinosa													U.S.
P. serotina						2		2	3		3	3	Breeding progr.
P. strobus			reference Advisory in age		THE COLUMN TWO IS NOT	***		<i>t</i>	· ·		3	3	
P. taeda							()						Breeding progr.
P. virginiana	/								Andrew Walnes		2	2	Breeding progr.
Populus balsamifera	/					2		2	·		3	2	1 K
			**************************************					•			,	2	High potential for biomass on medium fertility soils
P. deltoides	*		Agrange Market Strategy Commission Annual An				2				And a		Breeding progr.
P. tremuloides	The second secon		The same of the sa		Anti-place Constitution of the Constitution of	3	2	3		o walled			Breeding progr. in U.S.
Prunus serotina	Control of the Contro					3		3	3	**************************************	3		Canadian populations at extremes of range
Ptelea trifoliata	- J		1		2	2			1	2			
Quercus alba			1			2		2		3		3	Canadian populations at
Q. borealis													extremes of range
						3		3		3		3	
Q. macrocarpa Robinia pseudoacacia	-		<i>'</i>		4	3		3	3				
Taxodium ascendens	·		/			3		3					
r axodiom ascendens T. distichum					2	3		3	3		3		
r. oisucham Torreya taxifolia		A A A A A A A A A A A A A A A A A A A		j	2	3		3	3		3	***************************************	
Umus americana	***************************************								2			***************************************	
onnus amentana	*				3	3		3	2	3	3		Resistance breeding progr.
B. MEXICO													
Astronium graveolens	1	***************************************			1	1	1	1	1	1	1	1 1	(E). National interest
Brosimum alicastrum	/			1	2	2		2	3	3	2	2	
lursera simaruba					3	3		3		ACCUMPANT AND AC	3	and the company of th	
alophyllum brasiliense	1		1		1	1		4	2	3	3	2	
edrela odorata	/			- Anna Carlo		1	1	4	que established	1			PVT and PGT
ordia alliadora	1	-			3	3		3		**************************************	3		-
. dodecandra	/	**************************************		1	3	3		3		Ampulation (Ampulation)	3	months of Albanda and an angle	
upressus lindleyi	-	***************************************		Windshield (St. St. St. St. St. St. St. St. St. St.		400-	1	1	1	- Property of the Property of		1	
upressus benthami	*			American de la composition della composition del	2	2		2	**	2			E) some provenances
endropanax arboreus	A CONTRACTOR OF THE CONTRACTOR	**************************************		distance contacts	1	1	1	1	2	2		1	VT in progress
axinus uhdei	Manager Manage	- N. Vicinesconor		1	2	2		2	1	2	3	б/набоско оченива. В при	. •
siloma bahamensis		m. on Constitutions	✓	Administration of the Control of the	3	3		2		de conservadament	~		
etopium brownei		Metallican		According to the second	3	3		2		de l'action de l'a			
nus ayacahuite		***************************************		And the second	2	1		2	1	1			

							Оре	eration	ns/ Activ	/ities	gagen, enterprise and elicitate data have been really as		
SPECIES	End	use of	specie	:8	Explora & colle		Evalu	ation	Conser	vation	Germp use	asm	REMARKS
		2	3	4	. 5	6	7	S	9	10	11	12	and the second
P. ayacahuite var. veitchii	1/	gangaga a andra da a da andra		400000000000000000000000000000000000000	3	3		3			A in the second	2	
P. chiapensis	/				2		- poss		que established			*	PVT and PGT
P. durangensis					3	3		3				2	TT
P. gregii	/				2	2	o de la companya de l	2	(3)	3			(E) some provenances
P. engelmannii	1				3	3	N. Commission of the Commissio	3				2	**************************************
P. herrerai	~				3	3	Address (Constitution of Constitution of Const	3			3		***
P. michoacana	1				3	3		3	A THE STREET STREET			2	
P. montezumae	1				3	3	en e	3	y py promote the state of the s			2	
P. oocarpa	/				3				Avvocament Province			2	
P. oocarpa var. ochoterenai	/				2	1		2	3	1			
P. patula	/				2		*		g-o-			1	PVT (Int.)
P. pseudostrobus	1				3		an paradoantus					2	to the state of th
P. zedowski	1				2	2		1	1	2	2		**************************************
Piscidia communis	1		1		3	2		2	100mm		3		Language Control of the Control of t
Pseudotsuga flahaulti				1	2	2		2	2	3	2		
Prosopis spp.			1	1	2	3		3		3	3	3	The state of the s
Simaruba glauca	1		- Artestando				A CONTRACTOR OF						THE PROPERTY OF THE PROPERTY O
Spondias mombin	1		***************************************		3	3	with the state of	3			3		
Swietenia macrophylla					energy was a supplier of the s	1	1	1	1	1	weeks proportion and weeks	1	PVT, PGT, SO. (E) certain populations
Tabebula rosea			And the same of th		nder, berkenten der Vertreten						NA ANTONIO (MISSAN) (ANTONIO (MISSAN) (MISSAN) (ANTONIO (MISSAN) (
4. CARRIBEAN. CENTRAL AMERICA. COLOMBIA, VENEZUELA AND ECUADOR			egyenes				Andrew Company of the						
Albizia niopoides	1		1		2	2		2					PVT, SO. (E) in parts of range
A. quachepele	/		And the state of t		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	2	Andrewski (Communication of the Communication of th	2	de la companya de la	2	2	2	PVT, PGT in progress. Vegetative propagation studies
Alnus acuminata	<u> </u>		And agreement with the first the delication of	1	gelen Anderson was not dep	April	Comments of the Comments of th	3	4600	18	Andreas A Angelie (A) a manamataka	4	PVT, PGT in progress. In situ stands established
Calliandra calothyrsus	Secular Applications		1	1	Application and other states of the states o	1		1	1	1	2	1	PVT in progress
Cedrela tonduzzi	/		Avergam artifacture.		2	2	Adaptations Strangerical Strangerical		2	2	verseteleteleteleteleteleteleteleteletelete		(E) in most parts of range
Cupressus lusitanica	Management (minute)		Nympho duo caso de l'estimativ		2	2	manuscript of the state of the	2	2		eating A. A. Joseph A. A. Language J. L		PVT and PGT. Ex situ stands established
Diphysa robinioides	a deletika de de majeriya A de majeriya de de majeriya			1	And the state of t	2			2	2	dring physyrumunders		
Enterolubium cyclocarpum	Accompany of control o		1	1	2	2	3	3	2	2			Seed stands established
Erythrina spp.	Ayaquussaana Maaama AAAAabaha			1	2	2	.3	3	2	2			PVT
Guazuma ulmifolia	**************************************				1 2	2		2			V-200000-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0		PVT

	Angel				V V CONTRACTOR OF THE CONTRACT		Ор	eratio	ns/ Act	ivities			
SPECIES	End	use t	of spec	ies	Explor & colle		Evalu	ıation	Conse	rvation	Germ¢ use	lasm	REMARKS
		2	3	4	5	6	7	8	9	10	11	12	
Inga spp.			1	1	2	2	3	3	2	2	Vicinities of the Control of the Con		Company Compan
Leucaena diversifolia			1	1	2	2	2	2		3	3	3	And the second s
L. salvadorensis			1	1		1		1	Ť	1	1	1	PVT in progress. SO
Leucaena spp.	Odododo Oo Ougu ya i ammata Adamata		**************************************	✓	ę	· Posse	Andreas Andrea	April .	g a c	‡		· poors	Provenances of species from Central America and Mexico available from OFI for PVT
Liquidambar styraciflua	/		and or other particular particula		-	1		1	\$34	2	3	3	PVT in progress
Pinus ayacahuite	/		N-SAMMAN AND AND AND AND AND AND AND AND AND A		+	1	Out of the last of	1	ą.	2	2	2	PVT and PGT in progress
P. caribaea var. bahamensis	·		edentificities poemente por portuguido de la constanta de la c	1	Andreid Arthrodox and two classics or comments of the state of the st	1		dime	A		The state of the s	1	PVT in progress. Ex situ stands established
P. caribaea var. caribaea	1			1	And the state of t						1	4	PVT in progress
P. chiapensis	1		***************************************		****	Ť	Welling	1	4	4	***************************************		PVT and PGT in progress
P. maximinol	1										3	3	PVT in progress
P. occidentalis	1				2	2		2	2				In situ stands established
P. oocarpa	/			1		1			erech description of the second	groos.	4	1	PVT in progress. <i>Ex situ</i> stands established
P. pseudostrobus/tenuifolia	-			1	1			1	***				PVT in progress. (E) in parts of range
Prosopis atcamensis			1	1	1	1		ą.	1				PVT in progress
P. burkartii			1	1	1	1		1	1				PVT in progress
P. chilensis			1	1	1	1		1	1	1	2	2	PVT in progress
P. juliflora			1	1	1	1	-	1	1	2	2	3	PVT in progress
P. limensis			1	1	1	1	***************************************	1	1	2			PVT in progress
P. siliquastrum	***************************************		1	1	1			1	door				PVT in progress
^p . tamarugo			1	1	1	1			1	3	2	2	PVT in progress
Samanea saman			1	1	1		2	3					Not planted extensively
Swietenia humilis	1			/	2	2		2	1	2	2	î	SO established. Not planted extensively
Tabebuia rosea	1		1		1	1	1	1	1	1	3	1	Restricted prov. collections
Vochysia quatemalensis	~		***************************************	WHITE CONT. THE BOOK AND COME.		1	1	4	1	3	2	4	PVT, PGT established. Veg. propagation studies
5. SOUTH AMERICA EXCEPT COLOMBIA, VENEZUELA AND ECUADOR)	Volumente de la companya del companya del companya de la companya del la companya de la companya		Commence of the Control of the Contr	hanjilana kanilipus pi (perendi Asperanda da d									
Acacia bahiensis	1		1		1	2	,	2	2	3			
Acharas sapota	Security Company			1	2	2		2	7	2			Human food
Aniba duckei	A-PAPA-GRAND COMMISSION COMMISSIO	V			1	2	4	2	Application	2			(E) all range. Medicinal products
Araucaria angustifolia				Cadeshulanian	1	2	**	2	1	2	2	1	

							Öpi	eratio	ns/ Acti	vities			
SPECIES	End	use of	speci	ês	Explora & colle		Evalu	ation	Conse	rvation	Germp use	lasm	REMARKS
and the second s		2	3	4:	1 5	6	7	8		10	11	12	
A. araucana	1				2	2	2	2	1	2	2	2	
Aspidosperma polyneuron					24	quotis	4-	2	-	1			1000 C C C C C C C C C C C C C C C C C C
Austrocedrus chilensis	1		1		2	2	2	2	2	2	2	2	
Auxema oncocalyx	And the special state of the s			1	2	2	2	2	2	3			
Bactris gasipaes		1			2	1	2	2	2	1	dd) hangayy/vaal		Human food. PVT
Balfourodendron riedelianum	1				2	1	2	3	100	1			
Beilschmiedia berteroana	No. Organización de la companya de l		-										***************************************
Bertholetia excelsa	Sandjerrijskumaj krimum is Arrakaturovejs Kanadjerrijskumaj krimum is Arrakaturovejs Kanadjerrijskumaj ist istiliskum istorijskumaj istorijsku	s	sealantematerisseassessessessess		ender versche der	*	Anne	†	Amino.	aprender .	1	1	Human food, wood. Species of social importance
Britoa guazumaefolia	mily to deserve		-	✓	2	2		2	######################################	3			Human food
Brosimum glaziovii	And the second of the second o								Management (Arabico				
Bowdichia nitida	<i>y</i>				2	2		2	2	2			
Bumelia sartorum	e de company de compan			1	1	2		2	1	2	Section of the Control of the Contro		Medicinal products
Bursera leptophieos			1	1	3	2	2	2	2	2			
Caesalpinia echinata	/			1	2	1	3	1	3	1			(E)
Carapa guianensis	/			✓	2	4	2	*	2	1			Oils
C. legalis			***************************************		2	1	1	1	1	1			
Caryocar brasiliense		1	1		2	2	1	2	1	2	e circle	1	Human food
C. wriaceum			/	✓	2	2	2	2	2	2	2	2	Human food
Cavanillesia arborea	minto representativo de la composición del composición de la composición de la composición del composición de la composición de la composición de la composición de la composición del composición de la composición de la composición del composici		minute management of the state	1	2	2	4-	2	The state of the s	2	Ada talahan kanada da kanada d		
Cedrela fissilis			der kannada da	•		2	1	2	1	2	400	1	(E) in parts of range
C. odorata					2	1	ę.	1	4	1	***************************************	1	(E) all range. Overexploitation
Chlorophora tictoria					1		4		2		enanessassassassassassassassassassassassassa		(E) all range
Chloroleucon foliosum				ſ	3	2	3	2	3	2	Market Communication of the Co		
Citronella congonha			*	-	2	2	2	2	2	2	Single-envilonited		Medicinal use
Copaiferta langsdorfii			naswassamawa) an		2	2	2	2	ll 2	2		2	
Cordia alliodora			·messewesweso		2	2	2	2	2	2	2	2	
C. goeldiana			Messeremonia		2	2	1	2	4	2		- Personal	
c. goeidana Couepia schotii			demmeganishide		2	2	2	2	2	2	emploide de la constitue de la		
Couratari asterophora			Over a school section and a school section and a school section as		2	-	1		1	•	CHECK CONTROL OF THE		Endemic. PVT. Ex situ
D. nigra	/		d-Aprilmanninist.		A	1	1	1	1	1	nii www.comining.com		(E) all range
Dicypellidium caryophyllatum	Autor i po pari mentre		مامر مقدموا أمدمه ومراسم	1	2	2	1	2	1	2	Avolution		Medicinal products
Dipteryx alata	1	1	adminute (as dischar)		2	2		2	1	2	Andersonal		Human food
Euterpe edulis	Victoria (1	Assemble date the firm		1	1		1	1	2	2	3	Human food

							Op	eratio	ns/ Activ	rities			
SPECIES	End	use of	specie	es	Explore & colle		Evalu	ation	Conser	vation	Germp use	lasm	REMARKS
	1	2	3	4	5	6	7	8	9	10	11	12	
E. oleracea		1			1	· ·		1	2 ~	1	2	3	Human food
E. precatoria	no Deservation		-	1	2	2	2	2	2	2	2	2	
Fitzroya cupressoides	1				2	2	2	2	1	2	2	2	THE PROPERTY OF THE PROPERTY O
Gomoterka keule	1				2	2	2	2	2	2	2	2	and the state of t
Hynenaea courbaril	1				3	2	2	3	1	2	distriction of the control of the co		School Control
Jugians neotropica	/				*	2	To a second seco	2	1	2	THE COLUMN TWO IS NOT		(E) all range
Lecythis pisonis	/	1			2	2	2	2	1	2	Tristribe odrawii del		Human food
Malouetia arborea	1				2	2	2	2	2	2	A COLUMN TO THE PARTY OF THE PA		
Manilkara bidentata	/				2	2	2	2	2	2	2	2	sauman
Manihot glaziovii		1		1	3	2	3	2	3	2	4		VANCOUNTER 1
Marlierea edulis	***************************************			1	2	1	2	2	1	1	and the same of th		(E). Human food
Maytenus ilicifolia		1		✓	2	3	2	3	2	3			(E) all range. Medicinal use
Melanoxilon brauna	/		1		3	3	2	3	2	3			
Micropholis melinoniana	/				2	2	T.	2	2	2			(E)
Mimosa caesalpinifolia			1	1	3	2	3	2	3	2	2	2	
Myracrodruon urundeuva	1		/	1	2	1	2	2	2	1			200 L
Nothofagus alessandrii	/		***************************************		2	2	2	2	2	2	2	2	(E) all range
Ocotea catharinensis	/				Andrews Andrews	2	1	2	1	2	***************************************		(E) parts of range
Pachystroma longifolium			***************************************	1	2	2	2	2	1	2	***************************************		Medicinal products
Parinari brasiliensis	/		and the same of th		2	2	2	2	2	2			
Parkia platicephala	/				2	2	2	3	2	2			
Peltogine paniculata	/		and the same of th		\$0.00	2	4	2	4	2	-		(E) all range
Pilocarpus jaborandi	A de la companya de l	1			**************************************	2	ą.	2	aler and a second	2	And the state of t		(E) all range. Medicinal products
Pitavia punctata		1			2	2	4	2	desired the state of the state	2	2	2	
Plathymenia foluiosa	1		1	✓	3	2	3	2	3	2			
Pouteria psammophila			Association of the state of the		2	2	2	2	2	2			
Prosopis juliflora			1	1	2	2	2	2	2	2	2	2	
P. chilensis			1	1	2	2	2	2	2	2	2	2	(E) all range
Prumnopytis montana	1		***		1	2	1	2	1	2	***************************************		(E) all range
Quassia amara	1				2	2	2	2	2	2	2	2	Territoria de la constanta de
Quiina glaziovii	Marie de compression de la compression della com		- Topped and the Control of the Cont	1	2	3	2	3	2	3			Medicinal products
Schinopsis brasiliensis	1		***************************************		2	2	2	2	April	2	***************************************		ACCOUNTS OF THE PROPERTY OF T
Sophera teremire		I	***************************************		2	2	1	2	ų (na	2	2	2	(E). Carving
Stryphnodendron adstringens	interpretation for the			1	American Conference of the Con		2	2	2	2	2	2	(E)
Stylites andicola			Yanada wasana		2	2	2	2	2	2	2	2	
Swietenia macrophylla	/		volume-maked			2	4	2	1	2	3	1	(E) in parts of range

							Op	eratio	ns/ Act	ivities			
SPECIES	End	use ci	speci	ies	Explor & colle		Evalu	ıation	Conse	rvation	Germ; use	olasm	REMARKS
	1	2	3	.4	5	6	7.	8.	. 9	10	1.1	12	
: Śwartzia glazioviana	1				2	2	2	2	2	2			
T. cassinoides	/				2	†	2	2	Action (Controller	1		2	A Samuel Control of the Control of t
T. impetiginosa			1	1	3	2	2	3	2	2			**************************************
Thiloa glaucocarpa	1		1		3	2	3	2	3	2			The second secon
Virola surinamesis	1			1	2	1	2	2	1	1		Ť	
Vochisia maxima	1				2	2	2	2	de la company	2			1000
Zeyheria tuberculosa	1		1		2	*	1	1	1	1		1	
5. NORTHERN AND CENTRAL EUROPE	Pickers and the second and the secon				manyakhalanda da manyak								
Abies alba	1				2	2			2	2	**************************************		PVT. PGT. SO. (E) by pollution
raxinus excelsior •	/			1	PPP STATE OF	1			1	1			**************************************
luglans regia	/			1		3		3		3		3	Human food
arix sukaczewii	1					3		3	2		2	3	In Russia
licea abies	1				2	2		2	2	2	2	2	(E) by pollution in some regions, PVT, PGT, CLT.
Pinus sylvestris	1				2	3	3	3	3	3			Scotland
opulus nigra	1			1	2	2			2	2		2	
runus avium	1			1	2	2	2		2	2		2	
luercus robur	1			1	2	2	2	2	2	2		2	Northern Europe
axus baccata				1	. 1	1			2	2			Baltic
ilia cordata	1			1	2	2	2	2	2	2	1		
llmus glabra	1			1	2	2	2	2	2	2			Elm disease
I. laevis				1	4	d de	1	1	1	\$0000 MINISTER			
7. MEDITERRANEAN REGION, SOUTHERN EUROPE AND NEAR EAST	disservation of the control of the c	en per established de de construir de de construir de de construir de de construir		an ya weeze û Hêmînoo kewe new di adii.									
. marocana	***************************************	***************************************		1		2			2	2			-
. nordmanniana/bornmullariana	1	***************************************			3	2		2			2	2	
. numidica		bibilithresis male verera		1		1			1	1			(E)
. pinsapo	1	**************************************		***************************************		2		2	2				
cacia albida		and the second second	1	•	2	4	1	1		electric and the second second	1	1	
cacia nilotica		-	1	1	4000	1	1	1		***************************************	1		Int. PVT in progress
. saligna			1	1		1	1	1		Vacioni (Antino anno emp.	1	1	
. senegal		***************************************	1	1	1	1	1	1		American (market	1	1	
. tortilis (incl. ssp. raddiana)			1	/	No.	1	1	1		delite Andrein	1	where continued	Int. PVT in progress

							Opera	tion	s/ Activ	rities	•		
SPECIES	End us	e of spe	******************************		pration Hection	Ev	/aluatic	n	Conser	vation	Gerr use	nplasn	REMARKS
Markan di simundan salah di di simundan salah		2 a	4	5	6		7			10	1	***************************************	
Cedrus atlantica			1	2	2		2 2			e de la companya de l	1	2	
C. libani		elek erdimetek kilojopa a a musik dasi samisak kungga a a da a a da a	J	2	***************************************		2 2		1.	- Agreement of the state of the	2	2	
Ceratonia siliqua		distriction of the state of the	1	Aur	*	1	1			and the second	***************************************		
Cupressus atlantica	¥	tim pp blockitische designamenties successorentes		**	2		2		1		1	q mbu	(E) ? in parts of range. Drought and frost tolerant. Important for breeding
C. dupreziana C. sempervirens	*			1				Maria dalam della	1	And the second s	1	1	(E). Ex situ cons. stands. Breeding for resistance to Ceridium cardinale
	A Particular Control of the Control	Wile-jumiliari — parama	1	2	2	A CONTRACTOR OF THE PARTY OF TH	2					1	Breeding for resistance to Seridium cardinale
Gleditzia triachantos	Header in the control of the control			1	1.					7		1	The contract of the contract o
Inglans regia			/	2						3		2	
Picea omorika	1		1		2					2			In situ cons. stands
Pinus brutia		4440 A	1	3	2.		2	***************************************			****	1	Int. PVT. Further sampling desirable
P. eldarica	*		The contract of the contract o	2	1		2		1	1	2		Int. PVT. (E) some
P. halepensis	*		1										provenances Int. PVT
P. laricio mauretanica	/	***************************************	***************************************		1					1			(E)
P. pinaster	1	- Company	1	2	1		2			1	1	1	Int. PVT
^p . pinea			/	2	2		2			,	1	4	mit. PV i
Platanus orientalis	density and the second		/	1					2		1	•	} #* \$ **
Prosopis cineraria	Annie de la companya	1	✓ 	1	1	1	1		1		2	2	(E) ? some provenances
luercus aegilops		/							2		4	۷	
1. suber				2	2	2	2		_	***************************************	2	2	
etraclínis articulata	NAME OF THE PROPERTY OF THE PR	The second secon	*	1	Pro-	1	1	4	2 2		Æ.	۷	
llmus wellichiana		***************************************			ван моралания принада			1	Ì				(E)
. SOUTH AND EAST ASIA XCL. CHINA AND INDIA		organization and the state of t	And the second s		mental Administration		***************************************						
cacia auriculiformis	/	1	Neikannyi ya maka ya Kata ya K		And the second	1	Toront Constitution of the	1	al de la companya de		76	1	line through the
. catechu	1 1	1	,	1	7-	1	·	1				H	Int. PVT in progress
cressicarpa		1		1	West of the second	1	1		1	II.	2 2		MPTS for farmers
mangium		✓ ,			de de la companya de	2	med de George (A) (A) de immer konstrukt (A)	que	Ĩ	merekkilapiyanindi digiri yamana balijigayanina bar B. A. Beldari A. Ilipoyanindi digiri yamana yamani yamani B. A. Beldari A. Ilipoyanindi digiri yamani yamani	£	To a second seco	PVT in progress Int. PVT in progress. Need for resistance selection. Work on hybridization (with A. auriculiformis) needed

				a constant of			Op	eratio	ns/ /	Activit	ies			
SPECIES	End u	ise of	specie	S	Explora & collec		Evalu	ration	Co	nserva	ation	Germpla use	ism	REMARKS
		2	3	4	5	6	7	8		9	10	11	12	
Afzelia xylocarpa			✓		t-re-	N.		1			1	2	2	Construction and furniture purposes
A <i>gathis</i> spp.	/		1		1	1	A CONTRACTOR OF THE CONTRACTOR	*			**	2	1	Indonesia and Malaysia
Alstonia scholaris	/		/	1	2	2	2	2	Opinelia internati	2	2	2	2	
		1	/		1	4	1	1		1	4	1	1	Medicinal products
Aquilaria spp. Artocarpus heterophyllus	in the second se	1	1	1	2	2	2	2		2	2			Excellent MPTS, used on farms. Need for trials on farms
· · · · · · · · · · · · · · · · · · ·			1	/	2	2	2	2	***************************************	2	2	1	2	Int. PVT in progress
Araucauria cunninghamii				1	2	2	2	2	in the last	2	2	1	2	Int. PVT in progress
Araucauria hunsteinii Azadirachta indica (incl. vat.	1	1	1	1	gara- gara-domandaris-pi-pin	1	****	1		2	7	do	1	Int. PVT in progress
excelsa) Bamboo	/	1	1	1	A Total Control of the Control of th	ques	1	1		1	1		1	Coperation with INBAR. Excellent MPTS
Bombax ceiba	/		1		3	3	3	3		3	3	2	2	Important on-farm tree species
Broussonetia papyrifera	·		-		2	2	2	. 2		2	2	2	2	Important on-farm tree species
Cassia siamea	/	1	1	1	2	2	2	: 2		2	2	According to the state of the s	2	For dry areas within the region
				1	***	quin		1		1	1	2	2	Int. PVT in progress
Casuarina equisetifolia				1		1		1		1	1	-	2	Int. PVT in progress
C. junghuhniana				*	1	1		1		1	1	2	2	Excellent wood
Dalbergia cochinchinensis					A. P.	a a				1	1	2	2	Excellent wood
D. latifolia Dipterocarpus alatus	**************************************			J	Annual An	w				1	1	Wilderman	***	Excellent wood for construction and veneer purposes
			1,		1	40		1		1	1	1	1	(E). Gum
Dyera costulata		,	1,		2	2		3	3	3	3	3	3	Construction wood
Endospermum malaccensis					400	1			1	1	1	1	1	Construction wood
E. peltatum Eucalyptus camaldulensis	.					*			Annual Control of the		1	1	1	Int. PVT in progress. Wo on hybridization needed
		,		,	1	1	Annual of the second	1	The state of the s	1	1	1	2	Int. PVT needed
E. deglupta		,		,	2	2	Annual Vision	2	2	2	2	1	1	Promising species trials
E. pellita E. urophylla		, , ,	, ,	, ,		1		1	1	Q anner	1	To the state of th	1	Int. PVT in progress. We on hybridization needed
	Souther post distribution of the control of the con		***************************************	,	2	2	megapying distribution declared	2	2	2	2	1	*	
Gmelina arborea Hopea odorata		<i>(</i>	and the second second second second	, ,	· *	1	washing of	1	4	4	400		1	1 405
Leucaena leucocephala	Astalomente professioni del mante de	/ .	/ .	, ,	/ 2	i ti	A CANADA A CANADA HA CANADA A		deren	**************************************	desc	Vandamana et al didiri vi damana por vi damana et al didiri vi damana por vi damana et al didiri vi damana por vi damana didiri damana di	ye.	MPTS. Need for selection for psyllid resistence

	Transcription of the state of t						Οp	eratio	ns/ Act	ivities			
SPECIES	End	use of	fspec	ies	Explora & colle		Evalu	uation	Conse	rvation	Germp use	lasm	REMARKS
	The state of the s	2	3	4	5	6	7.	8	9	10	1 1	12	
Paraserianthes falcataria	*	J	of the state of th	√	2	apour .	2	1	1	1	1	· Para	Excellent wood for furniture and veneer purposes. Use on-farm
Parashorea stellata	- J		1		2	2	2	2	2	2	1	*	
Parkia javanica		1	1	1	3	3	3	3	3	3	2	2	MPTS
Parkia speciosa		✓	1	1	4000	1	1	1	1	1	-	*	MPTS
Peltophorum dasyrachis	maryanaman na arganjan naga maryanaman na arganjan naga		As along the quadrantees	1	1	· ·	1	1	1	1	1,	2	Promising MPTS (pioner species)
Peronema canensis	1		*		1	1	1	1	1	1	1	1	Promising MPTS
Pinus kesiya	1	1	/			1	1	1	1	1	1	1	Priority species for ASEAN
Pinus merkusii	/	1	1		1	1	1	1	1	7	1	1	Priority species for ASEAN
Pterocarpus indicus	And the state of t		·		***	4	1	disease.	***************************************	1	2,000 y	Î	Excellent for construction purposes. Priority species for ASEAN
P. macrocarpus	A Company of the Comp		1		glanci	giver .	1	4	*	î	electronic management (electronic management)	. evends.	Excellent for construction purposes. Priority species for ASEAN
P. marsupium	1		1		1	1	1	1	1	1	monweasoned	1	
Rattan	The state of the s	1	The same of the sa	✓	**************************************	1	April Carried Control	7	1	1		***	(E) in parts of range. Coperation with INBAR, MPTS
Rhizophora spp.	A CONTRACTOR OF THE PROPERTY O	1	**************************************			1	, we will		1-1	4	q	· Province	Some populations threatened by aquaculture in the region
Santaium əlbum	-	1	1		4	2	1	2	1	2	1	1	Promising MPTS
Shorea spp.	/		·	**************************************	Acceptance of the second secon	1	week, week,	1	norm	1	1	· ·	Potential hardwood for construction purposes.
Swietenia spp.			vertical and a second a second and a second	1	7W							1	
Tectona grandis	/		1		1	Ą	1	Î	- donne	1	· ·	1	Very important species
9. NORTH, NORTH-EAST AND CENTRAL ASIA INCL. CHINA AND INDIA			Westernament of the state of th	финальний получений получ	VALUARIAN AND THE REAL PROPERTY AND THE REAL	лания сындала од фанциолупиција							
Abies beshanzuensis	/				3	3	3	3	2	3	2	3	China. (E), a few trees left
A. chensiensis		1		1	3	3	3	(3)	2	3	3	3	***************************************
4. delavayi	1	1	1	/	2	2	2	2	2	3	3	3	The state of the s
A. ernestii	1	1	J	1	2	2	2	2	2	2	3	3	
4. fabri	1	1	J	/	3	3	3	3	3	3	3	3	
A. firma	1	w	1	w.	†	-	1	1	2	3	1	1	
1. georgei	1		1	1	2	2	2	2	2	2	2	2	
A. holophylla	Vide udoseavement seascem	*	1	<i>,</i>	2	2	2	2	2	2	2	2	Important for greenery and Christmas tree growing. Tolerant to frost

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							Op	eratio	ns/ Acti	vities			
SPECIES	End (use of	speci	es	Explor & colle		Evalu	ation	Conse	rvation	Germp use	asm	REMARKS
	1	2	3	4	5	6	7	8	9	10	11	12	
A. nephrolepis		1	-	\$	2	2	2	2	2	2	2	Z.	Important for greenery and Christmas tree growing. Tolerant to frost
A. kawakamii	/				3	3	3	3	3	3	3	3	
A. pindraw	America Company of the Company of th		ummarino casada	1	(°)	3	3	3	2		Appendity delically decided and appendity delically decided and appendity delically decided and appendity delically decided and appendity delically delicall	3	India. Hybrid populations occurring
A. sachalinensis	/		Samuelan de la constante de la	1	Aveniment version and a service servic	2	2	2	7.0	2	and the contract of the contra	2	Important for greenery and Christmas tree growing. Tolerant to frost
A. sibírica	1	1	1	1	3	3	1	3	2	2	Quier Remainsoppings on	2	
A. spectabilis	V. come Annualization de company		•	1		3	2	3	2	2	(*)	3	India. Hybrid population occurring.
A. veitchii	/	1		✓	3	3	2	3	2	2	3	3	Japan
A. yuanbaoshanensis				1	3	3	3	3	2	2	3	3	China
A. zíyuanensis				1	3	3	3	3	2	2	3	3	China
Acacia nilotica	1	1	/	1		***		3	1	1	1	1	India, Gums
A. senegal			1	✓	4	1		3	†	4	1	1	
A. catechu	/	1	1	1	2	2	2	2	2	2	2	2	China and India
A. tortilis			1	1	1	1	1	4		- turc	1	4	
Acer buergerianum	/	1		1	3	3	3	3	3	3	3	3	
A. palmatum		1		1	2	2	2	2	3	3	3	3	
A. oblongum	/			1	2	2	2	2	3	3	3	3	
A. truncatum	/		***************************************	1	2	2	2	2	3	3	3	3	
Albizia alata	1	1	***************************************	1	· ·	1	*	1	1	1	1	1	India
A. chinensis	/	1	1	1	2	2	2	2	2	2	2	2	
A. lebbek	/	1	1	1	1	Ŧ	1	1				1	India
A. procera	/	1	1	1	1	1	3	3	*	1	1	î	India
Alnus cremastogyne		1	1	1	2	2	2	2	qua.	1	1	**	Pioneer, fast growing
A. daurica		1	1	✓	1	1	į	1	2	2	1	1	
Å, formosana	/	1	1	<i></i>	4	1	1	1	2	2	1	de de	
A. japonica	-	1	1	1	2	2	- 2	2	The second	7	1	1	China, Japan, Korea
A. nepalensis	*	1	1	1	1	1	1	1	Ī	V	1	1	
A. mandshurica		1	<i>y</i>	1	1	2	2	2	1	Ç-our	Queen (Queen (Qu	á	Nitrogen fixing in cald regions
A. sibirica	-	1	1	1	2	2	2	2	2	2	2	2	- Anna Anna Anna Anna Anna Anna Anna Ann
A. trabeculosa	1	1	1		2	2	2	2	2	2	2	2	v delenio de la companio de la compa
Amentotaxus yunnanensis	1	a.per		/	3	3	3	3	2	2	2	2	China
Anthocephalus chinensis		1			2	2	2	2	2	2	2	2	***************************************

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SPECIES	End	use of	speci	es	Explora & colle		Evalu	ation	Conse	rvation	Germp use	lasm	REMARKS
	1	2.	3	4	5	6	7	8	9	10	11	12	E de la companya de l
Aquilaria spp.	-	1	de des il muse de sembles de motor des des de la constante de	ď.	· (*)	que en			- Price - Pric	· end	2	2	Overexploited, poor regeneration, reclacitrant seeds
Azadirachta indica	/	1	1	1	7	*****	***************************************	1	Accountant Accountant	1	1	1	Int. PVT initiated
Bamboo	-	1	1	J	Appropriate Approp		1	di i	Workstanderschaften and de school of the sch	1	4	7	(Bambusa, Dendrocalamus spp.)
Betula chinensis	1	1	1	1	3	3	3	3	(3)	3	3	3	
B. luminifera	/	1	1	1	3	3	3	3	3	3	3	3	A STATE OF THE STA
B. penduía	1	1	1	1	3	3	3	3	***************************************	1	1	1	documents
Bombax ceiba				1	1	1		1	**************************************	1	1	1	India
Boswella serrata	/	1	1	1	1	4	4	1	A to the state of	1	1	1	India. Overexploited.
Calycanthus chinensis				✓	3	3	3	3	3	3	1	1.	China
Camellia oleifera				1	2	2	2	2	2	1	1	1	Valuable oil, Japan
Canarium album	,	1	1	1	2	2	2	2	2	2	2	2	Fruit, Chína
C. pimela	1	1	1	1	2	2	2	2	2	2	2	2	
Carya cathayensis	1	✓	1	1	2	2	2	2	2	2	2	2	Nut
Castanea henryi	1	1	1	1	2	2	2	2	2	2	2	2	Management of the Control of the Con
C. mollissima	1	1	Í	1	2	2	2	2	3	3	1	1	Nut, many varieties
Casuarina equisetifolia (exotic)	1	1	1	1	2	2	2	2	2	2	2	-2	India. Breeding in China
C. glauca (exotic)	1	1	1	1	1	1	1	1	4	1	1	1	Chína
C. junghuhniana (exotic)	1	1	1	1	1	1	1	1	4	1	1	1	China
Cercidiphyllum japonicum	1			1	1	Ĩ	1	1	1	†	1	1	(E) China, protected
Chamaecyparis formosensis	/	1	1	1	3	3	3	3	**************************************	1	1	1	China
C. obtusa	1	1	1	1	1	1	1	1	**************************************	1	1	1	PVT, SO in Japan
Choerospondias axillaris	1	1	1	1	2	2	2	2	2	2	2	2	
Chosenia arbutifolia	/	1	1	1	2	2	2	2	2	2	2	2	
Chukrassia velutina	/				- Process	1		2	Accompanies and a second	1	***	1	India. (E) some provenances
Cinnamomum camphora	1	1	1	1	2	2	2	2	2	2	2	2	Over exploited
C. cassia	1	1	1	1	3	3	3	3	2	2	2	2	Accompany of the Control of the Cont
Craigia yunnanensis	1	1	1	1	3	3	3	3	3	3	3	3	China
Cryptomeria fortunei	1	1	1	1	2	2	3	2	2	2	2	2	
C. japonica	1	1	1	s	2	2	2	2	acon de company	4	1	1	PGT, SO in Japan
Cupressus chengiana	1	1	1	1	3	3	3	3	2	2	2	2	4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.
C. duclouxiana	1	1	1	1	2	2	2	2	2	2	2	2	Tababahania da marin mar
C. funebris	1	1	1	1	2	2	2	2	2	2	2	2	
C. gigantea	/	1	1	1	3	3		1	4 mm	1	1	1	China

					America (Maria		O	peratio	ns/ Act	ivities			
SPECIES	End	use o	fspec	ies	Explor & colle		Eval	uation	Conse	ervation	Germt use	olasm	REMARKS
	. 4	2 -	3	4	5	6	7	8	9	10	11	12	
C. torulosa	1	1	/	J	1	of f	1	· ·	gradu - gradu	**************************************	1	**	India. Soil binding timber species for dry exposed sites.
Cunninghamia lanceolata	1	1	1	1	2	2	2	2	4-07	No.	1	***	
C. konishii	s	1	1	1	2	2	2	2	2	2	2	2	Taiwan
Cycas micholitzii				1	3	3	3	3	2	2	2	2	China
C. panzhihuaensis				1	3	3		1	2	2	2	2	China. (E)
Dacrydium pierrei	1	1	1	1	2	1	1	2	7	1			China. (E)
Dalbergia balsamae	1	1	1	1	2	2	2	2	2	2	2	2	
D. latifoiia	/	1	1	1	7	1	1	N. Marie	1	1	1	1	India
D. odorifera	/	1	1	I	2	1	1	2	1	1	1	1	China, rare
D. obtusifolia	1	1	1	1	2	2	2	2					CATALON CONTRACTOR CON
D. sissoo	1	1	1	1	1	1	1	1	-	1	1	4	India, genetic variation
Davidìa involucrata	/	4		1	3	3	1	1	****	and the same of th			China, endemic and rare
Dipterocarpus spp.	1		1	1	1	4	2	2	1	1	4	1	India
Dipteronia dyeriana	1	1		1	3	3	2	2	3	3	3	3	China
Duabanga grandiflora	/	1	1	1	3	3	3	3	2	2	2	2	And the state of t
Elaeagnus angustifolia	1	1	1	1	1	1	1	1	4	1	1	1	-
Erythropholeum fordii	1	1		1	2	2	2	2	2	2	2	2	THE CONTRACT OF THE CONTRACT O
Eusideroxylon spp.	*				· proces	1			1	1			Overexploited, very slow growth, recalctrant seeds
Eucalyptus spp.	Water Control of the	1	<i>*</i>	•	ęjiew	**************************************	document of the second of the	*	2	2	400	1	Mainly E. globolus, E. grandis, E. tereticornis, E. camaldulensis, E. urophylla. China and India
Eucommia ulmoides	A State of the Control of the Contro	1	1	✓	2	4000		2	*	quan	· · · · ·	1	Monogenus. Endemic to China. (E). Chinese herbal medicine
Fagus longipetiolata	/	1	1	1	2	2	2	2	2	2	3	3	
Firmiana major	/	1	1	1	3	3	2	2	3	3	2	2	China
Fokienia hodginsi	- Lucidani de la companio del companio de la companio de la companio del companio de la companio del companio de la companio de la companio del companio de la companio del c	ď	J	/	1	4	4-1	ą.	1	december to the control of the contr	4	1	Endemic to China. Monogenus
Fraxinus chinensis	/	•	I	1	2	2	2	2	. 2	2	2	2	
. chinensis var. rhychophylla	1		1	/	. 2	2		2	2	2	2	2	
raxinus mandshurica	/	TO TO THE PARTY OF	J	1	2	1	2	2	1	1	1	4	PVT
. sieboldiana		/	1		2	2		2		description of the second of t			
Sinkgo biloba	1	-	I	/	2	2	1	2	1	anning and the state of the sta	*	· ·	Seed used for human food and for medicine
Gleditsia sinensis	/	1	1	1	2	2	2	2	2	2	1	1	
Glyptostrobus pensilis				/	2	que en	2	1	1	grand make an objective and ob	1	1	(E)
Smelina arborea	1		1	/	1	1	1	7	1	4	19	î	Int. PVT

							Qρ	eratio	ns/ Acti	vities	·····		
SPECIES .	End	use of	speci	es	Explor & colle		Evalu	ation	Conse	rvation	Germp use	lasm	REMARKS
	1	2	3	4	. 5	6 -	7	8	9	10	11.	12	
G. hainanensis	1	1	/	✓	2	2	2	2	2	2	2	2	
Gonystylus spp.	V				73)	3			g-Prov	3			Overexploited, poor regeneration, recalcitrant seeds
Haloxylon ammondendron		1	1	1	4	1	4	*	2	2	2	2	Central Asia. Cold areas
H. persium		1	1	1	1	**	1	q' S	2	2	2	2	Central Asia. Cold areas
Holorelea spp.	1		1		1	1	2	2	1	1	1.	1	India
Hopea spp.	1	1	1		3	1	2	2	1	1	2	2	China
Hovenia dulcis	1	1	1	1	1	1	2	2	1	1	1	1	India
Illicium verum				1	2	2	2	2	1	1	1	1	China. Medicine and spice
Juglans cathayensis	1	1	1	1	2	2	2	2	1	1	1	1	
J. mandshurica	1	1	1	1	2	2		2	2	2	1	1	
J. regia	1	1	1	1	1	1	1	1	1	1	1	1	Himalayas. Nuts
J. sigillata	1	1	1	1	2	2	2	2	1	1	1	1	Many cultivars
Ketaleeria davidiana	1	1	1	1	3	3	2	2	3	3	2	2.	China
K. pubescens	/	1	1	1	2	2	2	2	3	3	1	1	PVT. Fast growing, good timber species
Koompassia malaccensis	*				3	3	Angel by (analysis the samp) (c) (money		²	3			Overexpoited, poor regeneration, recalcitrant seeds
Larix griffithiana	/	1	1		Account of the second of the s	*	2	2	40000	3	2	2	Rare. Restricted distribution Sikkhim, Hepal Himalayas
L. gmelini	1	1	1	1	2	2	2	2	2	2	1	1	PVT, SO
L. leptolepis	1	1	1	1	1	1	1	1	1	- Post	1	1	PVT, SO
L. olgensis (syn. L. gmelini var. olgensis)	1	1	1	1	2	2	2	2	²	2	2	2	Important for hybridization
L. potaninii	1	1	1	1	2	2	2	2	2	2	2	2	PVT, SO .
L. sibirica	1	1	1	1	1	1	1	1	2	2	2	1	Work in progress. China
Liriodendron chinense	1	1	1	1	7"	4	A THE RESIDENCE OF THE PERSON	1	2	2	1	1	Hybridization
Liquidamber formosana	1	J	1	1	2	2	2	2	2	2	2	2	
Madhuca hainanensis	1	1	1	1	3	3	2	2	quite quite	1	3	3	China. Rare
M. indica	1	✓	1	s	3	3	2	2	No.	4000	3	3	India
Magnolia officinalis	/	1	1	1	2	2	2	2	2	2	1	1	China. Medicine
Malus komarovii	1	1	1		3	3	2	2	3	3	3	3	China
M. sieversii	(C)		Andrewson de Carlos	1	3	3	2	2	3	3	3	3	China
Mangifera persiciforma	1	1	1	1	2	2	2	2	2	2	2	2	
Mangifera spp.	1	1	1	1	*	1	1	1	4	1	1	1	Timber and ornamental tree
Manglietia aromatica	1	1	1	1	3	3	3	3	3	3	3	3	China
M. fordiana	1	1	1.	1	2	2	2	2	3	3	3	3	

				***************************************			Op	eratio	ns/ Acti	vities			
SPECIES	End	use of	speci	es	Explor & colle		Evalu	ation	Conse	rvation	Germp use	lasm	REMARKS
	1	2.	3	4	5	6	7	8	9	10	11	12	
M. glauca	1	J	1	1	2	2	2	2					
M. patungensis	1	1	1	1	3	3	3	3	3	3	3	3	China
Melia azedarach	/	1	1	1	1	1	2	2	3	3	2	2	
M. toosendan	1	1	1	1	1	1	1	1	3	3	2	2	THE COLORS OF TH
Mesua ferra	1		1	1	1	1	1	1					TRANSPORT
Metasequoia glyptostroboides	1		1	1	*	1	2	1	3	3	3	2	Living fossil, China
Michelia spp.	1	1	1	1	2	2	1	2	2	2	2	2	000000000000000000000000000000000000000
M. wilsonii	1	1	1	1	3	3	2	3	3	3	2	2	China
Moringa oleitera	1	1		1	+	1	1	1	1	1	1	1	India. Agroforestry
Mytilaria laosiensis	1	1		1	2	2	2	2	2	2	2	2	
Neobalanocarpus heimii	/		- CHIEF CONTRACTOR CON		3	3			A	B			Overexploited, poor regeneration, recalcitrant seeds
Nyssa sinensis	1	1	1	1	. 2	2	2	2	3	3	3	2	
N. japonica	1	1	1	1	2	2	2	2	2	2	2	2	Topic Control of the
Ormosia henryi	1	1	1	1	2	2	2	2	1	don	2	2	Over selected
O. hesiei	1	1	1	1	2	2	2	2	1	1	2	2	A THE STATE OF THE
O. macrophylla	1	1	1	1	2	2	2	2	1	1	2	2	
Parashorea chinensis var. kwangsiensis	1	1	1	1	3	3	2	3	- April	· Province			China
Paulownia elongata	1		1	1	1	1	1	1	2	2	2	2	Work in progress. China
P. fortunei	1		J	1	1	1	1	1	2	2	2	2	
o, tomentosa	1		1	1	1	1	1	*	3	3	1	2	non-money and management of the second
Phellodendron amurensis	1	1	1	1	2	2	2	2	1	1	2	2	Timber and medicine
Phoebe nanmu	1	1	I	1	2	2	2	2	1	1	2	2	99101111111111111111111111111111111111
Picea asperata	1	1	1	V	2	2	2	2	2	2	2	2	
o. brachytyla	1	1	1	1	2	2	2	2	2	2	2	2	
o, brachytyla var, compianata	1	1	1	1	2	2	2	2	2	2	2	2	
^o , grassifolia	/	1	1	1	2	2	2	2	2	2	2	2	
P. jezoensis	1	1	1	•	2	2	2	2	*	4***	1	1	Breeding in China, Korea and Japan
, koraiensis	1	1	J	1	2	2	2	2	1	ę.	1	- Arrest	
P. likiangensis	1	1	1	1	2	2	2	2	2	2	2	2	
P. meyeri	1	1	d.	1	2	2	2	2	2	2	2	2	
² . schrenkiana	1	S	1	1	2	2	1	1	1	4	quer	1	Protected, NW China
P. wilsonii	1	1	1	1	2	2	1	1	1	7	d.	1	
Pinus caribaea var. bahamensis	1	1	1	Í	2	2	1	1	1	1	1	1	PVT, PGT in China
P. caribaea var. caribaea	1	1	1	1	2	2	1	1	1	1	1	1	PVT, PGT in China

						· · · · · · · · · · · · · · · · · · ·	Oı	peratio	ns/ Act	ivities			
SPECIES	End	use o	f spec	ies	Explor & coll		Evalı	uation	Conse	rvation	Germi use	olasm	REMARKS
		2	3	4	5	6	7	8	9	10	4.5	12	
P. dabeshanensis	/	1		1	3	3	3	3	3	3	3	3	China
P. densata		1	1	1	2	2	2	2	2	2	2	2	
P. gerardiana	and dy from the five manufacture and a state of the state	J	American de	1	Ymann	400	CONTRACTOR		1	4	Action of the control	· ·	India, restricted to two dry valleys of inner Himachel Pradesh
P. densiflora	, .	✓	, de la constitución de la const	✓	2	2	2	2	1	1	1	1	PVT in Japan, S. Korea x P. massoniana
P. fenzeliana	/	1	1	1	3	3	3	3	3	3	3	3	The state of the s
P. kesiya	A CONTRACTOR CONTRACTO	1	1	1	*	**	Q eloni	1	1	1,	1	of the state of th	China, India. (E) some provenances
P. koraiensis	**	1	1	•		1	ą.	å	**************************************			1	(E) in parts of range. Protected in China
P. massoniana	1	1	1	1	1	1	1	1	1	1	1	1	China, PVT, PGT, SO
P. merkusii	1	1	/	/	1	1	1	1	2	2	7	2	
P. morrisonicola	/	1	1	✓	2	2	2	2	3				
P. pentaphylla	<i>'</i>			✓	- Actions	***	2	2	Ten	4	3	3	(E) in parts of range. Some occurrences in Japan protected
P. parviflora	1		1	/	2	2	2	2	2	2	2	2	
P. pumila			1	1	2	2	2	2	2	2	3	3	
P. roxburghii	1	1	1	1	1	1	1	1	2	2	1	1	India. Resin producing
P. sylvestrís var, mongolica	1	1	1	1	1	7	1	gen-	2	2	1	2	China. PVT, PGT, SO
P. tabulaeformis	1	1	1	/	†	1	2	2	1	1	1	1	China. PVT, PGT, SO
P. taiwanensis	1	1	1	v	2	2	2	2	2	2	2	2	
P. takahasii	1				2	2	2	2	3	3	3	3	
P. thunbergii	1	1	1	/	2	2	2,	2	2	Ť	1	1	Japan, PGT, SO
P. wallichiana (syn. P. griffithii)	*		J	\	3	***	3	3	1	Q wider	3	3	India. Vigorous regeneration
P. wangii	1		J	1	3	3	3	3	3	3	3	3	China
^p . yunnanensis	1		1	1	1	1	*	1	Yelon	qua.	· ·	7	PVT, PGT, SO
Pistachia chinensis	1		1	1	2	2	2	2	2	2	2	2	
^o . vera	1			1	2	2	2	2	2	2	2	2	Human food (nuts)
Platycladus orientalis	1		1	1	2	2	2	2	2	2	2	2	Species for semi-arid areas
Platycarya strobilacea	1		1	1	2	2	2	2	2	2	2	2	
Podocarpus nagi	1		1	1	2	2	2	2	2	2	2	2	
Populus ciliata	1				2	2	2	2	2	2	2	2	India. Himalayas.
?. deltoides	1	- The second sec	1	/	2	2	1	*	1	1	1	1	India
. euphratica	V	in the second se	1		1	\$ poses	1	1	1	1	1	do.	China. Dry areas
, koreana			1	/	2	2	2	2	2	2	3	3	
. maximowiczii	1		1	/	2	2	2	2	2	2	2	2	

							Ор	eration	s/ Activ	vities			**************************************
SPECIES	End u	ise of	specie	es	Explora & colle		Evalu	ation	Conser	vation	Germp use	lasm	REMARKS
		49.1 4.	3	4	Chi.	6		8	9	10	11	12	
P. simonii		***************************************	1	J	2	2	2	2	2	2	2	2	\$\frac{1}{2}\tau_{\text{constraints}}\$
P. suaveolens	/		1	1	2	2	2	2	2	2	2	2	Taranteen Control of the Control of
P. tomentasa			1	1	2	2	2	2	2	2	2	2	Endemic to China
P. ussuriensis	1		1		2	2	2	2	3	3	3	3	
P. yunnanensis	1		1	1	3	1	1	1	1	1	1	1	and the control of th
Prosopis spp.	1		1	1	1	2	2	2	2	2	***	1	
Prunus amygdalus				1	2	2	2	2	1	1	# P P P P P P P P P P P P P P P P P P P	4	Nut for arid areas
Pseudolarix amabilis	1		1	1	1	-	1	1		1	1	*	Protected in China
Pseudotaxus chienii	/		1	1	3	3	3	3	1	*	Quadrature (Control of Control of	1	Over exploited
P. brevitolia	٧.			1	3	3	3	3	1	1	Q-line	Î	Over exploited
P. gaussenii	1		/	1	1	*	1	1	1	2	2	2	-
P. sinensis			1	1	1	1	1	1	1	2	2	2	
Pterocarpus spp.	/		1	1	1	1	2	2	1	1	Warn Arten	40000	
Pterocarya paliuras (syn. Cyclocrya paliurus)	/		1	1	2	2	2	2	1	1	Manager and a second	1	
Quercus mongolica		1	1	1	2	2	***	2	1	1	1	1	
Q. variabilis		1	/	1	1	1	2	2	1	1	1	· ·	
Rhododendron spp.			1	1	***	1	2	2	1	1	1	1	Rich in SW China
S. matsudana		1	1	1	2	2	2	2	2	2	1	1	
S, mongolica		1	1	1	2	2	2	2	2	2	1	1	
Santalum album	/		1	1	1	1			1	1	1	1	India
Sapium sebiferum	/	1	1	1	2	2	2	2	2	2	1	1	China, MPTS
Sassafras tzumu	/	1	1	1	2	2	2	2	2	3	1	2	
Schima superba	1	1	1	1	2	2		2	in the suppose of the				Fire protection
S. wallichii	1	1	1	1	2	2		2	dia di cara				- And Advanced Property of the Control of the Contr
Sciadopitys verticillata	/	1	1	1	2	2		2	umanivi vidalidinasi see				Ornamental plantings
Sesbania spp.			1				www.manushina.co		the state of the s				
Shorea assamica	1	1	1		3	3	3	3	3	3	3	3	India
Shorea spp.	1	1	1	J	1	1	1	1	*	No.	1	dem	India, China
Sinowiisonia xylocarpa	O COMPANY AND A STATE OF THE ST			J	3	3		3	(5)		And the second s		China
Syzygium cumini	**************************************		-	1	goro:	1		2	gii	Almos	3	1	India. High genetic variation, polyembryony chromosomal races
Taiwania cryptomerioides	/	1	1	1	2	2	2	2	*	1	2	2	(E), Taiwan, China
T. flousiana	1	1	1	1	1	**	4	ę	1	1	1	1	(E), China, PVT
Tectona grandis	-		1	1	1	1	1	. desirely	######################################	1	1	1	
Terminalia spp.			1	1	1	1	2	2	1	1	4000	Ť	India
Thuja sutchuenensis					3	3			3	3			China

				***************************************			()perati	ons/ A	ctivities		***************************************	
SPECIES	En	d use	of spe	cies		oration llection	Eva	luation	Cons	ervation	Gerr	npiasm	REMARKS
	- II. 9	2] 3	4	1 5	6	5	8	9	10.	11		
Tilia amurensis		•	1	/	2	2	2	2	1 2	2		1	
Toona microcarpa	/	1	1/	1	*	1	1	****	2	2		1	MPTS
T. sinensis	/		1	1	1	1	are a	1	2	2		1	Marie 10
T. sureni	1				1	4		1	2	2		1	and the state of t
Torreya grandis	1	1	1	1	2	2	2	2	1	aprox.		1	Nut
T. jackii	1	1	***************************************	1	3	3	2	2	3	3	3	3	1000
Trochodendron aralioides	1	1	1	1	3	3	2	2	1	1	1		China
Tsooniodendron odorum	1	1		1	3	3	2	2	4	1		***	China. Monogenus
Tsuga chinensis	/	1	1	1	2	2	2	2	2	2		1	China. Monogenus
T. dumosa			1	1	1	1	1	1	1	ų. √	3	3	
Ulmus laevis	1	1	1	/	2	2	2	2	2	2	3	1	India. Eastern Himalaya
U. japonica	/	1	/	/	2	2	2	2	-	Ł	3	3	And the second s
U. macrocarpa		1		/	2	2	2	2	1	4	3	3	and the same of th
U. parviflora	1	/	/		2	1	2	2	1	1	2	2	
U. propingua	/	1			2	2	2	2		1	2	2	
Vatica guangxiensis		1			*	1	1	1	2	2	2	2	
V. hainanensis		/		,	2	2	2	2	1	1	1	1	China. Tropical rain forest
Xanthoceras sorbifolía	E Commercial Commercia	1			2	2	1		1	1	1	**	China. Tropical rain forest
Zelkova schneideriana		/			2	2	2	1	1	1	4	1	For oil in arid area
Zenia inidignis		/	1		2	2		2	2	2	Your	K rone	Breeding in Japan
		-		**************************************	۷.	-	2	2	- Anna	**************************************	1	· ·	Endemic to China
O. AFRICA						A CONTRACTOR OF THE PERSON OF							
cacia auriculiformis (exotic)	/		1	Total de la constante de la co				2			3	3	Prov. collection
, crassicarpa (exotic)	/					2		2		***************************************	3	3	* TOV. CONECUON
. erioloba			1	/		econgramacy company economic populations	3	1		And in the second	<u> </u>	~	PVT in progress
. holosericea (exotic)	***************************************		1	/		Marchine Special States		2			2		Prov. collection
. karroo			1	/			1	1			2		PVT in progress
. mangium (exotic)	1							2		***************************************	2	7	r v i in progress
. nilotica			1	1	2	3	1.	4			2	3	2
	Accommondation of the control of the			er en		ener užberojimanna ipomo		Май-Муссия в вей областу градицийся в проблем причения в полительной причения в		de la constitución de la constit	۷.,		Int. PVT in progress, W. Africa to be completed. Problems with natural regeneration
polyacantha	Notice of the control	**************************************	1	/	2	2		2		Анган Ониванска Небольска медалога		Manage of the second	goneraliti
senegal		1	1	/	1	1	general control of the control of th	1	1	T	3	2	(E) populations in N parts
>		***************************************				The state of the s				A	~	- 1	of range. Problems with
seyal	120 mm	**************************************	/			1 1 1	ı	e constitution de la constitutio		William VALCON		Accordance (No.	natural regeneration
tortilis (incl. ssp raddiana)	dmy/eniserake	abro L Gargania	1	/	2	1 2		1		edistangonja	n		
		ind Tayle Voldinsons	•	markin-vij zajapija markin-skalapojava	who		-	. Section of the sect		AMMARITO POLICIES	3	2 1	int. PVT in progress, W. Africa to be completed.

an función propriedad de la constitución de la cons		Leannid Noopherfuntation with	**************************************				0	perati	ons.	/ Activi	ties	-		
SPECIES	End (ise of	specie	ŝ	Explora & colle		Eva	luation) (Conserv	ation	Germpl use	asm	REMARKS
	1	2	3	4	5	6	7	ä		9	10	11	12.	ta kan kan kan kan kan kan kan kan kan ka
Aizelia guanzensis					2	2	2	2				Page 1		
Albizia spp.			1	1	2	3	3	3	de distribuição de la constante de la constant					
Alletia tunimanii	*								distanta di Cara	3				
Androstachys johnsonii	1				2		A. Care of the second		e e e e e e e e e e e e e e e e e e e	•				
Antiaris toxicoria	1				2				i di malana	2				
Aucoumea klaineana			gi ja		2	2		2		3	2	3	3	
Azadirachta indica (exotic)	Opposition of the control of the con	1	/	1			4.00	1		1	**	4	Amount	Int. PVT in progress
Balanites aegyptiaca	And the second of the second o			1		2		2	de despetados de la companya de la c	2				(E) in Zímbabwe
Bersama tysoniana				1						2			,	Medicinal products. (E) overexploited in South Africa
				1		1		1		1	2			(E)
Bivinia jalbertii				1	1	2		2		1				(E)
Boscia spp.	/				3					3				
Brachylaena hutchinsii	/									2				
Burtdavya nyasica	/				2	1		1		2	2		2	(E)
Chlorophora excelsa	*		-		2		***************************************			2			2	
C. regia				s	2	2	- Communication of the Communi	2	2	2			2	es months of the control of the cont
Dacryodes edulis				•	1	1		;	2	*	1	Averaging in the control of the cont		(E)
Dalbergia melanoxylon	/			,	apart and a second	2			2					Prov. collections proposed
Dichrostachys cinerea						2								by OFI/NRI
Entandrophragma spp.	- A		ekterykenamen de ektyytekter		2					2				Breeding for resistance to shoot borer
Eucalyptus camaldulensis (exotic)	/	1			Andrewsky was distributed the service of the servic				2			Queen	2	
E. paniculata? (exotic)	/		Comment of the Party of the Par						Ť.			And the state of t		
E. propinqua (exotic)	/	· /	and the second		Andia (10 October 1984) Anticopolo (militario)				1			aaaaaa voorgapeeee		
E. saligna (exotic)	/	,	A Commission of the Commission		1004	2			2			2	2	
Faidherbia albida	АДНИДАЛЬНИКИВНИКА СОДИЙНИКИ В БИТОВИ АДНИКА СОДИЙНИКИ СОДИЙНИКА СОДИЙНИКА СОДИЙНИКА СОДИЙНИКА СОДИЙНИКА СОДИЙНИКА СОДИЙНИКА СОДИЙНИКА СОДИЙНИКА СОД		***************************************	. 1	Annua and American			3	1	2		Appropriate to the state of the	7	Seed collections, PVT, PG and population genetics studies in progress
Gmelina arborea (exotic)	dama a selectivo de como de co	/			en production de la company de	1			4			entra de la company (company (· ·	New collections available for testing
Guarea cedrata		r	* department of the control of the c	J	2		***************************************			2		V 100 mm m m m m m m m m m m m m m m m m		
Gymnostemon zaizou		į	Table of the American		3					3				(E) some provenances
Heritiera (syn. Tarrietia) utilis	O. W property (Alfred of the Contract of th	/			Automotory or annual state of the state of t	· ·	200	4	1	4	1	- Park	1	
Hyphaena petersiana	tuendistilessepele tuendistilessepele			15	/ 2		e palysissisian Presidente Spanissississississississississississississ			1		September (A)		A Annual Control of the Control of t
H. ventricosa	Albandenie erreitste		New York Commission of the Com	*	/ 2		e de la composition della comp			1		Emdophylatic Emdophylatic	4	***
Irvingia spp.			all and a second	, .	/ 1	1		1	1	disclanation 4	1	and the second	· ·	Annual Control of the
Juniperus procera		,	***************************************		/ 2	. 2			2	2		ALL/CONTRACTOR		(E) some provenances

									Op	eratio	ns/ A	ctivities			
SPECIES		End u	se of	spec	ies	Exp!	oration election			************	11	ervation	Gerr	mplasm	REMARKS
		1-	2	3	4	5	6		i y	8	9	1.0	11	1:	2 (1997)
Khaya spp.	i de la companya de l	1	la de la compania de			1	***		1	*	1	1	1	1	
Lovoa spp.	A	1	200			2	2				2	3		ŧ	The state of the s
Maesopsis eminii		s	**************************************	1	1	2	2	and the second		2			2	2	(E) some provenances
Mansonia altissima	and the second		-					-			·			٤.	Selection for resistance to shoot borer
Markhamia lutea	majetininini, w. v.	1	-			2	2			2	2				(E)
Melia volkensii		<i>,</i>		1		2	2		2	2	2	2		2	
Milletia stuhlmannii		/	and the contract of the contra	1		, (Comments)				1			3	3	
annous storumanny	in the state of th	,				2					2				(E) some provenances.
Mitragyna ciliata	Total minutes of the control of the	1	Assessing to the Contract of t			2	2			2	'n				PVT, PGT in progress
Nesogordonia papavorit	era	1				2	4			۷	2	2	2	2	**************************************
Nauclea diderrichii		1				2	2			,	2				
Ocotea bullata		1				2	2			2	2	2	2	2	The state of the s
O. kenyensis	20000000000000000000000000000000000000	/					2.			-	2				(E) some provenances
O. usambarensis		1				2	2				3				
Olea capensis		1				2	2				2	2			(E) some provenances
Parkhamii utea		/		,		2	2				1				The second secon
Parkia biglobosa	And the second	/				*-	۷	,		2	2	2		2	
Pericopsis angolensis	and the second			,				1		1	1		1	1	
										***************************************	2				(E) some provenances. PVT, PGT commenced in
P. elata	- Property and the second	,													East Africa
	*	•				2	2			2	2	2			Prov. collections and gene
Pines manufacture 14	de la companya de la														ecological studies in progress
Pinus maximinoi (exotic)	-			4	/				3			2	1	1	Heavily exploited for
o. oocarpa (exotic)	# /	,			1							and the state of t			carving
o. roxburghii (exotic)		,					2		_			and Apple	2	2	(E) some provenances
Podocarpus spp.	·					2	2	2	2						(E) in parts of range
Prosopis spp. (exotic)			1	J		ĸ.	1	2	2						PVT in southern Africa
P. africana	A Company			./	, -	2		~	1				2	direction of the second	
Protea gaguedi	o Comprimentations			,	Anna Anna Anna Anna Anna Anna Anna Anna	1	*	2	1						
runus africana	√	J		, ,		1	*	ň	•	Construction of the Constr					
terocarpus angolensis		-		٧	- Committee of the Comm	3	1	1	1			Voca .	2	Total more and a second	
erinacesis					***************************************		***		2			1		***************************************	
	MACHINEMA PROPERTY CONTRACTOR CON				**************************************					2		W. 2011			E). Recalcitrant seed. Field renebank
. lucens			V-C	1						2		STATEMENT OF THE PARTY OF THE P			
	en la de en la composito de la composito de la composito de la composito della		Phin Villagerees									man programme and the state of		I P	n situ cons. in progress. Iroblem of die-back
soyauxii	/				edicymolegadista.co					2					isease o <i>situ</i> cons. in progress

in description of the control of the							Ор	eration	s/ Acti	vities			
SPECIES	End (use of	specie	·S	Explora & collec		Evalu	ation	Conse	rvation	Germpl	asm	REMARKS
e Grand Grand Gran	1		3	4	5	6	7	8	9	10	11	12	
laphia faranifera					2	Terreside des principals des presenta			3				Problem of die-back disease
aprila ratamista								3			Managary Control of the Control of t		graduse.
iclerocarya birrea	(Acceptation of the Control of the C		ovvojeji na venim	1	***	2		2			manuscon (constraint		Octoberation of the Control of the C
Sesbania spp.	A Company of the Comp				2	,		2		1	Acceptance of the control of the con		Recalcitrant seed. Field:
Famarindus indica	erio de la companya d			1	Q:- T	· Anne		ž.		,	,		ICRAF in SADC countries, FAO in CILSS countries
Tectona grandis (exotic)	And the second s		ASTANTAN PARAMANAN PARAMAN			1	Quint	1			2	1	PVT of <i>S. sesban</i> in progress in Zimbabwe, Zambia and Malawi
Terminalia ivorensis			A PRODUCTION		2	2		2	3		3	2	
T. superba	/		Average of the same			2	and the same of th	2			3	3	
r. superba Tarrietia utilis			A Principal de Carlos de C	J	2	2	A CONTRACTOR OF THE PROPERTY O	2	1	3	3		Int. prov. collections in progress
Triplochiton scleroxylon	1				2		() Comments () Com				******	2	Int. prov. callections in progress
	1				2				2				Recalcitrant seeds
Turraeanthus africanus Uapaca kirkiana	Activities of the second secon			1	7	1	*	1	min, con an annual resident		Composition Commenced Confession Confessio	1	Seed production unreliable poor
www.madelloo	***************************************			J	2	2		2	2			2	
Vernonia amygdalina Vitellaria (syn. Butyrospermum)				1		1	2		Tann	1	2		Seed collections in progress in SADC region
paradoxa		,	-		1	1		4	2		1		Seed collected in W. Afr
Vitex ssp. Warburgia salutaris			200	1	- April	1			**	1			Seed recalcitrant, vegetative multiplication
W. ugandensis	,	•	and the state of t	J		2	nate of the state	2			3		Seed supply problems, seed collections in progr
		,	alament property and a factor of the factor		2	2	Brown Commence	2	***************************************				(E) in parts of range
Widdringtonia spp.			cate delicates	*	/ 2	2		2	The second secon				(E) in parts of range
Ziziphus mauritiana Z. micronata	Andrew (specimals Astronomical			· .	Annie de la constantina del constantina de la constantina de la constantina del constantina de la cons	1		1					Evaluation of seed sourd from India desirable
11. AUSTRALIA AND NEW ZEALAND			der foreiglichte von der versche dien betreiten				A STATE OF THE STA						
Acacia ampliceps	overpring by by beautiful or the state of th		u de la constante de la consta	· ,	/ 1	***		1			3		Salt tolerant
A. aulacocarpa	And deliging developments was	1	anakitisaite (epipinise daste	f	ginor Avenamen (delikin med Avenamen (delikin med	1		Ť	oke dayai in je gozilirekter overste kan in				Potential for tropical lowlands. SO
4 unini	Aprenanta transfer				3		de de la company	*	egy (Accomplisation of the Control o		3	3	Proven food value
A. coleí A. clachantha	indigenyi Arin kamanda Justiningi da Madandori Ingganya and Peruniah karina mendadan dendo		hindayishayasiya.addibbaasaysiya		1	•	Samuel Accordance Samuel Samue	1			C.	ž	Species for dry tropical lowland sites with poor soils. SO
A. crassicarpa	Harden between the state of the	1	AND DESCRIPTION OF THE PROPERTY OF THE PROPERT		Accommission of the latest statement of the latest sta						ę powe	;	3 Biogeographic descript sampling, PVT complet SO

	i II				1	***************************************			······································	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		-	
SPECIES	1	use of	fana	(di di mana		11		tions/ A		-11	······································	
		use O	, spe	cies		oration ollection		aluatic	n Con:	Servatio	n Gerr use	mplasm	REMARKS
		2] 3	4	<u> </u>	6		7 8	9	10	1.1	12	
A. decurrens	Months and a second		1		2	3		3				<u> </u>	Andread Control of the Control of th
A. holosericea			/	1	Account of the contract of the	1		1	1	1	e e e e e e e e e e e e e e e e e e e	1	PVT
A. mangium A. mearnsii			minimakyaniny 140,000 mp. is openiny is objektivanina pojektivanina		Versien (A. A. Serien in geschen in seine Versien versien (A. A. Serien in Serien in Serien (A. Serien in		erek (1918-ken-190) de-depase dady salemen erek (1909) erek Persisten erek (1909) de-depase dady salemen erek (1909) erek		minier estatublykan keerajalaja estatublykkan ja		eri	Apor	Biogeographic descriptions completed, sampling, PVT Hybrids being developed with A. auriculiformis. SO
			1	J	offendinesson	4	Committee of the Commit	· ·			3		Int. PVT
A. melanoxylon			J	1	2	G	A CONTRACTOR OF THE CONTRACTOR	3			kananie udopopojo ulikali kananie udopopojo	3	
A. saligna			J	1	1	2		2			apartic services and services are services and services are services are services and services are services and services are services are services are services and services are services are services are services a		Dune fixation,
A. stenopylla A. tumida		i verana de la compansa de la compa	1	✓	2	2		2	To the state of th				
Araucaria cunninghamii	e de la companya de l	***************************************	1	1	To the state of th	2		2	Viteralia Liverany		2		Under taxonomic revision
Brachychiton populneus	-				2	2		2			1	1	Int. PVT in progress
Casuarina cunninghamiana				1	1	1	1	1	1	1	1	3	Drought resistant
C. equisetifolia			/	1	3	3		3	THE CONTRACT OF THE CONTRACT O			3	PVT.
C. glauca		-	,	/	2	2	1	2	Approximent to make the second of the second				Int. PVT underway
Eucalyptus badjensis		ĺ	1	1	Page and the control of the control	3		3			- Legarina de la companya de la comp		Salt tolerant
. benthamii			,		2	2		2					
	***************************************	a 19 common de de la company de la compa	•	,		1	1	2	ę.	Armen	ques.	3	Restricted natural distribution. (E) in parts of range. Promising in trials
. camaldulensis			1	1	1	· ·	3	1	1		Quines (Quines)	· ·	Taxonomic assessment ongoing
citriodora	-		1	1	2	1		1			1	1	
cloeziana		**************************************	1			1		1			2	3	
delegatensis		Marine State of the State of th									To the		PVT
dunnii globulus ssp. globulus		halide as the spoom brainfall days			2	2		2			1		Bulk seed difficult and costly to obtain
grandis		The state of the s	1	/	1	*****	1	7	1	At or	4	ķ	Int. PVT in progress. (E) some provenances
nitens			1	1			3				1		PVT.
occidentalis	1	mick declare untertainmic de papa					The state of the s	and the same of th			#		PVT. Buik seed difficult and costly to obtain
oodaa.a	/		I		1	1		1		o cu presentante de la constante de la constan		THE CONTRACT OF THE CONTRACT O	Tolerates saline soils and high pH
paniculata	1		1		1	1		****				Little (Control of Control of Con	wan per
pellita	**************************************	Andrew Printer Community - Acids to pursuants-	/	Territorio del grando		2		2			2	- 1	Closely related to <i>E.</i> urophylia. Potential for hybridization
pilularis	1			demanda de la constanta de la	3			nemenado igijinajsooo			dend	Care	>VT
radiata	J			1	2	Manufacture Control		Ventralije, je, de digiga, je, ventralije, je, je, de digiga, je, je, je, je, je, je, je, je, je, je		300 mary 100		9	Some forms high yield at
saligna	,	Proposition Vendering		HIP CONTRACTOR OF THE PARTY OF		i i i i i i i i i i i i i i i i i i i							rineale oil

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							Op	eratio	ns/ A	ctiviti	es			
SPECIES	End (use of	specie	35	Explora & colle		Evalu	ation	Cor	serva	ition	Germpla use	esm	REMARKS
ADDIANAMA PROPERTY AND	†	2	3	4.	. 5	6	7	8	9	<u> </u>	10	11	12	
E. tereticornis	1		1	***************************************	1	,						Ť	*	PVT
E, viminalis	1				1	1		1		1	*	1	4	PVT
Grevillea pteridifolia			1	1	3	3	One of the Control of	3						
G. robusta			-	1	3	2	2	2					2	
Leucaena spp.			1	1		1		*				1	1	Agroforestry species
Macadamia Spp.				1	2	2	2	2		3	3		3	Nuts
				1	*	1		1				in the state of th		The second secon
Melaleuca cajuputi M. leucadendra	,	1	*	1	Account	African		down					1	Tolerant of waterlogged. acid sulphate and saline conditions. Int. PVT
Melia azedarach var. australasica			1	1	1	1		*						and the second
Paraserianthes procera	1		/		3	3	3	3				3		
Pinus caribaea	1				mundas septembras	1		Ť		1	1	1	****	
P. elliottii			water	1		4		1		1	1	Separate Sep	1	
P. oocarpa	1					1		1		1	1	7	1	
P. pinaster	1			1		1		1		1	1	1	1	
P. radiata	_			1	1	1,	1	1		1	1	wiledayari manaya	1	(E) in parts of range. Guadalupe Is.
P. tecunumanii					4000	1	1	1		1	1	2	2	
				1	3	3	3	3		3	3	3	3	
Papulus spp. Pseudotsuga menzesii	1													PVT
Santalum album	The second secon	1		1	A estro	American	4	1		1	1	40000	1	Timber for carving. SPRIC proj. germplasm collection and evaluation in progres
		,		1		1	1	1		1	1	1	1	
S. lanceolatum			,		1	1		1		1	1	1	· ·	Timber for carving
S. spicatum Syzigium paniculatum			***************************************	J	3	3		3	CALCULATION OF THE PARTY OF THE	3	3	3	3	Ornamental, bonsai tree. Unsuitalbe for subtropica areas due to insect attac
Sesbania formosa	and the second s			, ,	, 1	1		1				And the second s		Close relative of S. grandiflora
Toona ciliatavar australis	*	•	AMILITATION OF THE PROPERTY OF		The state of the s	2	Antimorphy (majorida samasa premijaja ja kuselistava Antimorphy alpina ja kuselistava paremijaja ja kuselistava	ž				Antonio (militari de Antonio de A		SPRIG proj. germplasm collection and evaluation progress
12. PACIFIC ISLANDS	A A A A A A A A A A A A A A A A A A A		www.marenewww.				And the second s		Annual Control of the			A CONTRACTOR OF THE PARTY OF TH	4	
Agathis macrophylla sens lat.	- Control of the Cont	/ /			3				2	2	2	1	1	Some section of the s
A. rabusta (exotic)	•	/		*		2			2	_		The state of the s		Endemic to Vanuatu
A. silbai	*	/ ,			1 2				2	3		allestinespools		Culturally important in
Aglaia saltatorum	And the second s		*	/ .	/ 2	! 2	2		1			enamente en		Polynesia
Acacia koa	(produced and the control of the con	,	edimento propins de							Y ester	1	3	3	Timber for carving

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		***************************************		www	1		-67-		***************************************						
SPECIES	Manage of the state of the stat						- 11	Оре	ratio	ns/ A	ctivities				
or cores	En	d use	of spe	cies		oloration ollectio		valua	ition	Cons	servatio	n Ge	irmpla e	asm	REMARKS
	1	2	3	4		. 6	5	7	8	9	10	-	- []	12	A CONTRACTOR OF THE CONTRACTOR
Artocarpus altilis	Andrew Management		1	1		1		1	1	1	1		1	1	
Atuna racesmosa			/	s	2	: 2			***************************************				2		Culturally important in Polynesia
Barringtonia edulus				1	3	3			2					1	
Calophyllum spp.	1		1	1	2	46	A CONTRACTOR OF THE CONTRACTOR		7	1	4		f	2	Important indigenous nut
Campnosperma brevipetiolata	1		MATCH CONTRACTOR		1	1		1	1	1	***			1	Salah Parisan
Canarium harveyii		✓	-		2			2	-						inanareane (a.d)
C. indicum	/			1	2	1			*		1	1			Important indigenous nut
C. solomonensis				1	1	2	1	2	2	2		1 2		i	Important indigenous nut
Casuarina equisetifolia	/		1	1	1	*			,		1	1		~	Important indigenous nut
Cordia subcordata	1			1	4	1	1		1	*	essen)	4		q.	Timber for carving
Cocos nucifera	1	1	1	1	1	1	1			1	- Personal P			1	tunner for carving
Dacrydium nausoriense	•			1	3		2			3					Endangered valuable timbe spp. Fijian endemic
). nidulum	1			v	3	1	2			3					spp. Filian endemic
hiospyros major					2					5		3			
racontomelon spp.	1			,	2	•		2	***************************************	H ouse	apoun.	2	3	73	Culturally important in Polynesia
iysoxylum gaudichaudianum	V				9										
adospermum macrophyllum	,				2	3		2							
medullosum	./				2	2		2		2					
robieannum	,				2	3	3	3		3	3	2	3		
rcalyptus tereticornis (exotic)	/	/			۷.	2		2		2					
arcinia sessilis	*										With the party of	2			
** on 10 3 c 3 S m 5				/	2	2		2				3		С	ulturally important in
ruga floribunda	1	**************************************			2	~		-			***************************************			∥P∂	olynesia
nelina arborea (exotic)	1				۷.	2		2			W/W/W/W/W/W/				
sia bijuga	1				2	3	7	3				2	1	Br	eeding prog.
carpus fagifer		- Andrewson and					3		3	\$	-		1		
aserianthes falcateria	j	***************************************			2	2		2	HALL CONTROL OF THE PARTY OF TH		Bert Chappenson		1	***************************************	
us caribaea (exotic)	, ,		•	· ·	ŀ	2	2	2	3		3	1	1	Offithermed organic	
Tehenalla tarrias Rassa						2					2	2	2	STANCE CONTRACTOR OF THE PARTY	
netia pinnata	√ ,				1	of the state of th		1	www.		A CONTRACTOR AND A CONT			independent of the least of the	
focarpus indicus	·	Community of the Commun	*		2	40.00		2	1		1		1		

y pagamanan ang mang mang mang mang mang ma							Орі	aration	s/ Activ	vities	т		
SPECIES	End u	ise of	specie	5	Explora & colle	ition ction	Evalu	ation	Conser	vation	Germp use	asm	REMARKS
:		2	3	. d	5	6	7	8	. 9	10.	1.1.1	12	and the second s
Santalum album (exotic)		<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>		igas (tarak perpendikan Panta	2	3		3		2	And the second s	2	
S, austrocaledonicum	and the second s	1			3	3	2	3	1	2		2	
	in a company of the c	1			3	3	2	3	*	2		2	
S. yasi		*	MAN CANADA		***	145	1	1	***	1	- Year	1	
Securinega flexuosa Swietenia macrophylla (exotic)	A Commence of the Commence of				Andreas de la companya de la company	3	Accounts of the state of the st	3	Section of the Control of the Contro	3	Acceptance of the control of the con	3	Intro. and eval. of prov. from natural range desirable
Syzigium neurocalyx	1		A. A		4"	1		1				1	Breeding progr.
Tectona grandis (exotic)	/			1					Manager at transmitter		2	4	Otsenrid brode.
Terminalia brassii	/			1	*	1	4	¥ mes	, and the same of	*	***************************************	2	Soft-shelled nut trees
T. catappa			1	1		2	- Administra					des.	identified in Vanuatu
T. richii	1		The second secon	s	(*)	3	Andreas and the following the	3	3	4-1	2	1	Excellent cyclone resistance. Possibly extinct on Niue
Touna ciliata var. australis	·				According to the second	*	The second of th	1	Annual Control of the	1		1	Susceptible to cyclone damage