

# European Cooperative Programme for Crop Genetic Resources Networks (ECP/GR)

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## ***Report of the Seventh Steering Committee Meeting***

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## 1. Introduction

The seventh meeting of the Steering Committee of the European Cooperative Programme on Crop Genetic Resources Networks (ECP/GR) was held on 29 June 1998 and from 4-5 July 1998 in Braunschweig, Germany. The meeting was attended by representatives of all the 32 member countries of ECP/GR, as well as by observers from seven non-member countries, ASSINSEL, FAO, IPGRI, NGB and an NGO representative. The list of participants is included in Annex I. The meeting was held in conjunction with the European Symposium on plant genetic resources for food and agriculture (PGRFA), which provided a number of recommendations for consideration by the Steering Committee (Annex II).

The meeting was chaired by Dr. W. Himmighofen of the Federal Ministry of Agriculture, Germany and co-chaired by Dr. M. Pencic of the Maize Research Institute, F.R. Yugoslavia. The agenda was adopted after a number of changes. The items discussed are listed in Annex III.

## 2. Report of Phase V of ECP/GR

A preliminary End of Phase V report was presented by the ECP/GR Coordinator. An overall account of the implementation of the new structure of the Programme, as approved in Nitra (1995), was given. The main achievements reached by the Working Groups and *ad hoc* groups were schematically summarized. Comments were made on the operation of the Programme, on the basis of the IPGRI Secretariat experience. Emphasis was placed on the need for increased secretarial staff support, in order to maintain a reasonable level of efficiency in the coordination of the Networks. It was also suggested that a better definition of the role of Working Group members and Chairs could improve their effectiveness in the Group as well as their role as representatives within their respective countries. The evaluation of the organization of Working Group meetings showed the generally very positive appraisal made by Working Group members during the last five years. Replies by National Coordinators to a questionnaire on the effectiveness of ECP/GR in achieving its objectives also showed a good level of satisfaction (see Annex VII). During the presentation of the preliminary financial report it was noted that most countries who joined ECP/GR during Phase V had regularly sent their contributions. However, a number of countries from the former Soviet Union were unable to join Phase V. This was the cause of a mismatch between the initially foreseen budget (TCC, Bulgaria, 1993) and the revised budget for Phase V. An expected negative balance of US\$ 45,900 at the end of Phase V was presented as a realistic result, provided all the countries who joined ECP/GR sent their outstanding contributions. As a solution to reducing the expected negative balance of Phase V, it was proposed not to completely spend the funds of Phase IV, of which approximately US\$ 40,000 still remain uncommitted in June 1998.

The Steering Committee expressed its appreciation for the transparent report of Phase V. Reduced spending, as far as possible, of remaining Phase IV funds, was approved as the most reasonable way to minimize the negative balance. A recommendation was made that all outstanding contributions are sent as soon as possible. A few amendments to different parts of the preliminary report were provided to the Secretariat. These were incorporated and the revised report was distributed to all the National Coordinators before the end of the meeting. The revised report was approved by the Steering Committee and is included as Annex IV in this report.

## 3. Continuation of ECP/GR: Phase VI

On 29 June 1998, the ECP/GR Coordinator presented three options for Phase VI of ECP/GR. A first round of discussions revealed that some countries would have difficulties in significantly raising their annual contributions to ECP/GR. It was agreed that the opportunity should be taken to review

objectives and mode of operation of the Programme to further raise its effectiveness in addressing the broad range of topics covered by the Global Plan of Action (GPA; Leipzig 1996) despite a possible stagnation of the budget.

During the Symposium, two task groups met on several occasions to draft a list of revised objectives and mode of operation for Phase VI. These two task groups submitted a joint text to Plenary on 4 July 1998. After a lengthy discussion of the submitted text, the Secretariat was asked to incorporate agreed changes and to provide a revised text. During the afternoon, further task groups developed recommendations on: 1) the structure of the Networks and their terms of reference; 2) general indicators or objectives for the crop Networks.

On the basis of the recommendations made by the above mentioned task groups and the Plenary, the coordinating Secretariat redrafted the proposal for Phase VI, as contained in Annex V, and re-submitted it to the Plenary.

The Steering Committee agreed that the proposal would be used to rapidly seek the necessary government approval for this proposal and funding for the implementation of Phase VI. A reservation was made by the Belgian delegate, who explained that in Belgium the budget for ECP/GR in 1999 had been already approved at the same level as 1998 and therefore no increase would be possible until the following year.

The possibility to convert the budget to Euros at the 1 January 1999 exchange rate to the dollar was left to the discretion of the Secretariat.

The Steering Committee expressed its appreciation to IPGRI in its role of Coordinating Secretariat for the implementation of the Programme during Phase V. The mandate for IPGRI to act as Coordinating Secretariat for the Programme was unanimously extended to Phase VI.

## 4. Objectives and mode of operation

### 4.1 Introduction

The formulation of the objectives for Phase VI of ECP/GR is based on the following underlying context and principles, recognized by the Steering Committee:

- the role played by ECP/GR for the last 18 years in developing a pan-European collaboration on PGR;
- the experience gained in coordinating collaborative efforts in a cost effective way;
- the significant results obtained by the Programme;
- the willingness for increased international collaboration present at national level;
- international cooperation as essential to the success of the Global Plan of Action (GPA) which is an integral part of the FAO Global System for plant genetic resources;
- the need for implementation of the GPA in harmony with the objectives formulated in Chapter 14G of Agenda 21 and in compliance with the provisions of the Convention on Biological Diversity and other relevant international agreements;
- the role of ECP/GR as the platform to facilitate the implementation of the Global Plan of Action in the European region as part of the FAO Global System on Plant Genetic Resources;
- the specific characteristics of plant genetic resources for food and agriculture (PGRFA) which are fundamental for food security;
- the great interdependence of countries with regard to PGRFA.

### 4.2 Objectives

The original objectives of ECP/GR include the creation of a system to promote direct contact between National Programmes and institutions involved in crop genetic resources activities. ECP/GR is to promote the unhindered exchange of crop genetic resources and related data. Consequently, up-to-date information on genetic resources is to be made easily available to users. ECP/GR is also a framework in which joint activities such as documentation, collecting expeditions, characterisation and evaluation of germplasm are implemented.

These activities reflect the role of ECP/GR as the platform to facilitate the implementation of the Global Plan of Action for the conservation and sustainable utilisation of plant genetic resources for food and agriculture, at the European level. As such, they are an important input for the development of sustainable agriculture.

The following objectives characterize Phase VI of ECP/GR:

- to facilitate the long-term *in situ* and *ex situ* conservation of plant genetic resources in Europe;
- to facilitate the increased utilization of plant genetic resources in Europe;
- to strengthen links between all plant genetic resources Programmes in Europe and promote the integration of countries which are not members of ECP/GR;
- to encourage cooperation between all stakeholders, including NGOs and private breeders;
- to increase the planning of joint activities including the development of joint project proposals to be submitted to funding agencies;
- to encourage the sharing of conservation responsibilities for PGRFA in Europe;
- to increase awareness, at all levels, of the importance of PGRFA activities including conservation and sustainable use;
- to seek collaboration with other relevant regional and global initiatives.

### **4.3 Mode of Operation**

The networking structure of the Programme, adopted in Nitra (1995) is reaffirmed by the Steering Committee<sup>1</sup> (Figure 1). This structure is overseen by a Steering Committee consisting of National Coordinators nominated by participating countries. The EC and all European countries contributing to the core budget are invited to nominate a representative as full member of this Committee. ASSINSEL, FAO, IPGRI, Euro-MAB, NGB and an NGO representative are invited as observers (Figure 2). The Programme operates through Networks in which activities are carried out either in the framework of Working Groups or as *ad hoc* actions. The Steering Committee has the overall responsibility for the Programme.

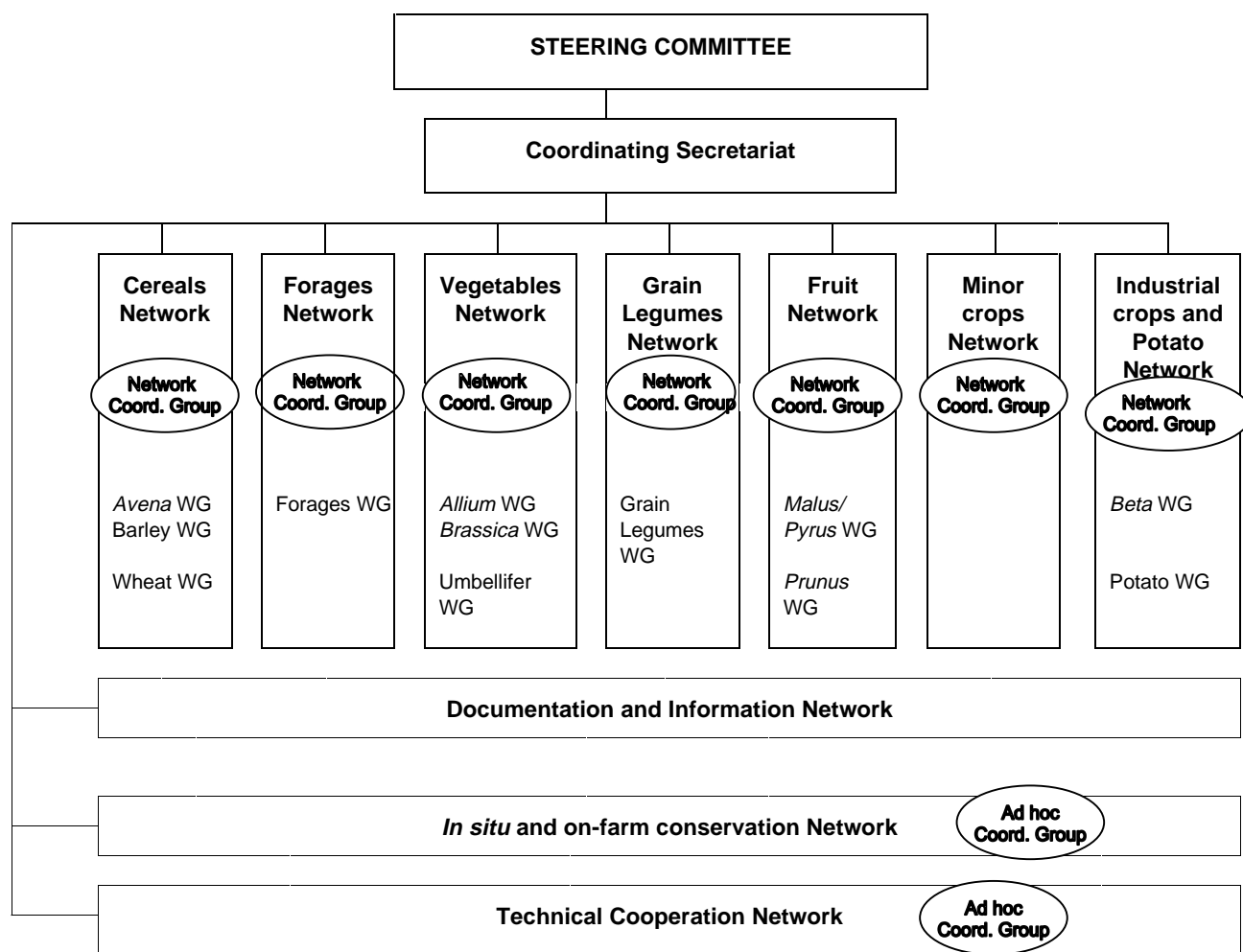
#### **4.31 Role of the Steering Committee**

The Steering Committee makes decisions regarding the general scope of the Networks and the establishment or continuation of Working Groups and approves the Programme's budget. The Steering Committee periodically reviews the overall Programme and progress made by the Networks. On the basis of such reviews, the Steering Committee defines the priority activities to be funded through its core budget and the complementary activities for which additional funding has to be sought outside the core budget. The Steering Committee mandates the Coordinating Secretariat to carry out its decisions.

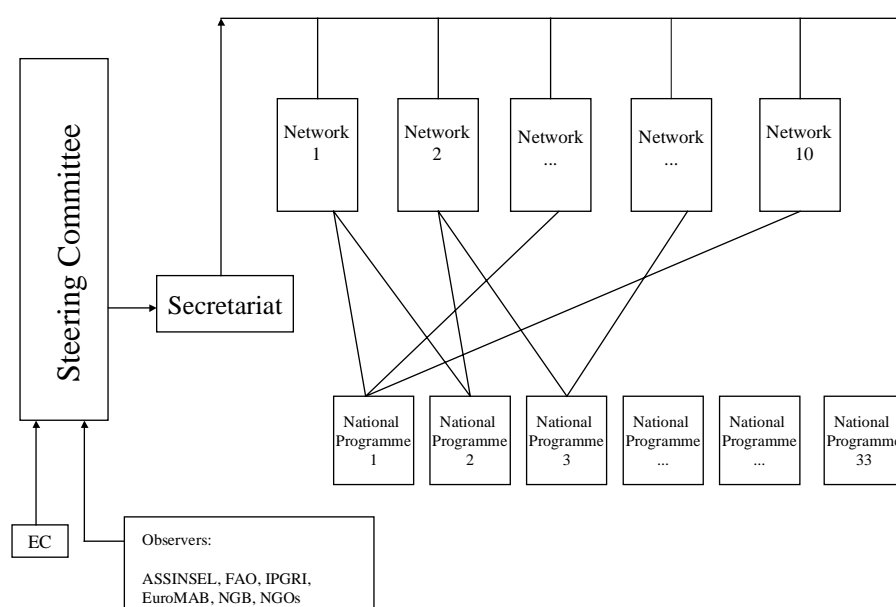
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<sup>1</sup> IPGRI/FAO. 1996. International Technical Conference on Plant Genetic Resources: Preparatory process for Europe. International Plant Genetic Resources Institute/Food and Agriculture Organization, Rome, Italy.

**Figure 1. Operational structure of ECP/GR, Phase VI.**



**Figure 2. Interaction of National Programmes with the Networks and the Steering Committee**



#### 4.32 Coordinating Secretariat

The Coordinating Secretariat is currently provided by IPGRI as requested by the Steering Committee. The responsibilities of the Coordinating Secretariat are:

- to ensure implementation of the Programme in accordance with the mandate given by the Steering Committee;
- to coordinate the activities carried out in the framework of the Programme;
- to be responsible for the financial management of the Programme;
- to provide technical and financial reports to the Steering Committee for approval;
- to provide support to the Working Groups and ensure that the agreed workplans are carried out;
- to provide support to Network Coordinating Groups and, where necessary, to assist in preparing evaluation of Network activities and the formulation of workplans and priorities;
- to initiate *ad hoc* activities in accordance with guidance provided by the Steering Committee;
- to gather and distribute information;
- to assist in the formulation of project proposals for joint activities;
- to search for donors to support particular elements of workplans and *ad hoc* activities;
- to provide a link with other regions;
- to contribute to raising public awareness.

#### 4.4 The role and functioning of Networks

Discussions on the role and functioning of the Network took place in view of the fact that a significant level of implementation of the Programme's objectives has been achieved for a number of crops. The Steering Committee has received an increasing number of proposals for the establishment of new Working Groups and recognizes the necessity to address more effectively the broad range of areas covered by the Global Plan of Action on PGRFA. In view of the unlikely prospect of a significant increase of member countries' contributions to the Programme, the Steering Committee agreed on the following changes in the mode of operation of the Network.



#### 4.41 Structure and functioning of the crop Networks

To achieve greater coordination within the Crop Networks during Phase VI, *Network Coordinating Groups* will be activated to establish priorities for action for the extended range of crops covered by the Network. These self-organizing coordinating groups, will be composed of Working Group Chairs and Vice-Chairs or Database managers. The Network Coordinating Groups will work closely with the Secretariat, to which they will submit proposals for activities and review progress, achievements and future workplans. In the case of crops for which no Working Group yet exists, or in the case of Networks in which no activities have been carried out in the past, the Network Coordinating Groups can initiate *ad hoc* actions and may propose the establishment of a Working Group to the Steering Committee. The Network Coordinating Group will strive for a balanced regional participation in the Networks' activities. The Working Group Members ensure effective links between ECP/GR and the respective stakeholders at the national level.

The main implementation of the Networks' activities continues to be through *Working Groups*. These Working Groups will no longer necessarily meet several times during a given phase. However, the respective Chairs and Vice-Chairs will ensure that both attending and corresponding members are involved in the planning and implementation of the crop specific workplans. The main vehicle for facilitating action for any given crop are focused meetings of a restricted number of Working Group members and resource persons as necessary.

#### 4.42 New Working Groups

The Steering Committee received proposals for the establishment of Working Groups on wheat, umbellifers, *Beta*, potato and *Pleurotus*. On the basis of the scope of the Global Plan of Action and the importance of these crops in the European context, the proposals on wheat, umbellifers, *Beta* and potato were approved.

#### 4.43 Participation in Working Groups

In the case of a meeting involving the whole Working Group, the participation through either attending or corresponding members will be determined by priorities established at the national level<sup>2</sup>. As a consequence of the increased number of Working Groups and the re-scaling of the funding categories (Table 4, Annex V), the quota for attending members are now as follows:

A	4
B	5
C	6
D	7
E	8

In the case of the Nordic countries it has been agreed that the Nordic Gene Bank will nominate two attending members to each Working Group to represent all the Nordic countries. It is agreed that the Secretariat can welcome to the meeting self-funded corresponding members as long as the overall size of the Group remains conducive to working effectively.

#### 4.44 Structure and activities of thematic Networks

Thematic Networks are intended to support the crop Networks by addressing issues common to several or all of the crop Networks. Within the thematic Networks, activities will be carried out

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<sup>2</sup> Gass, T., G. Kleijer, M. Waldman and E. Frison, editors. 1995. Report of the Technical Consultative Committee. Sixth meeting, 21-23 September 1995, Nitra, Slovakia. European Cooperative Programme for Crop Genetic Resources Networks (ECP/GR), International Plant Genetic Resources Institute, Rome, Italy.

primarily through *ad hoc* actions. Initially it is not foreseen to establish Working Groups within the thematic Networks.

#### 4.45 New activities within thematic Networks

During the European Symposium on PGRFA it was recommended to ECP/GR to initiate activities within the existing Networks on 'In situ and on farm conservation' and on "Technical cooperation". The Steering Committee requests the Secretariat to establish *ad hoc* coordinating groups with precise objectives, workplans and possible achievements in these areas during Phase VI, and submit proposals to the Secretariat. Furthermore, a proposal was received from the Documentation and Information Network for a number of activities. The Steering Committee approves the proposal in principle, but the number of events which will be held is subject to budget availability.

An offer made by ZADI, Germany, as an input in kind to ECP/GR, to take care of the management of the European Information Platform was gratefully taken into consideration by the Committee. A discussion followed on the appropriateness of having the Platform located at one institute rather than at the Secretariat. Overall the Committee did not express clear support for this offer<sup>3</sup>.

#### 4.46 Working Groups priorities

The Steering Committee expressed the intention of elaborating a system to analyze and compare the progress made by the different Working Groups and to clarify the goals to be achieved. As a result of a brainstorming session, a task force started to elaborate a matrix for guidance to Working Groups in setting their priorities. The intention would be to distinguish minimum and additional tasks that Working Groups should plan to undertake in different areas of activity (conservation, documentation, collecting, characterization and evaluation, etc.). A preliminary matrix was circulated within the Steering Committee. A revised version is included in this report as Annex VIII. This text remains provisional and needs to be further discussed by the Steering Committee.

## 5. Complementary Programme Modules

The Steering Committee noted with great interest the proposal of the Secretariat to have complementary activities as separate programme modules funded from various sources. It requested the Secretariat to further elaborate this element on the basis of the draft proposal for Phase VI of ECP/GR and of the Symposium recommendations. It was suggested that the following schedules, that were already active during Phase V of ECP/GR (refer to proposal for Phase VI, Annex V), be initiated immediately:

- Emergency actions;
- Cooperation with EU-funded projects;
- Training activities.

As a result of the recommendations of the Symposium, the following themes could be taken in consideration for funding within additional complementary modules:

- Surveying and inventorying PGRFA;
- Compiling crop specific regeneration guidelines;

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<sup>3</sup> The issue was subsequently rediscussed by correspondence with the Secretariat. Expressions in favour of the offer came from Italy, while the offer was considered unacceptable by the representatives of Denmark, France, Norway, Slovenia, Sweden and Switzerland.

- Supporting planned and targeted collecting;
- Expanding the characterization, evaluation and number of core collections to facilitate use;
- Studying genetic diversity to analyze comparative genetic diversity in wild relatives and their respective crop genepools;
- Undertaking genetic enhancement of pre-breeding genepool via base-broadening;
- Inventorying and monitoring legal framework of seed production and distribution in Europe.

## 6. Sharing of responsibilities

T. Gass introduced the subject of sharing of responsibilities by briefly outlining the presentation made on this subject during the Symposium<sup>4</sup>. In order to make progress in the widely recognised need for the sharing of responsibilities in the European region, the Steering Committee:

- encourages the Working Groups which have developed proposals for the sharing of responsibilities to elaborate on these and seek to implement them;
- encourages all Working Groups to analyze the advantages and disadvantages of the various options for sharing responsibilities for their respective crop, including the technical conditions to be fulfilled;
- requests the Secretariat, in consultation with a small task force of experts from the member countries, to prepare a questionnaire to be sent to the institutes through the National Coordinators. This should result in an overview of the present situation and possibilities envisaged at national/institutional level.
- requests this task force to analyse the results of the questionnaire and to prepare an outline for the next meeting of the Steering Committee to guide curators, institutes and ECP/GR Networks, in making appropriate and effective choices in order to share responsibilities for the conservation and utilisation of PGRFA within the European region.

P. Mulvany commented that NGOs might wish to participate in the sharing of conservation responsibilities provided that the system developed would not reduce local access to the collections and that the loss of unique material through excessive rationalization be avoided.

## 7. Material Transfer Agreements (MTAs)

Following the recommendation during the Symposium on PGRFA for the Steering Committee to consider the promotion of MTAs among genebanks in Europe, this issue was discussed on 4 July 1998.

After carrying out an inventory of institutions within ECP/GR member countries to determine which had introduced MTAs, it appeared that some, but not all, of the British institutes holding PGRFA collections had done so, and that CGN, The Netherlands had announced its intention to introduce MTAs within a few months. The text of CGN's MTA was distributed and discussed. L. Visser of CGN explained that the three main objectives of the introduction of the MTA was to clarify the status of CGN's collections; to prevent appropriation of CGN's germplasm by third parties, and to guarantee feedback on evaluation data. Some minor discussion points with breeding companies, i.e. on the interpretation of "essentially derived" and on the embargo period of evaluation data remained to be solved. CGN's motivation for the introduction of the MTA was the upcoming privatization of

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<sup>4</sup> Gass, T. and F. Begemann 1998. International efforts to sustain *ex situ* collections: conceptional aspects. In: Proceedings of a European Symposium on Plant Genetic Resources for Food and Agriculture, Braunschweig, 30 June - 4 July 1998. International Plant Genetic Resources Institute, Rome, Italy (in press)

CPRO-DLO, in which CGN is integrated, and its sensitization on the issue by the NGOs with which it collaborates in the Community Biodiversity Conservation and Development Programme.

Dick van Sloten of IPGRI stressed that CGIAR institutes had already been using MTAs for several years, and also mentioned that it would be very expensive to bring infringement of MTAs before a court, but that the most successful way to react to infringement would probably be to seek publicity. Patrick Heffer of ASSINSEL mentioned that alleged infringements earlier this year concerned public institutions and not private companies.

After some discussion in the Working Group and then in Plenary, it was decided to request that the ECP/GR Secretariat, in collaboration with experts, distribute among institutions of the ECP/GR member countries a consolidated text regarding MTAs for further discussion and suggestions for its further improvement. Such an approach should result in a text which could be used by the institutions involved as a model to compose their own MTA. In general, the need for an agreed MTA model, for use by genebanks, was agreed and its wide and immediate circulation was endorsed by the Steering Committee.

## **8. Other business**

### ***8.1 Participation of a representative of NGOs on the Steering Committee***

Following the recommendation made by the Working Group on "On-farm Management and improvement of PGR" of the European Symposium on PGRFA and emphasized by the NGOs, the Steering Committee agreed to invite a representative of the NGOs to all its meetings. It was specified that this invitation was valid for only one representative per meeting.

Patrick Mulvany (ITDG), representing the emerging European NGO agricultural biodiversity network, welcomed the invitation. He clarified that NGOs were undergoing a process over the next year to further develop linkages between various European NGOs working on agricultural biodiversity issues, one result of which would be agreement on a nominated person who would fulfil this role in future. With regard to this Steering Committee meeting, he said he would provide feedback to European NGOs after having checked the status and confidentiality of the information with the Secretariat.

### ***8.2 Statement received from EURO-MAB***

A statement was received from Natalia Rybianets, on behalf of EURO-MAB, and was read to the Steering Committee. This communication recommends that the Steering Committee takes into account the implementation of the GPA in the field of *in situ* conservation and on farm management and conservation of PGRFA. Closer contacts between the European Cooperative Programme for Crop Genetic Resources (ECP/GR) and the MAB-structures are encouraged. The full document is included in Annex VI.

### ***8.3 Number of participants per country in the Steering Committee***

This issue was raised by the Secretariat, who finds it increasingly difficult to agree on the participation of multiple delegations at Steering Committee meetings. It was agreed that, in some cases, individual Steering Committee Members do not have experience in the full breadth of issues discussed and that therefore the attendance of a second participant from the same country would be useful. It was agreed that, while first making full use of the complementarity of technical and policy capacities among country representatives, a second participant from the same country could participate in exceptional cases.

#### **8.4 Date and venue of next Steering Committee meeting**

An offer from the Israeli participant to host the Mid-term Steering Committee meeting in Israel was welcomed. In order to maintain the offer within affordable cost, Miriam Waldman informed the Committee that she would seek additional funding from private companies and from the Israeli Academy of Sciences. The Secretariat will remain in contact with Dr Waldman to clarify the cost implications for the organization of this meeting. The Mid-term meeting of the Steering Committee is tentatively planned for Spring 2001.

### **9. Conclusion**

Both the present report and the Proposal for Phase VI of ECP/GR were approved by the Steering Committee.

The Committee expressed its thanks to the hosting institute (BAZ), and to all staff involved in the patient and accurate assistance offered to ECP/GR in the organization of the Steering Committee meeting.

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## **Annex II: Recommendations of the European Symposium on PGRFA**

During the European Symposium on Plant Genetic Resources for Food and Agriculture, a number of Working Groups met in separate sessions to discuss various items of the agenda, with the intention of drafting a set of specific recommendations for the implementation of the Global Plan of Action. Full reports of the conclusions reached by the different Working Groups can be found in the report of the Symposium. A summary of the recommendations drafted by each Working Group is given below:

### **1. Institutions and Capacity Building: National Programmes**

*Chairs: M. Lefort and V. Ryabchoun*

A long discussion took place during the Plenary session, after three interesting presentations. It highlighted questions on:

- financial sources and systems or mechanisms for the implementation of National Programmes;
- appropriate legal frameworks for the conservation and use of PGR, and particularly the role of Plant Breeders' Rights within these frameworks;
- the role of the European Commission regarding conservation and sustainable use of PGR.

Also, the review of the progress made in Europe for the implementation of the GPA<sup>5</sup> highlights developments in the consolidation of all aspects of National Programmes, either scientific or technical, economic, legal and social.

### **2. Capacity-building and Training**

*Chairs: L. Withers and N. Maxted*

It is recommended that:

- A PGRFA training opportunities database be maintained and made widely accessible within the region, e.g. through the Internet.
- Mechanisms be explored to (i) mobilize further training resources through raising awareness in universities and research institutions to the need for involvement of more scientists in PGRFA training and the introduction of PGRFA elements into training curricula at all levels; (ii) to network organisations and individual trainers offering PGRFA training within the region to encourage professional exchanges, collaboration and complementary approaches.
- Both the opportunities and the constraints presented by language diversity be taken fully into account in planning and executing training activities to maximise the impact of PGRFA training offered by Europe both within the region and globally.
- Efforts be made to enhance and diversify training provided in the region, and to base decisions on the extent, levels, topics and approaches taken in training on an ongoing assessment of needs, opportunities and constraints.

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<sup>5</sup> Gass, T. and F. Begemann 1998. International efforts to sustain *ex situ* collections: conceptional aspects. *In*: proceedings of a European Symposium on Plant Genetic Resources for Food and Agriculture, Braunschweig, 30 June - 4 July 1998. International Plant genetic Resources Institute, Rome, Italy (in press).

- Mechanisms be explored to increase the total funding available for PGRFA training through diversifying approaches to national and international funding sources and coordination of efforts to aggregate modest contributions and inputs in-kind.
- Milestones and indicators relevant to training and national PGRFA programme implementation be developed and that impact assessment of training and capacity-building be carried out periodically in order to optimise the targeting of training efforts and resources over time, and in response to changing needs and opportunities.

### 3. *In Situ* Conservation and Development: a) Wild Relatives of Cultivated Crops

*Chairs: V. Heywood and E. Firat*

1. It is recommended that a list is made of existing examples of *in situ* conservation projects for conservation of PGRFA in Europe and neighbouring regions, and a database of project details established.
2. Action should be taken to build upon the Council of Europe catalogue of wild relatives of European cultivated plants (Heywood and Zohary 1995) by checking and supplementing the information therein on a national basis. New fields to be added should include: detailed in-country distribution, ecology, breeding system, crossing information, population dynamics and IUCN category of threat.
3. The ECP/GR *In situ* and on-farm conservation Network should compile and issue, from various existing sources<sup>6</sup>, a consolidated list of guidelines for the practical implementation of PGRFA conservation and these should be issued as a booklet.
4. Links should be established with other organizations (e.g. MAB, FAO, DIVERSITAS, IUCN, etc.) that have competence in this area to promote and facilitate mutual benefits.
5. The amount of genetic diversity that may duplicated between the wild relatives and their related crops should be investigated.
6. There is a need to research the relative costs of *in situ* and *ex situ* conservation of species' populations.
7. The workshop recognized that *in situ* conservation of wild relatives and on-farm conservation are two distinct but related subjects. Therefore it recommended that two separate but allied working groups be

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<sup>6</sup> e.g. the following references:

Council of Europe. 1979. Bern Convention. Council of Europe, Strasbourg. (available on Internet at <http://www.microresearch.be/isha/JUR/bernconv.htm>)

Given, D.R. 1994. Principles and Practice of Plant Conservation. Timber Press, Oregon.

Heywood, V.H. and D. Zohary (eds). 1995. A Catalogue of the Wild Relatives of Cultivated Plants Native to Europe. *Flora Mediterranea* 5:375-415.

Heywood, V.H., G.B. Ingram and L. Olivier. 1993. Report on Workshop IV.6 Managing Protected areas to Conserve Genetic Resources. *in* IV World Congress on National Parks and Protected Areas, Caracas, Venezuela, February 1992. IUCN, Gland.

Hoyt, E. 1992. Conserving wild relatives of crops (2<sup>nd</sup> edn.). IBPGR-IUCN-WWF.

MAB. The Seville Strategy for Biosphere Reserves. MAB, UNESCO, Paris (available on Internet at <http://www.unesco.org/mab/home/stry-1.htm>)

Maxted, N., B.V Ford-Lloyd and J.G Hawkes. 1997. Plant Genetic Conservation: the *in situ* approach. Chapman & Hall, London.

Valdes, B., V.H. Heywood, F. Raimondo and D. Zohary (eds.). 1997. Conservation of the Wild Relatives of European Cultivated Plants. *Boccone* 7.

formed, although certain species or situations may be of interest to both working groups, e.g. forage and weedy species.

8. To assist countries in determining priorities for *in situ* conservation, the workshop recommended that the following criteria be considered:
  - is the target species/ecotype/population threatened nationally, regionally or globally?
  - does the species occur in a recognized protected area?
  - is the species subject to environmental legislation at a national, regional or global level that requires conservation action?
  - if the species does not occur in a recognized protected area, does it occur in an area where ownership/control/access can be gained and monitoring undertaken?
  - is it a 'keystone', 'umbrella', 'flagship' or culturally important species?
  - is it a component of an ECP/GR or other crop network?
  - the ecogeographical range or specificity of the species;
  - population size, structure and whether isolated, marginal, introgressed;
  - the breeding system and phenological characteristics of the species;
  - once priority species have been determined, an effective strategy is to conserve those that occur in the same ecosystem or habitat, i.e. give priority to the conservation of sites that are rich in species of wild relatives.
9. The workshop recommends that an *ad hoc* meeting be held to assess work at a national level to review project experiences, identify further conservation, research and training initiatives, coordinate research and training priorities at a European level, and that the meeting should involve the participation of representatives of EUFORGEN and DIVERSITAS. The workshop further recommends that invitations to the *ad hoc* meeting are extended through Europe and neighbouring regions in view of the close biogeographical links between Europe and the Mediterranean region.
10. The workshop recognizes that due to severe threats to many wild relatives in certain European countries, emergency survey and inventorying is required and it therefore requests IPGRI to assist in strengthening national programmes in these areas.

#### **4. *In situ* conservation and development   b) On farm management and improvement of PGRFA**

*Chairs: N. Arrowsmith and P. Marum*

The Working Group recommends that:

1. An ECP/GR thematic network on on-farm management for PGRFA be activated and relevant activities be included in the crop networks in the workplan for Phase VI in order to fully implement Activity 2 of the GPA in Europe;
2. To this end ECP/GR should establish a temporary Task Force existing up until the first meeting of the thematic Network, with good knowledge of on-farm management and representing both the formal and informal sectors;
  - the mandate of this Task Force would be to draft terms of reference for the first meeting of the on-farm management thematic Network;
  - The Task Force would provide the Network with the most important issues raised by on-farm management;

- The Task Force should use various ways to communicate its ideas and proposals with a larger audience so that strategies and new initiatives for an ECP/GR on-farm management programme can be established;
- 3. The work programme of the thematic Network include a number of issues that were identified by the participants of the Working Group, such as:
  - the problem of definitions;
  - the need for minimum descriptors lists for on-farm management;
  - inventory of on-farm management experiences;
  - improvement of communication and information exchange within and between different sets of actors;
  - case studies of experiences of formal and informal sector cooperation on the different elements of GPA Activity 2;
  - the need to document farmers' knowledge and plant traits of interest in on-farm management for inclusion into the Central Crop Databases;
  - identifying training needs, involving the informal sector wherever possible.
- 4. ECP/GR identify mechanisms for improving relations between formal and informal sector institutions. One such mechanism could include inviting European NGO representation in the ECP/GR Steering Committee and the ECP/GR Networks;
- 5. National programmes should develop activities relating to on-farm management in collaboration with the informal sector.

**5. Sustaining *ex situ* collections. The rationalization of regenerating methods, how far can we go.**

*Chairs: M. Cerne and N. Stavropoulos*

Gaps in implementing the GPA:

- the lack of sufficient funding for research in the direction of the rationalization of regenerating methods can delay and slow down this process;
- the lack of storage facilities, regeneration facilities and human resources can be a real barrier in the implementation of the GPA.

Areas in which additional participation or work is needed:

- the coordination of research on inexpensive and effective methods to reduce the cost of regeneration should be promoted by different programmes at the regional, national and international level. Training should be provided once the methods have been identified;
- involve private breeders and NGO's and the formal sector to assist in regeneration schemes with better scientific competence, infrastructure and funding.

What should be done in the near future to implement the GPA in the area of rationalization of regeneration methods:

- complete and adopt protocols and guidelines for the regeneration of PGRFA;
- provide training in the use of protocols and guidelines;
- prioritize PGRFA on a species level;

- regeneration is an essential prerequisite for the utilization of PGRFA and the benefit for the breeders and agricultural community. Therefore it needs to be declared as one of the priorities in future work.
- due to a of lack of facilities, funds, human resources etc. at the national level, regional aspect needs to be explored to facilitate regeneration.

## **6. Utilization of plant genetic resources**

*Chairs: D. Cooper and M. Suurnakki*

Main recommendations to ECP/GR:

ECP/GR should ensure that adequate attention is given to facilitating the use of the plant genetic resources in Europe, and in particular:

- the crop Working Groups should examine the need, by crop and geographical area, for genetic enhancement, including base-broadening and, where such needs are identified, formulate modalities for undertaking and/or supporting the necessary activities;
- the crop Working Groups should continue to develop core collections, and related approaches to optimise use, using the Central Crop Databases;
- the Steering Committee should facilitate collaboration between the public, private and informal sectors, especially to address issues of (i) funding of these activities, including those of a long-term and public-good nature, and (ii) accessibility of genetic resources and material resulting from these activities.

## **7. Seed Production and Distribution**

*Chair: R. Schachl and L. Hommo*

- the ECP/GR Secretariat should put forward information about various options in implementing Paragraph 203.e of the GPA, including the gathering of data about national case studies, and to study their effectiveness in achieving its objectives.
- ECP/GR should develop criteria for identification of landraces and obsolete varieties to be marketed, and criteria for the identification of landraces and obsolete varieties which are threatened.
- ECP/GR should identify barriers and lack of incentives to marketing landraces and obsolete varieties in accordance with Paragraph 209 of the GPA.
- besides seed legislation measures, ECP/GR should also discuss supportive measures within the general agricultural concept.

## **8. Collecting**

*Chairs: P. Perrino and N. Stavropoulos*

**The Working Group proposes the following actions:**



- Further collecting in unexplored areas and for which there are indications that there is high genetic erosion. The experts participating in the Working Group suggest collecting:
  - a) **wild genetic resources** in the various centres of primary or secondary diversity existing in the European region and perhaps in other areas proposed by country experts.
  - b) **landraces and other domesticated germplasm** in the same areas or perhaps in other areas proposed by country experts.
- Within these areas priority actions for sites and species should be decided by National Programmes and facilitated or supported by ECP/GR following the recommendations of the GPA and those of the suggested *ad hoc* Working Group of experts and/or an *ad hoc* ECP/GR Workshop. In particular, crop specific priorities may be proposed by existing Working Groups or Networks operating under the ECP/GR Programme, while multicrop collections could be proposed by National programmes and prioritized by existing Networks or an ECP/GR *ad hoc* group of experts.

## 9. Underutilized Crops

*Chairs: A. Della and L. Gusmao*

- To seek, through a questionnaire, the view of European countries referring to national concern about, among others, the following main points:
  - what species are considered within this group;
  - which are in danger of genetic erosion;
  - which are considered of priority;
  - degree of expertise for the species included.
- To carry out an inventory of the existing platforms dealing with the conservation and sustainable utilisation of genetic resources of these underutilised crops.
- To establish links among ECP/GR and other related Networks, particularly with the "MEDUSA" Network.

## 10. Collaboration with other regions

*Chairs: F. Begemann and Eva Thorn*

Suggestions for additional activities:

1. Information exchange
  - joint use of newsletters;
  - merge of databases i.e. crop, thematic;
  - directory of NGO activities, including activities related to disaster situations;
  - link information globally; i.e. via EIARD- Infosys, clearing-house mechanism;
  - information on training opportunities;
  - "seed" directories prepared by SADC/GTZ/CBDC and others could be made available.
2. Training
  - training in policy issues;

- training in scientific and technical issues.
- 3. Disaster situations
  - contact with relevant bodies within Europe.
- 4. Joint research
- 5. Seed distribution
  - networks needed to improve distribution of seed and information particularly in Africa.

By reflecting these items, the ECP/GR mandate to "facilitate the implementation of the GPA.." should be kept in mind.

## **11. Information systems**

*Chairs: I. Faberova and B. Visser*

- Each country should develop a well-functioning National information system on PGRFA, which should eventually become accessible through Internet.
- Data provided to this system should conform to regionally agreed standards. Also, data need to be validated as well as regularly updated.
- National information systems and decentrally managed databases should be accessible via the ECP/GR information platform. A relational structure of databases, linked to agreed standards, is recommended rather than the establishment of a single "mega-database".
- User-friendliness should be given high priority to promote utilization of PGRFA and in the interest of raising public awareness.
- Training of Database managers remains an important objective and services by the Internet Advisory Group should be continued.
- Access to germplasm related information (passport, characterization, and -as far as possible - evaluation data) should remain free of charge.

## **Annex III: Agenda Items discussed by the Steering Committee and list of background documents**

### **Agenda items discussed**

- Opening statements by representatives of the host country and IPGRI
- Election of Chair and co-Chair
- Adoption of the Agenda
- Preliminary End of Phase report
- Proposal for Phase VI of ECP/GR
- European symposium on PGRFA. Expectations and involvement of the Steering Committee
- Review of the objectives, structure and modus operandi
- Evaluation of Network activities and recommendations for further actions
- Sharing of conservation responsibilities for PGRFA in Europe
- Complementary ECP/GR modules to implement the Leipzig GPA
- Working Groups priorities ("milestones")
- Material Transfer Agreements
- Other business
- Conclusion

### **List of background documents made available by the Secretariat to the Steering Committee**

- Preliminary End of Phase V Report
- Proposal for a Phase VI of ECP/GR
- Sharing of conservation responsibilities for PGRFA in Europe,
- Draft letter of notification
- Draft Trusteeship Agreement
- Proposal for Complementary Modules
- Evaluation of Network activities and recommendations for future actions
  - Appraisal of Working Group meetings during Phase V
  - Forages Network
    - a) Internal Mid-term (progress?) report-1996 (*Petter Marum*);
    - b) Internal Mid-term report-1998 (*Petter Marum*);
    - c) Report (Part I, Appendix I, Appendix II and Appendix VII) of the Sixth meeting of a Working Group on Forages, 6-8 March 1997, Beitostolen, Norway.
  - Vegetables Network
    - a) *Allium* Working Group, Chair's report - (*Dave Astley*);
    - b) Draft report (Part I) of a Working Group on *Allium*, Sixth meeting, 23-25 October 1997, Plovdiv, Bulgaria;
    - c) Umbellifer Group report - (*Dave Astley*);
    - d) Activities and achievements of the ECP/GR *Brassica* Working Group - (*Lorenzo Maggioni*). Paper presented at the ISHS Symposium on Brassicas, 23-27 September 1997, Rennes, France.
  - Fruit Network
    - a) Supplement to the report of the *Malus/Pyrus* Working Group First Meeting - (*Wye College*);

- b) Draft report of an Extraordinary meeting of the ECP/GR *Prunus* Working Group and the Second Coordination Meeting of the Project Gen Res 61, 13-15 November 1997, Zaragoza, Spain.

Cereals Network

- a) Progress Report of the Wheat *ad hoc* Group - (*Iva Faberova and Annick le Blanc*);
  - b) Draft report (Part I) of the Fifth meeting of a Working Group on Barley (Alterode/Gatersleben, Germany 10-12 July 1997);
  - c) Draft report (Part I) of the Fifth meeting of a Working Group on *Avena* (Vilnius, Lithuania, 7-9 May 1998).
- Proposals received by the ECP/GR Secretariat for the establishment of additional Working Groups and recommendations for the initiation of *ad hoc* activities (see also Annex V):
    - Proposal for a Working Group on Wheat - (*Annick Le Blanc and Iva Faberova*);
    - Proposal for a Working Group on Umbellifers - (*Dave Astley*);
    - Proposal for a Working Group on *Pleurotus* - (*Giuseppe Venturella*);
    - Proposal for a Working Group on *Beta* - (*Lothar Frese*);
    - Proposal for a Working Group on Potato - (*Roel Hoekstra*);
    - Proposal for activities within the Documentation and Information Network - (*Internet Advisory Group*) .

## European Cooperative Programme for Crop Genetic Resources Networks (ECP/GR)

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### Annex IV: Report of Phase V of ECP/GR

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## 1. Introduction

This Preliminary End of Phase V report shows progress made up to Spring 1998. It is intended as information for funding agencies and policymakers and constitutes one of the background documents prepared for the Steering Committee of ECP/GR, to be held in Braunschweig, Germany, 29 June and 4- 5 July 1998.

Other important publications on ECP/GR Phase V include<sup>7</sup>:

- ECP/GR brochure which briefly outlines objectives and mode of operation of the Programme and provides a list of member countries, as well as contact details of the Chairs of the different Working Groups, plus a list of the European central databases;
- reports of the Working Group meetings which contain detailed results of the Working Group's activities, workplan and crop-specific recommendations;
- reports of Steering Committee meetings which contain decisions regarding scope, objectives and *modus operandi* of the Programme, as well as financial summaries and budgets;
- previous Progress Reports which cover the first three years of Phase V of the Programme (1994, 1995 and 1996);
- Quarterly Report to National Coordinators to inform the Steering Committee members of ongoing activities and progress. It also serves to bring to their attention aspects requiring the guidance of the Steering Committee;
- articles published in the IPGRI Newsletter for Europe which has a regular section on ECP/GR, including news about the Programme, brief summaries of recent working group meetings, etc.;
- Directory of European Institutions Holding Crop Genetic Resources Collections, (fourth edition), which is edited by IPGRI and FAO;
- web site (<http://www.cgiar.org/ecpgr>) offering information on ECP/GR.

## 2. Implementation of Phase V of ECP/GR

Following the recommendations made by the Technical Consultative Committee (TCC) at its Fifth meeting, held at Rhodope Mountains, Bulgaria, in August 1993, the European Cooperative Programme for Crop Genetic Resources Networks (ECP/GR) was extended into Phase V, covering the years 1994-1998.

Objectives of Phase V were identified as follows:

- to ensure the long-term conservation and to facilitate and encourage the increased utilization of plant genetic resources in Europe;
- to increase the planning of joint activities;
- to strengthen links between east and west European plant genetic resources Programmes;
- to develop joint project proposals to be submitted to funding agencies;
- to contribute to monitoring the safety of plant genetic resources collections and take appropriate action when required; and
- to increase public awareness, at all levels, of the importance of plant genetic resources activities

The operational structure of Phase IV was maintained and activities were recommended for Working Groups on *Allium*, *Avena*, Barley, *Brassica*, Forages and *Prunus*. The creation of a new Working Group on *Pisum* was also recommended, while the Working Group on Sunflower was considered to have successfully completed its Programme and it was suggested that it continues its activities under the umbrella of the FAO/ESCORENA.

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<sup>7</sup> Can be obtained free of charge from the ECP/GR Coordinator, IPGRI, Rome, Italy.

Seventh Meeting of the ECP/GR Steering Committee - Annex IV

Figure 1. Organization of the European Cooperative Programme for Crop Genetic Resources Networks (ECP/GR) and its activities during Phase V of the Programme (1994-1998)

Steering Committee							
Coordinating Secretariat							
Crop-specific Networks	Cereals Network	Forages Network	Vegetables Network	Grain Legumes Network	Fruit Network	Minor crops Network	Industrial Crops and Potato Network
<ul style="list-style-type: none"> <li>Standing Working Groups (meetings Phase V)</li> </ul>	<b>Barley*</b> - Germany, 1993 - Germany, 1997 <b>Avena*</b> - Hungary, 1993; - Lithuania 1998	<b>Forage crops*</b> - Bulgaria, 1995; - Norway, 1997	<b>Brassica*</b> - Portugal, 1994; - Italy, 1996 <b>Allium*</b> - Poland, 1995 - Bulgaria, 1997	<b>Grain Legumes*</b> - Denmark, 1995; - UK, 1998	<b>Prunus*</b> - Turkey, 1996; - Italy, 1996; <b>Malus*/Pyrus</b> - Ireland, 1997		
<ul style="list-style-type: none"> <li>Ad hoc meetings Phase V</li> </ul>	<b>Wheat*</b> France, 1996 <b>Secale *</b> - Poland, 1996 <b>Maize*</b> - Italy, 1996		<b>Daucus</b> - Poland, 1997		<b>Malus*</b> - UK, 1995		
<ul style="list-style-type: none"> <li>Collaboration with programme EC1467/94</li> </ul>	<b>Maize*</b> (GEN RES 88)		<b>Allium*</b> (GEN RES 20)		<b>Prunus*</b> (GEN RES 61) <b>Vitis*</b> (RES GEN 81)		<b>Beta*</b> (GEN RES 42) <b>Potato*</b> (RES GEN CT95)
Thematic Networks	<b>Documentation and information</b> <ul style="list-style-type: none"> <li>Collaboration with FAO : Publication of the Directory of European PGR Collections, 1995.</li> <li>Collaboration with CGN (Wageningen, The Netherlands): EGDS Project (East European Germplasm Documentation Systems); Workshop on Central Crop Databases, Hungary, October 1996.</li> <li>Collaboration with ZADI (Bonn, Germany): Training workshop on on-line databases, Germany, June 1997.</li> <li>Collaboration with NGB (Alnarp, Sweden): Training workshop on on-line databases, Sweden, February 1998</li> </ul>						
	<b>In situ and On-farm conservation</b> Workshop on <i>in situ</i> conservation of wild <i>Brassica</i> in Sicily, April 1997						
	<b>Technical cooperation</b> (no activities during Phase V)						

\* indicates the existence of a central crop database for the crop

### *Seventh meeting of the Steering Committee of ECP/GR*

*In September 1995 a mid-term meeting of the TCC was held in Nitra, Slovakia, in conjunction with the European preparatory conference for the International Technical Conference (Leipzig, 1996), when the objectives of the Programme were reviewed and reconfirmed. A new operational structure, based on a broader range of crop and thematic networks was established for activities on other crops or themes to be carried out and also to enable the ECP/GR to play a more catalyzing role in Europe for the implementation of the Global Plan of Action. The name of the "Technical Consultative Committee" was changed to "Steering Committee".*

**Figure 1** shows a summary of Working Group meetings, *ad hoc* actions and other activities, carried out by the networks established during Phase V and gives an overview of the organizational structure of ECP/GR as agreed at the 1995 meeting in Nitra.

Participation of most European countries was secured at the onset of the phase through Letters of Agreement signed with IPGRI. Although Albania, Russia and Ukraine were represented at the TCC meeting in Bulgaria in 1993, they never joined Phase V. However, representatives from these countries have occasionally been involved in the Programme activities. In particular, the link between Working Groups and the Vavilov Institute, St Petersburg, has always been maintained, by inviting Russian observers to the meetings. Furthermore, Croatia, Estonia, Lithuania, Malta and Slovenia joined the Programme during the course of Phase V, and currently, 32 countries are taking part in the Programme (**see Table 1**). Moreover, contacts with additional countries have been made and to date, Georgia, Latvia, Macedonia and Ukraine have indicated their intention to join the Programme in the near future.

The International Plant Genetic Resources Institute (IPGRI) provided the Secretariat to ECP/GR during Phase V and as recommended by the TCC in Bulgaria in 1993, a full time ECP/GR Coordinator was appointed. Thomas Gass, a Swiss national, took up this position from 1 July 1994 through 15 September 1996 and subsequently became Director of IPGRI's Regional Office for Europe. Following this, Lorenzo Maggioni, an Italian national, was selected for the position of ECP/GR Coordinator and took up his duties on 16 September 1996.

Contributions from member countries were regularly received and this enabled the Programme to continue. However, compared to the total budget agreed in Bulgaria in September 1994, funds have been reduced, due to the lack of some of the important countries joining the Programme. This has culminated in some of the activities having to be cancelled, such as one meeting of the *Prunus* Working Group. The expected balance at the end of Phase V is deficient at US\$ 45 900, compared to the anticipated deficiency of contributions of US\$ 144 000. (**See Appendix 1: Intermediate Financial Report**).

**Table 1.** Member countries of ECP/GR

Austria	Finland	Italy	Slovakia
Belgium	France	Lithuania	Slovenia
Bulgaria	Germany	Malta	Spain
Croatia	Greece	Netherlands	Sweden
Cyprus	Hungary	Norway	Switzerland
Czech Republic	Iceland	Poland	Turkey
Denmark	Ireland	Portugal	UK
Estonia	Israel	Romania	Yugoslavia (Fed. Rep.)



### 3. Activities carried out within the Networks

#### 3.1 Documentation and Information Network

This network was established during the Sixth meeting of the TCC in Nitra, September 1995, as a framework for activities in plant genetic resources documentation.

##### *Overall progress*

Collaboration between ECP/GR and FAO's World Information and Early Warning System on plant genetic resources has been intensive and fruitful during 1994 and 1995, and has resulted in the publication of the *Directory of European Institutions holding Crop Genetic Resources*. This document is also downloadable from the Internet.

ECP/GR has maintained close collaboration with the Dutch-funded EGDS project (East European Germplasm Documentation Systems), which aims at strengthening the PGR documentation systems in eastern Europe. Eight national genebanks (Bulgaria, Czech Republic, Hungary, Poland, Romania, Russian Federation, Slovak Republic and Ukraine) participated in this project, which was funded by the Dutch Ministry of Agriculture, Nature Management and Fisheries and coordinated by the Centre for Genetic Resources, The Netherlands (CGN). ECP/GR collaboration included the publication entitled *Descriptions of national plant genetic resources documentation systems in eastern European countries* and also assistance in funding the participation of observers to the annual technical workshops organized by EGDS.

A further outcome of this collaboration was a joint EGDS-ECP/GR Workshop on "Central Crop Databases: Tools in Plant Genetic Resources Management", held in Budapest, Hungary from 13 to 16 October 1996. This Workshop was attended by 55 participants from 26 countries representing most of the European Central Crop Databases (CCDBs) (see **Table 2**) and a number of institutions specializing in PGR documentation technology, as well as international organizations. As a result of Budapest, so called Documentation Support Centres" (DSC) have emerged, these centres being institutions with deep know-how in PGR documentation and a strong technical infrastructure. The DSCs are supposed to help and give advice to CCDB managers with respect to database management, as well as offering their technical infrastructure for publishing the CCDBs on the Internet. This workshop marked an important milestone in the activity of the Documentation and Information Network, since its recommendations significantly influenced ECP/GR activities in the following years.

The meeting focused on the following issues:

- the role of Central Crop Databases (CCDBs);
- the standardization of CCDBs;
- the inclusion of evaluation data in CCDBs;
- the role of Database Managers; and
- the facilitation of access to CCDBs.

While noting that the CCDBs will continue to be a key tool for the management of collections by the crop-specific working groups or individual curators, the Workshop recognized the need to focus the activities and development of CCDBs more towards the needs of the end users (breeders, research institutions, education establishments and others). The Workshop adopted a slightly revised version of a Multi-crop passport descriptor list proposed by FAO and IPGRI, as standard exchange format for data transfers in the region which contains two components: the Multi-crop passport descriptors; and, as a recommended optional, the World Information and Early Warning System (WIEWS) descriptors, for monitoring germplasm collections. It was also recommended that FAO and IPGRI should provide, maintain and promote a standard list of institute codes for the purpose of data exchange. This was expected to reduce the workload associated with the data transfers from genebanks to CCDBs and would enhance the usefulness of the CCDBs. The Workshop also recommended that evaluation data be included into the CCDBs to better meet the needs of users and to facilitate access to the collections.

In order for the CCDBs to become more widely accessible and to make full use of the opportunities given by recent developments in communication and computer technology, the Workshop decided to establish an Internet based

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Information Platform, through which all the CCDBs would eventually be accessible. This system, to be established within the framework of the ECP/GR Information and Documentation Network, would provide access to data on national programmes and a number of relevant information services. The Workshop considered the implementation of this Internet Information Platform on crop genetic resources as an important step to implement, at the European level, the 'Global Plan of Action' adopted in June 1996 in Leipzig, Germany. In March 1996, IPGRI established an Internet site for ECP/GR. This homepage can be accessed at the URL:

<http://www.cgiar.org/ecpgr> and gives the following information:

- Introduction to ECP/GR (including structure and *modus operandi*);
- News and information (including forthcoming meetings, employment opportunities, fellowships, etc.);
- Contact addresses (including updated lists and contact details of National Coordinators, Working Group members and Central Crop Database Managers);
- Publications (lists of ECP/GR and other IPGRI publications);
- The European Information Platform on Crop Genetic Resources.

### *Progress in 1997 and first quarter 1998*

As recommended during the Documentation meeting in Budapest, October 1996, an ECP/GR Internet Advisory Group was formally established. Members of the group are the documentation officers of the Support Documentation Centres: Pierre Campo (GEVES), Theo van Hintum (CGN), Morten Hulden (NGB), Daniel Jimenez Krause (ZADI), Kevin Painting (IPGRI) and Lorenzo Maggioni (ECP/GR Coordinator). The group has actively interacted via Email and has successfully collaborated in the following tasks:

- Development of the European Information Platform Home Page ;
- Definition of guidelines for the design and establishment of uniform Entry Pages for the Central Crop Databases ;
- Definition of technical guidelines for the first steps needed to create home pages or on-line searchable databases (including relevant aspects of common database design, access, automated update and electronic mirroring through Internet);
- Production of a list of commonly used terminology, which was included in the proceedings of the Budapest meeting ;
- Preparation of Central Crop Databases downloadable zip files and their uploading at a Documentation Support Centre;
- Organization of a Training Workshop on topics related to the Internet and on-line databases. The first session was held in Bonn, Germany in June 1997, organized by ZADI and ECP/GR, and the second held in Alnarp, Sweden, in February 1998, organized by NGB and ECP/GR.

Since June 1997, the "European Information Platform on Crop Genetic Resources" Home Page has been accessible at the URL <http://www.cgiar.org/ecpgr/platform>. The platform serves European National Programmes and offers on-line access to several ECP/GR Central Crop Databases (currently *Agrostis*, *Avena*, Barley, *Bromus*, *Dactylis*, *Brassica*, *Festuca*, *Glycine*, *Lathyrus*, *Lolium*, *Phalaris*, *Phleum*, *Poa*, *Trifolium* and Wheat) and to other regional and International databases (i.e. *Beta* and *Vitis*). Entry pages for the ECP/GR *Allium*, *Prunus* and *Triticale* databases are also in existence and linkage with the respective on-line databases is foreseen in the near future. Additional information and services are available from the Platform, such as a directory of PGR related institutions, the provisional list of FAO Institution codes, the IPGRI/FAO Multi-Crop Passport Descriptors List, the outcome documents of the first Training Workshop on on-line databases (Bonn, June 1997) and links to other relevant Internet resources, etc.

### *Outlook*

The Documentation and Information Network, with its numerous and successful activities, has had a very positive and stimulating effect on all the other networks of ECP/GR. For example, the FAO/IPGRI Multi-Crop Passport Descriptors List has been generally accepted by the crop Working Groups and databases have since been updated in harmony with this standard.

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The European Information Platform on Crop Genetic Resources itself is also expected to develop further, with links to all the databases, if available for on-line search or off-line downloading. The Platform could also develop further by offering access to an increased number of services, such as links to lists of PGR related sites and providing on-line ECP/GR meeting reports.

The Internet Advisory Group has proved to have a useful help desk function regarding Internet and germplasm documentation. This group is expected to maintain its role in the near future, in view of the preparation of downloadable zip files and of on-line searchable databases.

An ECP/GR mailing listserver is planned and expected to assist with rapid and informal exchange of information (such as announcements of meetings dates and publications of reports, etc.), as well as discussion on PGR databases and the management of collections.

Another service currently under discussion is the facility to request seed or vegetative propagating material through the above mentioned Internet Platform.

The Internet Advisory Group, on behalf of the ECP/GR Documentation Network, recommends to the ECP/GR Steering Committee that a European Documentation meeting take place during Phase VI, as a follow-up to the Budapest meeting held in October 1996. This meeting is considered essential as a forum for interaction between the European database (DB) managers.

A third session of the Training Workshop would also be beneficial for a number of DB managers. CGN has offered to host the workshop in Wageningen, tentatively planned for 1999.

A resubmission of the EUGENET project to the EC is planned, in response to the upcoming third call for proposals (EC 1467/94). This project would request funds to support the operation of the Documentation Network in Europe.

During the WIEWS meeting in September 1996 and the Budapest Meeting in October 1996, it was emphasized that the Documentation and Information Network of ECP/GR could act as an effective interface between WIEWS and the national programmes.

**Table 2. European Crop Databases established under ECP/GR**

ECP/GR Network	Crop or crop group	Managing institution	Date of establishment	Total number of accessions	On line http://
Cereals	Avena	BAZ Braunschweig/ DEU	1984	19 315	<a href="http://www.dainet.de/eccdb/Avena">www.dainet.de/eccdb/Avena</a>
	Barley	IPK-Gatersleben/DEU	1984 rebuilt 1987	88 996; 23 293 on-line	<a href="http://www.dainet.de/eccdb/Barley">www.dainet.de/eccdb/Barley</a>
	Secale	IHAR-Radzikow/POL	1984 rebuilt 1995	9683	<a href="http://www.ihar.edu.pl/gene_bank/secale/secale.html">www.ihar.edu.pl/gene_bank/secale/secale.html</a>
	Triticale	RAC-Nyon/CHE	under establ.	not applic.	
	Wheat	RICP Prague Ruzyně/CZE ) GEVES-Surges/FRA )	1996	250 000 (estim.)	genbank.vurv.cz/ewdb
	Maize	MRI Zemun/ YUG	(Oct 89) ECP/GR 1996	(5437) (in establ.)	147.91.51.237/EMDB
Vegetables	Allium	HRI-Wellesbourne/GBR	1985 (in rebuilding)	7527	
	Brassica	CGN-Wageningen/NLD	1992	13000	<a href="http://www.cpro.dlo.nl/cgn/brasedb">www.cpro.dlo.nl/cgn/brasedb</a>
	Umbellifers	HRI-Wellesbourne/GBR	Under establ.	Not appl.	
Grain Leg.	Phaseolus	Fed.Off.Agrobiology Linz/AUT	under establ.	13854	<a href="http://www.agrobio.bmlf.gv.at/phaseolus">www.agrobio.bmlf.gv.at/phaseolus</a>
	Vicia faba	INRA Le Rheu/FRA	under establ.	not appl.	
	Pisum	PBS Wiatrowo/POL ) JIC Norwich/GBR )	1989	37103	
	Lupinus	IPG Poznan/POL	May 1996	6782	
	Cicer	ENMP Elvas/PRT	Nov 1996	4421	<a href="http://www.ngb.se/Databases/ECP/Cicer">www.ngb.se/Databases/ECP/Cicer</a>
	Glycine	VIR St Petersburg/RUS	1992	11 693	<a href="http://www.dainet.de/eccdb/glycine">www.dainet.de/eccdb/glycine</a>
	Lens	AARI Izmir/TUR	1997	1491	
Fruit trees	Prunus	INRA Bordeaux/FRA	(1982) rebuilt 1996	15000	
	Malus	NFC Wye College/GBR	Feb 1995	2500	
Forages	Lolium/T. repens	IGER Aberystwyth/GBR	Nov 1987	Lolium 8456 T. repens 1247	<a href="http://www.ngb.se/Databases/ECP/Lolium/Trifolium">www.ngb.se/Databases/ECP/Lolium/Trifolium</a>
	Lathyrus lat./ tub./heter./sylv.	IBEAS Pau/FRA	1985	3734	www.ciuppa.univ-pau.fr:8888/lathy/ lathyrus
	Vicia ssp.	CNR Bari/ ITA	1992	5520	
	'other Viciae'	University Southampton/GBR	?	219	
	Agropyron	IPGR Plovdiv/ BGR	under establ.	not applic.	
	Arrh. elatius/ Tris. flavescens.	OSEVA Pro Zubri/CZE	1991	291 (219/ 72)	
	Perenn. Medicago	INRA-GEVES Guyancourt/FRA	1987	2900	<a href="http://www.cgiar.org/ecpgr/platform">www.cgiar.org/ecpgr/platform</a>
	other perennial forage legumes	IPPQ Tapioszele/HUN	under establ.	1316	
	Poa	IPK Malchow/DEU	1984	2636	<a href="http://www.dainet.de/eccdb/poa">www.dainet.de/eccdb/poa</a>
	Bromus	IPPQ Tapioszele/HUN	1984	584	<a href="http://www.ngb.se/Databases/ECP/Bromus">www.ngb.se/Databases/ECP/Bromus</a>
	T. pratense	IPPQ Tapioszele/HUN	1984	1895	<a href="http://www.ngb.se/Databases/ECP/Trifolium">www.ngb.se/Databases/ECP/Trifolium</a>
	T. subterr./annual Medicago	INIA Badajoz/ESP	1981	4853 (3077 + 1776)	
	T. alexandrinum/ T. resupinatum	ARO Bet Dagan /ISR		T. alex140 T. resup 100 (in 1995)(*)	
	Dactylis/Festuca	IHAR Bydgoszcz/POL	1985	16064 (8700 + 7364)	<a href="http://www.ngb.se/Databases/ECP/Dactylis/Festuca">www.ngb.se/Databases/ECP/Dactylis/Festuca</a>
	Phalaris/Agrostis /Phleum	NGB Alnarp/SWE	Agrostis/Phalaris1997 Phleum: Oct 1996	Phalaris 253 Agrostis 388 Phleum 3602	<a href="http://www.ngb.se/Databases/ECP/Phalaris/Agrostis/Phleum">www.ngb.se/Databases/ECP/Phalaris/Agrostis/Phleum</a>

(\*) data extracted from working groups reports

## 3.2 Cereals Network

Within the framework of the Cereals Network, two Working Groups (Avena and Barley) have been operative during Phase V. A Barley Working Group meeting was held in 1997 and an Avena Working Group meeting is planned for May 1998.

Other activities focused on a number of important crops, which have not been addressed by the Programme in the past. Ad hoc meetings were held in 1996 respectively for Secale, Maize and Wheat genetic resources.

A number of informal meetings were held in 1994 and 1995 to facilitate the preparation of projects to be submitted to the EU programme on genetic resources (EC 1467/94). These meetings were not funded by ECP/GR, but they were either attended by the ECP/GR Coordinator or the Director of IPGRI's Regional Office for Europe. Projects were submitted to the first or second call of the EC programme.

### 3.2.1 Avena Working Group

Following the retirement of Prof. Hugh Thomas (IGER, UK), the group has been chaired *ad interim* by Dr Mike Leggett from the same Institute.

#### **Overall progress**

A European core collection for cultivars of *Avena* is being established. This core collection is based on a cluster analysis of the parentage coefficient of the cultivars documented in the European *Avena* database, and is being undertaken by the Plant Breeding and Acclimatization Institute (IHAR) in Poland. Establishment of a core collection of oat landraces is intended by the BAZ genebank. Steps have also been taken towards the establishment of a core collection of wild species of the *Avena* genus, in order to make secondary and tertiary genepools more readily available to breeders. The latter is being undertaken by the Institute of Grassland and Environmental Research, IGER, Aberystwyth, UK, in collaboration with the N. I. Vavilov Institute of Plant Industry (VIR).

A collaborative project proposal for the conservation of European *Avena* genetic resources, involving 10 different countries and coordinated by IGER, UK, was submitted to the first call of the EU funded programme EC1467/94. Unfortunately, this project was not selected for funding.

Dr Leggett, acting Chair of the Working Group, represented the ECP/GR *Avena* Working Group at the Vth International Oat Conference, held in Canada in July-August 1996.

#### **Progress in 1997 and 1998**

The Database Manager of the European *Avena* Database attended the ECP/GR -ZADI Training Workshop on On-line Databases, held in Bonn, Germany in June 1997, and the database was made available on the Internet at <http://www.dainet.de/eccdb/Avena> and via the European Information Platform. This database contains passport data of 19 315 accessions representing the *Avena* collections from 20 European contributors. An additional 11 000 passport data received from the Vavilov Institute are being included. The structure of the database follows the principles of the IPGRI/FAO Multi-Crop Descriptors List. This list was adopted by the Group during its Fifth meeting, which was held in Vilnius, Lithuania, on 7-9 May 1998. The establishment of core collections of wild landraces and cultivars are under development within the group. The establishment of a core collection of wild oat species is also encouraged. However, the inclusion of data for species non native to Europe is considered essential in this case. Recent collecting missions have resulted in the discovery of the new species *Avena insularis*, likely the tetraploid progenitor of *A. sativa*. The importance of encouraging the protection of sites hosting rare wild relatives of oat, such as *A. insularis* and *A. murphyi* was stressed by the Group. A proposal was made to undertake a pilot study to improve genebank quality standards on the basis of ISO 9000 standards. The Steering Committee of ECP/GR was invited to comment on this opportunity. The Group will prepare a new project to be submitted for funding under the third call of to the EC 1467/94 Programme.

#### **Outlook**

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The Fifth meeting of the *Avena* Working Group is being organized at the Lithuanian Institute of Agriculture in Vilnius, Lithuania in May 1998. Participants from 12 countries will attend and the main topics of discussion will be the status of the European *Avena* core collections; the opportunities to include characterization and evaluation data in the EADB; as well as reports on recent collecting missions and on the status of national collections (including safety of collections and quality standards).

### **3.2.2 Barley Working Group**

The Working Group on Barley was chaired by Prof. Karl Hammer (IPK, Gatersleben, Germany) until July 1997 and since then by Prof. Roland von Bothmer (Swedish University of Agriculture, Sweden).

#### ***Overall progress***

A collaborative project for Barley was submitted to the EU genetic resources programme EC 1467/94, but not approved. The development of the European Barley Database (EBDB) was therefore carried out with limited resources as input- in-kind by IPK. By the end of 1997 the database contains approximately 89 000 accessions from about 25 European countries, including Russia. Of the ECP/GR databases, the EBDB is so far the most comprehensive. The European part of the International Barley Core Collection (which was initiated by ECP/GR) has been created under the coordination of Prof. Fischbeck at the Technical University of Munich. This material has been physically transferred to the IPK Genebank, where it is being multiplied and will soon be available for distribution. Progress has also been made in the development of mechanisms to extend genetic characterization to the molecular level and to further evaluate the Barley collections in national programmes. East European genebanks have been given support in several projects as the European Barley Working Group is considered an important platform for work with Barley germplasm. ECP/GR supported the participation of Prof. G. Fischbeck, who represented the ECP/GR Barley Working Group, to the VII<sup>th</sup> International Barley Genetics Symposium held in Summer 1996 in Saskatoon, Canada,

#### ***Progress in 1997***

The Fifth meeting of the group was held at Alterode, Gatersleben in Germany, 10-12 July 1997. A report made by the IPK Database Manager on the status of the European Barley Database (EBDB) stated that financial support for the position of the Database Manager had been provided by IPK since the beginning of 1997. IPK support for EBDB manager was for six months (ended September 1997). A prototype of the EBDB is now accessible via Internet at <http://www.dainet.de/eccdb/Barley> or via the European Information Platform on PGR. A list of descriptors for data exchange was established, based on the Multi-crop passport list agreed in Budapest, October 1996 and with the addition of Barley specific descriptors. The Database manager of the European Barley Database attended the ECP/GR – ZADI Training Workshop on On-line Databases, held in Bonn, Germany, in June 1997.

The resubmission of a project proposal to the potential third call of EC 1467/94 was agreed. Helmut Knüpfper (IPK) is coordinating this proposal, which aims at producing evaluation data for biotic and abiotic stresses and including these in the EBDB. The European Barley Database should be more extensively used within the project for data analysis and, at the end of the project, it should become the most complete source of information on the European Barley collections.

The Barley Working Group considered that ECP/GR should play an active role in formalizing the sharing of responsibilities for the conservation and promotion of the use of crop genetic resources. A possible mechanism of responsibility sharing for the conservation of European Barley genetic resources has been presented for consideration to the Steering Committee of ECP/GR (Agenda Item 7 of Steering Committee Meeting). Such a system would involve the establishment of a decentralized European Crop Collections, whereby each country takes up responsibility on behalf of ECP/GR for the maintenance of accessions, accepted as primary holdings by the respective national genebanks.

#### ***Outlook***

The primary objective of the ECP/GR Barley Working Group remains the completion of the EBDB and its use in addressing questions related to identification of duplicates, primary country holdings and gaps in collections. The EBDB is expected to advance further by developing links to available evaluation data and to information relating to pedigree data.

A list of putatively unique accessions will be sent to curators of genebanks with the plan of creating a rationalized European Barley Collection.

The Group's contribution to the development of the Barley Core Collection, particularly relating to European accessions is expected to continue, *inter alia*, with the initiation of the evaluation of material used for winter hardiness in the Czech Republic. This will add to the identification and utilization of useful traits, as well as extending the data and value of the collection.

The Group intends to increase its focus on the conservation and evaluation of wild relatives of cultivated Barley, in particular *H. spontaneum* and *H. bulbosum*, with reference to biotic and abiotic stresses. The Group strongly promotes the importance of pre-breeding efforts in improving access and utilization of these diverse gene pools.

The Group strongly recommends its continuation, in order to complete the work it has started and explore further the existing potential in terms of genetic resources management and their utilization.

### 3.2.3 Maize ad hoc Group

An *ad hoc* Workshop on Maize Genetic Resources was organized in Rome, Italy from 28 to 30 May 1996. The meeting was chaired by Prof. Richard H. Ellis (University of Reading, UK). An informal group on maize has since then been active.

#### **Overall progress**

The main objective of the Workshop was to discuss the needs of establishing a European Maize Database (EMDB), following an offer made by the Maize Research Institute "Zemun Polje" in Belgrade, F.R. Yugoslavia to host and take responsibility for the establishment and maintenance of the database as input- in-kind to the Programme. After a thorough assessment of the needs of the maize genetic resources users community, particularly those of the breeders, it was agreed that a European Maize Database could provide valuable information, facilitate data management and increase collaboration between genebanks. The offer from the Maize Research Institute was gratefully accepted and technical guidelines were drawn up for the contents and structure of the common database.

#### **Progress in 1997 and first quarter 1998**

*A project proposal submitted to the second call of the EU genetic resources Programme (EC 1467/94) was selected by the European Commission, and since 1997 has been funded as Project Gen Res 88. This project will ultimately establish a European core collection from the different national collections of maize landraces. The project is coordinated by INRA, Montpellier, France and involves another six EU countries who are all members of ECP/GR: Germany, Greece, Italy, Netherlands, Portugal and Spain. A high degree of complementarity is expected between this project and the establishment of a European Maize Database.*

The European Maize Database Manager from Zemun Polje was invited to take part in the Coordination Meetings of the EU funded project and as a result of this collaboration, it was agreed that the European Maize Landraces Database created within the Gen Res 88 project will form a particularly intensively documented subset of the European Maize Database. Although the establishment of the EMDB at the Maize Research Institute of Zemun Polje has encountered some internal obstacles, these have apparently been overcome and Yugoslavia has confirmed its intention to host this database as an input-in-kind to ECP/GR. The structure of the EMDB has been sent to all the participants and data are being received from the European countries.

#### **Outlook**

A first version of the EMDB is expected to be completed during the first half of 1998 and will subsequently become available on the Internet<sup>8</sup>.

The Group made recommendations to the Steering Committee of ECP/GR that a second meeting on maize genetic resources be held once the EMDB is implemented. The objectives of this second meeting would be to focus on rationalization for enhancement of utilization and prebreeding studies.

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<sup>8</sup> As of June 1998, the database is available on the Internet at the address <http://147.91.51.237/EMDB/>

### 3.2.4 *Secale ad hoc* Group

A *Secale ad hoc* Workshop was held in Warsaw, Poland, July 1996 within the context of an international conference on "Crop Germplasm Conservation Problems with Special Emphasis on Rye". The conference was part of Poland - USDA cooperation and was hosted by the Botanical Garden of the Polish Academy of Sciences and the Plant Breeding and Acclimatization Institute (IHAR), Radzikow, Poland. The workshop was chaired by Dr Wieslaw Podyma (IHAR, Poland). An informal *Secale* group has been active since then.

#### **Overall progress**

The European *Secale* Database, established in 1984, is maintained by IHAR, Radzikow, Poland and was last updated in 1995. During the above mentioned conference, an overview was given of the state-of-the-art in *Secale* genetic resources conservation and use, and a number of ongoing research projects in Europe and the USA were presented. The ECP/GR Workshop focused on the effective conservation of *Secale* collections through an agreed sharing of responsibilities. Analysis of the recently updated European *Secale* Database allowed the identification of putative duplicates among the 9,901 accessions recorded from 21 institutions in the region. This showed, for example, that the original material from some of the smaller collections is held in only one genebank, while some of the larger collections hold great numbers of foreign accessions that are duplicated in several other genebanks.

The *ad hoc* Group recommended a number of steps to establish a European *Secale* Collection. This concept was further developed by the Forages and Barley Working Groups in 1997.

#### **Progress in 1997**

The Database Manager of the European *Secale* Database attended the ECP/GR -ZADI Training Workshop on on-line databases, held in Bonn, Germany in June 1997.

#### **Outlook**

The European *Secale* Database is expected to become available on the Internet in Spring 1998.

### 3.2.5 Wheat *ad hoc* Group

An *ad hoc* Wheat Genetic Resources Workshop was hosted by the Bureau des Ressources Genetiques (BRG) in Paris, France from 21-23 March 1996, and since then an informal group on wheat has been active, co-chaired by Ms Iva Faberova (RICP, Czech Republic) and Ms Annick Le Blanc (GEVES - Le Magneraud, France).

#### **Overall progress**

Following a three-day visit from Iva Faberova of the Research Institute of Crop Production (RICP), Czech Republic to GEVES-INRA, Clermont Ferrand, France, the Database Managers of both institutions produced a programme to establish a jointly managed European Wheat Database (EWDB).

By way of a survey, the Group estimated the total number of accessions of wheat genetic resources maintained in collections throughout Europe, as well as the level of duplication and the level of computerization of data. The establishment of a European Wheat Database (EWDB), a prototype of which was presented during the Wheat Workshop in May 1996, was considered essential for the Group to promote the utilization of genetic resources and ultimately rationalize their conservation. The scope of the EWDB will be restricted to *Triticum*, including wild species. *Aegilops*, *Agropyron*, other wheat-related genera will not be included at this stage. The database will contain as a priority, the passport data for all European collections and data for a set of minimum descriptors which the Group agreed upon. The relational nature of the database also allows other, more comprehensive and heterogeneous data sets, to be linked to the database if necessary.

During the Workshop, the offer of the Federal Agricultural Research Station (RAC) in Nyon, Switzerland to initiate a European *Triticale* database was gratefully accepted. It was also decided that the progress of this database and possible collaboration in *Triticale* conservation and research would be discussed during further meetings of the Group. A project on the conservation and characterization of wheat genetic resources was submitted to the EC under the EC1467/94 Programme. However, the proposal was not selected for funding.



***Progress in 1997 and first quarter 1998***

The European Wheat Database (EWDB) has now been further developed, with the inclusion of passport data received from the European genebanks. Compilation of the passport data of all European *Aegilops*, *Agropyron* and *Triticum* accessions into the EWDB is done in interaction with comprehensive databases and germplasm evaluation networks like CIMMYT, ICARDA, the WANANET and IWGRN. The database has been co-managed by GEVES (data for European Union countries) and by RICP (data for other European countries). In March 1998 the two Database Managers attended an ECP/GR- NGB Training Workshop on On-line Databases and also presented the first on-line version of the EWDB, available from the European Platform and on Internet at <http://genbank.vurv.cz/ewdb/>.

The *Triticale* Database has continued its development with a format compatible with the European Wheat Database. Data are being collected from 17 institutes in 15 countries. An Entry Page with a database description is already available on the web from the European Platform.

***Outlook***

The Workshop recommended that the ECP/GR Steering Committee establish a standing Wheat Working Group. The objectives of this Working Group would be, *inter alia*, to promote the effective management of wheat collections in Europe; to facilitate the use of collections through increased interaction with breeders of the public and private sector; and to organize targeted collaborative actions for external funding. It was recommended to put more efforts into the utilization of European genebank collections through the involvement of national research institutions and breeding stations into a cooperative programme aiming at the evaluation of wheat genotypes carrying qualitative and quantitative genes of potential interest. The system used in France was demonstrated an example.

The *Triticale* database is planned to be completed and on-line accessible at the beginning of 1999.

### **3.3 Forages Network**

Activities of this Network have been carried out within the Forages Working Group.

#### **3.3.1 Forages Working Group**

The Forages Working Group met twice during Phase V. The Fifth meeting of the Working Group was held in Bulgaria, 1995 and the Sixth meeting in Norway, 1997. The Group was chaired by Dr Gilles Charmet until the end of the fifth meeting and since then by Dr Petter Marum of the Norwegian Crop Research Institute, Norway.

***Overall progress***

The status of the forages collections maintained in the participating countries and that of the crop specific European Databases were thoroughly reviewed. Most of the Database Managers have begun to update their databases.

The following changes were agreed:

- Transfer of the *Trifolium pratense* database from the Federal Agricultural Research Station (RAC) in Nyon, Switzerland to the Institute for Agrobotany, Tapioszele, Hungary.
- Transfer of the Annual *Lolium* Database from CNR, Bari, Italy to IGER, Aberystwyth, UK to be merged with the existing *Lolium* database.
- Transfer of the *Phalaris* Database from CNR, Bari, Italy to NGB, Alnarp, Sweden
- Transfer of the *Poa* database from FAL, Braunschweig, Germany to IPK Genebank, External Station Malchow/Poel

The following new European databases were established:

- European *Agrostis* Database at the Nordic Gene Bank.
- European *Agropyron* Database at the Institute for Plant Genetic Resources, Sadovo, Bulgaria
- European Database for Perennial Forage Legumes at the Institute for Agrobotany, Tapioszele, Hungary
- European Database for *Trifolium alexandrinum* and *T. resupinatum* at ARO, Bet Dagan, Israel

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The establishment and updating of the forages databases has been advancing well. Most of the Database Managers plus the Chair of the Working Group attended the workshop on documentation, organized in Budapest, Hungary, in October 1996. This provided an opportunity for discussions on further standardization of the European forages databases.

The 1995 edition of the European Catalogue of *Medicago* perennial species was published by INRA, GEVES, BRG (France).

The *Lolium perenne* Core Collection was established at 18 locations in 17 countries, and evaluation data for winter damage, morphological traits, diseases and herbal yield were centralized at IGER, Aberystwyth, UK.

The following safety duplications were carried out:

- R.v.P., Merelbeke, Belgium sent 55 *Lolium* accessions to RAC, Changins, Switzerland for safety duplication.
- RAC, Changins, Switzerland sent 10 accessions of *Dactylis glomerata*, 19 accessions of *Festuca pratensis* and 10 accessions of *Festuca arundinacea* to R.v.P., Merelbeke, Belgium for safety duplication.
- The Nordic Gene Bank safety duplicated 62 accessions of different forage species in the Svalbard Islands.

Several genebanks have increased their level of characterization and have regenerated collections or conducted new collecting missions. The Group published an agreed list of European Standard Varieties to improve compatibility of evaluation/characterization activities at the regional level.

A number of project proposals, prepared in collaboration with members of the Working Group, were submitted to the first call for proposals of the EU funded programme EC1467/94. However, none of them were selected for funding.

Representatives from Cyprus, Lithuania, Slovak Republic and F.R. Yugoslavia have now joined the Working Group.

### ***Progress in 1997 and first quarter 1998***

The Sixth meeting of the Forages Working Group was held in Beitostolen, Norway, 6-8 March 1997. The meeting was organized in collaboration with the Norwegian Crop Research Institute, Loeken Research Station, Heggnes, Norway and in association with the Nordic Gene Bank.

An update of the European Central Forages databases was given and opportunities for their standardization were discussed. Furthermore, a list of forage passport descriptors was approved which were largely based on the FAO/IPGRI Multi-crop Passport Descriptors List prepared in 1996 in Budapest, Hungary, with the addition of a few environmental descriptors. All Database Managers will be adopting this list for data exchange.

During the meeting, a workplan for the establishment of a decentralized European Forage Collection was proposed and discussed. An important step in this plan would be the definition of a "primary collection" for each original accession. National commitment would then be sought for the long-term conservation under international standards, to ensure that an appropriate safety duplicate is deposited in a genebank (preferably within another ECP/GR member country) and to provide access to these accessions. Institutes entrusted with "European accessions" would then be registered in the European Central Database as "holders of primary collection". Discussions on the most advisable procedure to determine the "home" of each accession will proceed further within the Forages Working Group and attention will be given to repatriating material to the country of origin.

Draft guidelines for the regeneration of perennial forage species were presented by R. Sackville Hamilton, Institute of Grassland and Environmental Research, Aberystwyth, UK. A task force revised the document, enabling all institutes to more easily follow the guidelines, and this was published in the report of the Sixth meeting.

It was recommended that the following project applications be submitted or resubmitted to the next call for proposals from the European Commission under Council regulation EC 1467/94:

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- *Lolium*, coordinated by Dirk Reheul of Rijksstation voor Plantenveredeling, Belgium;
- *Medicago*, under the coordination of GEVES/INRA, France (to be confirmed);
- *Viciaeae*, possibly coordinated by the University of Southampton, UK (to be confirmed);
- *In situ* conservation of forages in marginal and mountainous areas, under the coordination of BAL, Irdning, Austria.

An ECP/GR poster showing the preliminary results of evaluation of the *Lolium perenne* core collection for performance during the first winter, was presented at the International Grassland Congress in June 1997 in Canada.

Database Managers of the European *Dactylis*, *Festuca*, *Lolium*, *Trifolium pratense* and *T. repens* Databases attended the ECP/GR -ZADI Training Workshop on On-line databases, held in Bonn, Germany in June 1997. Database Managers of the *Agrostis*, Perennial *Medicago*, *Phalaris* and *Phleum* databases attended the ECP/GR - NGB Training Workshop on On-line Databases, held in Alnarp, Sweden, February 1998. Several forages databases are currently available on the Internet (see Documentation network).

### Emergency action

The Forages Group has responded to an appeal received from the Forage Research Institute of Fushë Krujë, Albania advising them that the Albanian collection of forages genetic resources was entirely lost during the recent civil unrest. Managers of the ECP/GR Forages Databases were invited to search their European DBs for material originating from Albania and also for material with potential value in breeding programmes for Albanian conditions. Subsequently, lists of relevant accessions would be sent to the genebanks holding this material, requesting them to kindly send small quantities of these accessions to the Germplasm Conservation Unit of the Albanian Seed Institute, Tirana, Albania.

### Outlook

The rapid development of the forages databases is expected to continue with increasing standardization and exchange of data between the members of the Group. Additional databases are expected to be made available on the Internet and the coverage of evaluation data should also increase. However, the large number of European Forage Databases still excludes some species of interest. For example, several species in the genus *Trifolium* are not considered and an expansion of the *Trifolium* databases might be considered in the future. Furthermore, several grass species not covered in any database could be included in one of the existing databases for "Minor/other grass species". Similarly, the database "Other perennial forage legumes" could be expanded to include all forage legumes not yet considered.

The Group has proved to be an effective framework for undertaking collaborative efforts, such as drafting research projects, defining common guidelines or carrying out solidarity emergency actions. Future enhancement of these databases will add value to the Working Group and enable a more effective management of the collections.

*The Group is strongly recommending to the Steering Committee that Phase VI of ECP/GR be implemented and that this also includes the continuation of the Forages Working Group. The full-time Coordination during Phase V was strongly appreciated.*

## 3.4 Vegetables Network

Within the framework of the Vegetables Network, two Working Groups (*Allium* and *Brassica*) have been operative during Phase V with two meetings being held for each of these groups.

Another activity focused on *Daucus* and other Umbellifers, which have not been addressed by ECP/GR in the past. An *ad hoc* meeting was held in 1997 in Poland, where an informal group chaired by Dr Dave Astley, HRI, UK, set the basis for a possible future Umbellifers Working Group.

### **3.4.1 *Allium* Working Group**

Two *Allium* meetings were held, one in 1995 in Poland and the other in 1997 in Bulgaria. The *Allium* Working Group has been chaired throughout the phase by Dr Dave Astley.

#### ***Overall progress***

The Fifth meeting of the ECP/GR *Allium* Working Group was held from 24 - 28 May 1995 in Skierniewice, Poland. The two European Collections for Vegetatively Propagated *Alliums*, located in Olomouc, Czech Republic and Rehovot, Israel were reviewed, and a report was produced on the actions undertaken to mobilize international support for the Olomouc collections, the maintenance of which was threatened by lack of funds .

The European *Allium* Database (EADB) has been rebuilt at the Genetic Resources Unit, HRI Wellesbourne using ACCESS software. In late 1996, at a meeting in Budapest of the ECP/GR Documentation Group and database curators, a decision was made to adopt a set of draft Multi-Crop Passport Descriptors List for use in the transfer of data within ECP/GR. Consequently, the proto-EADB was reformatted to meet the agreed standards.

Other priority actions for the *Allium* group included the assessment of safety duplication for collections; transfer of safety duplicates to participating base stores; assessment of characterization data and whether data were held in computer databases; review taxonomy of accessions in collections of wild taxa; prioritization of material for regeneration programmes; and assessment of *in situ* distribution of taxa in Section *Allium*.

The *Allium* Working Group was successful with its project proposal to the EU genetic resources Programme (EC1467/94) and a part of the Group's workplan has been undertaken within the framework of this project.

Other successful initiatives carried out by the Working Group have stimulated activities in areas of direct interest, such as the FAIR onion quality project, EU Biotechnology GALAHEAD project proposal and *in-vitro*/cryo training and collecting.

#### **Progress in 1997 and first quarter 1998**

The Sixth meeting of the *Allium* Working Group was held in Plovdiv, Bulgaria, on 23-25 October 1997. During this meeting, it was clarified that the EU project Gen Res 20 had the same objectives as the wider ECP/GR Group and that the work done within it will be completely integrated in the development of the European *Allium* Database (EADB). It was also agreed to use the IPGRI/FAO Multi-Crop Passport Descriptors List. Efforts to define appropriate minimum characterization descriptors for onion, garlic, leek, shallot and chives in the EADB, is leading to an advanced stage in the development of a completely revised *Allium* descriptors list and the Working Group intends to collaborate with IPGRI to complete this publication. The value of the European field collections of long-day and short-day *Allium* was stressed, together with the importance of the taxonomy collection at IPK and of the decorative *Alliums* collection maintained in Israel.

The Institute for Vegetable Research, Skierniewice, Poland was also associated in the above mentioned EU funded project, with financial support from ECP/GR. Within this framework, a joint activity with IPK Gatersleben to develop methods of cryopreservation has reached positive preliminary results.

The Entry Page to the EADB was made accessible on the Internet from the European platform and will soon be available to link to the on-line database.

The Guidelines for the Safe Movement of *Allium* Germplasm were published by IPGRI/FAO, and sent to all Working Group members.

#### ***Outlook***

The EADB, including all the missing data sets, is expected to be made available on diskette and on-line by mid-1998. It is also expected that the database will include links to minimum characterization data for all the *Allium* crops, as defined during the Working Group meetings.

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The European field collections will need to gain as much support as projects aimed at developing alternative systems for conservation of vegetatively propagated *Alliums* (i.e. cryopreservation). Unfortunately, a lack of available funds still constitutes a major constraint for the regeneration of wild taxa.

A commitment to the safety-duplication of seed material was given and several genebanks offered space for “black boxes”.

#### **3.4.2 Brassica Working Group**

*Brassica* Working Group meetings were held in 1994 in Portugal and in 1996 in Italy with an Extraordinary meeting taking place in France in 1997. Until September 1997, the *Brassica* Working Group was chaired by Prof. Mats Gustaffsson, Swedish University for Agriculture, Sweden and subsequently by Dr Gregoire Thomas, ENSAR-INRA, France.

#### **Overall progress**

Good progress was made on the European *Brassica* Database (Bras-EDB), managed by CGN, Wageningen, with the inclusion of previously missing accessions data. Furthermore, data from the original Wild *Brassica* collection (still maintained by ETSIA, Spain) were also included in the Bras-EDB. An agreement was reached on a nomenclature list for communication within the Working Group when referring to the database. This was a significant step for such a taxonomically complex genus. Agreement was also reached on a minimum list of characterization data to be included in the Database, which opens the way to the further development of a more complete database.

The status of national collections of wild and cultivated *Brassicas* was revised and agreements were reached on collaboration with regard to regeneration, safety duplication and documentation of these collections. Discussion of *in situ* conservation of wild relatives of cultivated *Brassicas* resulted in the recommendation that Sicily, with its population of *B. macrocarpa*, *B. villosa* and *B. rupestris*, be the first focal point in developing *in situ* strategies for wild *Brassica*.

A project was prepared for submission to the EC1467/94 Programme of the European Union. However, it was not selected for funding. It is planned to be resubmitted for the third call in 1998.

Several studies on regeneration and rationalization methods were presented, highlighting the need for the establishment of precise guidelines, in order to minimize the workload devoted to this task in the genebanks, as well as to ensure the maintenance of the original genetic diversity during the regeneration procedure.

#### **Progress in 1997 and first quarter 1998**

An Extraordinary Meeting of the Working Group was held during the ISHS Symposium on *Brassica*, in Rennes, France, 23-27 September 1997. The Group agreed to use the IPGRI/FAO Multi-Crop Passport Descriptors List and revised the minimum list of characterization descriptors to be used for the European *Brassica* Database. An overview of the six years of the activities of the *Brassica* Working Group and an on-line presentation of the Bras-EDB were given during the Symposium. The Bras-EDB was shown to include data for around 13 000 accessions, distributed in 20 countries. It was further confirmed that it was an essential tool for the rational management and utilization of the collections and had been instrumental in the establishment of a *B. oleracea* core collection.

The Bras-EDB can be searched on-line at <http://www.cpro.dlo.nl/cgn/brasedb/> and via the European Information Platform on Crop Genetic Resources.

#### **Outlook**

Further development of the Bras-EDB is expected, particularly through inclusion of minimum characterization data. It is planned that collaborative projects for multi-locational evaluation of accessions belonging to core collections of *B. oleracea*, *B. napus* and *B. rapa*, will be submitted to European funding agencies.

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The Group is committed to establishing formal agreements for safety duplication of accessions and several institutes are offering space for “black boxes” in their genebanks.

A compilation of the existing regeneration practices in genebanks is being prepared by the Nordic Gene Bank.

#### **3.4.3 Umbellifers *ad hoc* group**

A proposal for the development of a Crop Working Group to advance genetic resources work for carrot and wild *Daucus* was made at the Sixth TCC meeting in Slovakia in September 1995. It was agreed that ECP/GR undertake *ad hoc* action for *Daucus* during Phase V.

#### ***Progress in 1997***

An *ad hoc* meeting on *Daucus* Genetic Resources was held on 31 August 1997 in Kraków, Poland, jointly with the Fifth meeting of the EUCARPIA Carrot Working Group which took place 31 August to 5 September 1997. The meeting, organized in collaboration with Dave Astley of HRI, Wellesbourne, UK, convened 17 participants, representing 13 ECP/GR countries, including one observer from the Russian Federation and one from USDA. Wide interest in the family Umbelliferae in general was manifested during the meeting, and the Group agreed that it would have a wider scope, focusing its activities on nine genera (*Daucus*, *Apium*, *Petroselinum*, *Anethum*, *Coriandrum*, *Carum*, *Foeniculum*, *Pastinaca* and *Chaerophyllum*).

The Group agreed on the establishment of a European Umbelliferae Database, under the management of HRI, Wellesbourne, U.K. The IPGRI/FAO Multi-Crop Passport Descriptors List will be used for data exchange and further characterization/evaluation descriptors will be elaborated by subgroups. In response to a specific request for help made by the Russian participant from VIR, collaboration was offered by several institutes on the regeneration of landraces and old varieties of carrot. The urgency of organizing collecting expeditions to fill the gaps in the Umbelliferae European collections was emphasized and this will also be highlighted by the Group in the project proposal intended for submission to the third call of EC 1467/94. Several areas of potential collaboration were also identified, such as safety duplication, taxonomy investigation and molecular markers studies. Dr Dave Astley was elected as Chairperson.

#### ***Outlook***

Interest in Umbellifers genetic resources is expected to increase in Europe, in view of their possible use as alternative crops in their use as medicinal and aromatic plants. In the past, this family has received no attention from ECP/GR and some support may be required to enable the Umbellifers group to maintain momentum.

### **3.5 Grain Legumes Network**

The establishment of a *Pisum* Working Group and the initiation of activities with regard to other grain legumes was recommended by the Committee several years ago, but was never realized due to budgetary restrictions. Within Phase V, a Working Group on Grain Legumes was established and by the end of the phase it will have met twice.

#### **3.5.1 Grain Legumes Working Group**

The Group met for the first time in July 1995 and a second meeting will take place in October 1998. The Group has been chaired throughout the phase by Dr Mike Ambrose, John Innes Centre, Norwich, UK.

#### ***Overall progress***

The First meeting of the ECP/GR Grain Legumes Working Group was held 14-16 July 1995 in Copenhagen, Denmark. Immediate actions to be taken were prioritized, namely, ensuring the safety of the collections and enhancing the associated information. The status of grain legumes collections in each country was reviewed and collaborative actions agreed.

To facilitate the management of the large number of collections of grain legumes maintained in Europe and to provide users with improved access to information, it was decided that European Databases be established for

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several grain legume crops. The existing *Pisum* database continues to be maintained jointly by the John Innes Centre, Norwich, UK and the Plant Experimental Station, Wiatrowa, Poland. A *Cicer* database was established at the National Plant Breeding Station in Elvas, Portugal; a *Glycine* database was established at the Vavilov Institute of Plant Industry in St Petersburg, Russia; a *Lupinus* database was established at the Plant Experimental Station, Wiatrowa, Poland; the Federal Office of Agrobiolgy in Linz, Austria established a *Phaseolus* Database, a *Vicia faba* Database was established at INRA, Le Rheu, France and the responsibility for a *Lens* database was accepted by AARI, Izmir, Turkey.

#### *Progress in 1997 and first quarter 1998*

Central Crop Database managers for *Phaseolus*, *Lupinus* and *Cicer* attended ECP/GR On-line Databases Training Workshops (held in Bonn, June 1997 or in Alnarp, February 1998). The European Databases for *Glycine* is now available on-line at <http://www.dainet.de/eccdb/glycine> and through the European Information Platform for Crop Genetic Resources. An Entry Page for the European *Phaseolus* Database is also available on this Platform. A preliminary CD-ROM version of the European *Phaseolus* Database has been distributed by the Federal Office of Agrobiolgy in Linz, Austria.

#### *Outlook*

A second meeting of the Grain Legumes Working Group is planned for October 1998 in Norwich, UK. It is expected that the standardizing of the IPGRI/FAO Multi-Crop Passport Descriptors List will be formally adopted for all the European grain legumes databases. Furthermore, one of subjects likely to be raised at this meeting is the inclusion of additional characterization and evaluation data into the databases, as well as the review of safety duplication agreements and the status of regeneration needs for the collections. An area of growing interest is linkage between the formal and informal sector. These two sectors have different areas of expertise which could be used effectively in partnerships and further opportunities of collaboration may also be discussed at this meeting.

### **3.5.2 Other activities within the network**

Issue No. 12 of "Grain Legumes" (European Association for Grain Legume Research - AEP) features a special report on genetic resources activities, in particular the activities of the ECP/GR Grain Legumes Working Group. A number of the members of the Working Group have contributed to this issue.

The PHASELIEU project (Ref. PL 96-1753) was submitted to the European Community FAIR Programme. The objectives of this project are to promote the exchange of germplasm and facilitate stronger cooperation in research. Within this initiative, coordinated by the Mision Biologica de Galicia, Pontevedra, Spain, the Grain Legumes Working Group of ECP/GR will be represented by the Federal Office for Agrobiolgy, Linz, Austria, which manages the European *Phaseolus* database and will in this way facilitate access to the collections maintained throughout the region. The proposal was rejected in 1996 under EC 1467/94, but after re-submission in 1997 it was selected for funding as a FAIR project.

#### *Emergency action*

The *Phaseolus* collection of the University of Cambridge, currently deposited at HRI, Wellesbourne, is facing difficulties in being maintained and some material is urgently in need of rejuvenation. Urgent action for the regeneration of the most threatened accessions is being planned using ECP/GR emergency funds. Italian institutions have been contacted and agreements are underway to start a regeneration exercise during Summer 1998. Only part of the total cost will be charged against ECP/GR, while the rest will be offered as an input-in-kind. A first selection of the most threatened and unique accessions was made possible, thanks to the utilization of the European *Phaseolus* database managed by the Federal Office for Agrobiolgy, Linz, Austria. This institute has also offered to host a sample of the regenerated accessions as 'black box' safety duplicates.

### **3.6 Fruit Network**

Within the framework of the Fruit Network, the *Prunus* Working Group has been operative during the whole phase. The Group held one formal Meeting and two Extraordinary Meetings. An *ad hoc* Workshop on *Malus* genetic

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resources was followed by a formal meeting of the *Malus/Pyrus* Working Group, following the establishment of this new Group by the Steering Committee in Nitra, September 1995.

### 3.6.1 *Prunus* Working Group

A *Prunus* Working Group Meeting was organized in Turkey in 1996 and two Extraordinary Sessions were held in 1996 and 1997, together with the Coordination Meetings of the EU funded project Gen Res 61. The Group has been chaired throughout the phase by Prof. Dr Françoise Dosba from ENSAM/INRA, Montpellier, France.

### ***Overall progress***

The Fifth meeting of the Working Group on *Prunus* was held in Izmir, Turkey from 1-3 February 1996. National coordination structures for *Prunus* genetic resources conservation were presented and the status of collections reported. Following the transfer of the European *Prunus* Database (EPDB) from the Nordic Gene Bank to the Institut National de Recherches Agronomique (INRA), Bordeaux, France, in 1993, a call for the revision of national records was sent out to collection holders in early 1994. This included a questionnaire on the status of the collection; computer facilities available to curators; and, in the case of the EU countries, an invitation to participate in the formulation of a project proposal, under the programme on genetic resources (EC1467/94). A new structure and user interface for the database were presented by A. Zanetto from INRA, Bordeaux.

Following the successful submission of the project proposal to the EU, an Extraordinary Meeting was held in Rome, Italy at the Istituto Sperimentale per la Frutticoltura, from 28 to 30 October 1996, jointly with the First Coordination Meeting of the EU Project GEN RES 61. The principal objectives of the workshop were to discuss the priority descriptors for inclusion in the European *Prunus* Database (EPDB) and to further define the workplan to be carried out within the GEN RES 61 Project. Working Group members from non-EU countries agreed to collaborate with the EU project on complementary activities, such as the characterization and evaluation of original material; agronomic evaluation in areas for which these institutes can offer specific expertise; and the transfer of additional data to the EPDB. ECP/GR agreed to partially fund these complementary activities in accordance with the decision of the Steering Committee (TCC, 1993).

### ***Progress in 1997 and first quarter 1998***

A further Extraordinary Meeting of the *Prunus* Working Group was held 13-15 November 1997 in Zaragoza, Spain, jointly with the second Coordination Meeting of GEN RES 61. The presence of non-EU participants, collaborating in the project with ECP/GR support, made it possible to reach a good integration of the EU project and the Working Group activities. The input of eastern European data into the EPDB is rapidly adding value to the database. The final EPDB structure was presented, including fields for the agreed IPGRI/FAO Multi-crop passport data and for common and crop specific descriptors for almond, apricot, cherry, peach and plum. A revised set of priority evaluation descriptors was agreed for each *Prunus* crop, together with reference cultivars.

The definition of a European Collection concept was considered reasonable by the Group and a Task Force is elaborating the implications of implementing this concept, with the intent of presenting a proposal for consideration to the ECP/GR Steering Committee (Agenda Item 7 of Steering Committee Meeting).

The EPDB Manager attended the ECP/GR -NGB Training Workshop on On-line Databases, held in Alnarp, Sweden in February 1998. An Entry Page for the database is now accessible on Internet from the European Platform and the database will shortly be available in a searchable form on-line.

### ***Outlook***

The Group recommends that its activities be continued into Phase VI, without merging with the *Malus/Pyrus* Working Group. Opportunities in the future include, the incorporation of fruit quality data and molecular marker data and the realization of a European *Prunus* collection. The Working Group would welcome continued support from the EU, for example, to allow molecular tools to be used to exploit *Prunus* genetic resources for use in breeding programmes and to allow participation of non-EU countries. For a successful integration of marker data into the EPDB, a prolongation of the EU GENRES 61 project would be helpful.



### 3.6.2 *Malus/Pyrus* Working Group

This Working Group, formally established in 1995, has been chaired since the first meeting in 1997, by Prof. Terry Swinburne of Wye College, University of London, UK.

#### **Overall progress**

An *ad hoc* European *Malus* Germplasm Workshop was held 21-25 June 1995 at Wye College, University of London, UK. The meeting was organized and hosted by Wye College in close collaboration with the ECP/GR Coordinator. The status of individual countries' *Malus* collections and their use for breeding programmes and molecular research was overviewed. It was agreed that a common central database would be developed, based on the work underway at HRI, Wellesbourne, UK, where a relational database was established for the European Apple Gene Mapping Project.

A project proposal on *Malus*, submitted to the EU genetic resources Programme (EC)1467/94 was unfortunately not successful. However, the *Malus* database was implemented at the National Fruit Collections (NFC), Wye College, UK as an input-in-kind.

#### **Progress in 1997 and 1998**

The First meeting of the ECP/GR Working Group on *Malus/Pyrus* was held at the University College of Dublin (UCD), Ireland 15-17 May 1997 and was attended by representatives from 19 countries. The local organization was arranged by the Irish Seed Savers of Capparoe, Ireland. It was agreed that the *Malus* central database would be maintained on behalf of the group at Wye College, London, UK. A list of descriptors for data exchange was established, based on the Multi-crop passport list, agreed in Budapest, October 1996 and on a priority list of characterization and evaluation descriptors. The establishment of a Central *Pyrus* Database was recommended and the group identified institutes in France, Belgium or Italy as possible hosts for this Database. There was a consensus to resubmit the project on *Malus* genetic resources to the third call for proposals to EC 1467/94 and this will be again coordinated Wye College. A similar project proposal for *Pyrus* genetic resources was also considered appropriate but a Coordinator still needs to be identified.

The essential role of NGOs in the inventory of local knowledge and in the conservation of old varieties was emphasized. The Group visited the collection of old Irish apple varieties established at UCD after extensive surveys of the territory by the Irish Seed Savers. This was a clear example of the beneficial collaboration between NGOs and the formal sector. The concept of a European Collection of *Malus* and *Pyrus* was considered valuable in principle and the central *Malus* database would be an essential tool to establish this type of Regional Collection.

An offer to host the European *Pyrus* Database was made by the Centre de Recherches Agronomiques of Gembloux, Belgium. A similar offer was made by the Fruit Genebank of IPK Gatersleben, Germany,

#### **Emergency action**

Threats of losing the *Malus* collection at the Maikop station of VIR, Russia, due to the age and perilous state of the trees, prompted ECP/GR to fund an emergency mission to promote the recovery of endangered accessions. Graft wood from trees of the most threatened species and accessions was taken to the Genebank Obst Dresden-Pillnitz in Germany, where it will be kept temporarily and repatriated to Russian Fruit Genebank in the future. In the meantime, plans are underway to transfer the whole collection to another site within the Maikop station.

#### **Outlook**

The development of the *Malus* and *Pyrus* databases is seen as a necessary tool for the future monitoring and use of the genetic resources collections. Opportunities to include evaluation data is seen as the most important step in this direction. The analysis of the database should also assist the identification of unique accessions in the near future which will be a step in the right direction towards implementing a European Collection. One next step could be the formal establishment of safety duplicates in a European context.

Meetings of the Working Groups are seen as an important way of securing the genetic resources of *Malus* and *Pyrus*, and as an effective fora for the exchange of ideas. The members strongly recommend that the Group

### *Seventh meeting of the Steering Committee of ECP/GR*

continue to meet as frequently as ECP/GR funds permit during Phase VI. The Working Group can play a key role in raising commitment for the long-term conservation of the collections.

### **3.7 Other Networks**

Within the framework of the 'Industrial Crops and Potato Network', collaboration was enhanced between ECP/GR and the existing European initiatives on *Beta* and Potato. Both of these initiatives have submitted successful project proposals to the EU genetic resources programme (EC1467/94). The Managers of the international databases associated with these initiatives attended the Documentation Meeting in Budapest (see **Documentation and Information Network**). Arrangements were made for the participation of some of the eastern European institutes in the EU funded projects together with further participation to the Coordination Meetings of these projects.

*ECP/GR has offered support to the International Beta Genetic Resources Network, with the publication of the report of the Fourth International Beta Genetic Resources Workshop, held in Izmir, Turkey, 1995.*

Within the framework of the 'In situ and on-farm conservation network' an *ad hoc* Workshop on the Conservation of Wild Sicilian *Brassic*as was organized in Palermo on 19 April 1997, by the Palermo Botanical Garden, in collaboration with ECP/GR. The holding of this small Workshop was recommended by the *Brassica* Working Group in order to illustrate to local authorities the importance of Sicilian wild *Brassic*as, and to formulate a feasible plan of action for *in situ* conservation. A request for inclusion of *B. rupestris* and *B. villosa* on the red list of protected species of the Bern Convention was eventually formulated and forwarded to the appropriate Italian authorities. Furthermore, a draft project proposal for an integrated conservation and research programme on Sicilian wild *Brassic*as was prepared, under the coordination of Prof. Francesco Raimondo, for submission to Italian funding agencies.

A special one-day session on *in situ* and on-farm conservation will be held during the European Symposium on Plant Genetic Resources for Food and Agriculture, Braunschweig, Germany, 30 June-4 July 1998.

*A Network on Technical Cooperation was established by the Steering Committee to enable ECP/GR to facilitate support of PGR activities in other regions. Due to financial constraints, however, it was not possible to carry out specific actions within this framework. During the above mentioned Symposium in Braunschweig, a specific session will focus on European collaboration with other regions.*

## **4. ECP/GR and the International Technical Conference on Plant Genetic Resources for Food and Agriculture (PGRFA)**

ECP/GR collaborated in the preparatory process to the International Conference on Plant Genetic Resources, held in Leipzig 17-23 June 1996. This process significantly contributed towards strengthening links between national programmes and ECP/GR and raising awareness on the importance of PGR at the national level. The FAO Regional Meeting on Genetic Resources (24 -27 September 1995, Nitra, Slovakia) was organized by IPGRI's Europe Group in collaboration with the Agroinstitut in Nitra, 'back to back' with the Sixth meeting of the Technical Consultative Committee of ECP/GR. A total of 90 delegates representing 35 countries, the European Commission, the private sector, NGOs, FAO and IPGRI attended the meeting. The main outcomes of the meeting included: a recommendation to promote sharing of conservation responsibilities and rationalization of collections at the sub-regional level; strong appreciation of the role of IPGRI in the global and regional context; increased recognition of the role of NGOs; support for more activities on minor/underutilized species; formulation of a number of priority areas for technical cooperation with other regions; and a recommendation that ECP/GR be used as the platform to facilitate the implementation of the Global Plan of Action in the European Region.

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A European Symposium on Plant Genetic Resources for Food and Agriculture, to be held at the Federal Centre for Breeding Research on Cultivated Plants (BafZ), Braunschweig, Germany, 30 June- 4 July 1998, is being organized as a regional follow-up to the International Technical Conference in 1996, Leipzig, Germany. This Symposium was held in conjunction with the Seventh Meeting of the ECP/GR Steering Committee.

The objectives of the European Symposium are:

- to assess progress made at European level in implementing the Global Plan of Action (GPA);
- to identify gaps and weaknesses in the implementation process and recommend solutions;
- to enhance further and more intensive international collaboration among European countries in view of the further implementation of the GPA;
- to provide an opportunity for effective discussion and the development of collaboration between the formal sector, private sector and NGOs;
- to assess the contribution of European countries to the international conservation of PGRFA and wider agricultural biodiversity;
- to provide an input into the priority setting and planning of initiatives such as ECP/GR and the European commission genetic resources programme;
- to contribute to public awareness of the importance and value of PGRFA.

### **5. ECP/GR and the EU Programme on genetic resources for agriculture (EC 1467/94)**

With the publication of the Commission Regulation (EC) 1467/94 of 20 June 1994 on the conservation, characterization, collection and utilization of genetic resources in agriculture, the European Union established an action programme on genetic resources. ECP/GR has served as a forum for many Groups preparing projects for this programme. The ECP/GR Coordinator has maintained close contacts with these Groups; has participated in preparation meetings; has given advice on formulation and scope of proposals; and has provided drafting groups with information about the programme. In doing this, ways were suggested in which institutions from non-EU countries could be included in the projects. A total of 44 project proposals relating to plant genetic resources were submitted to the first call of proposals, and of these, six were selected. Two of these were the *Allium* and the *Prunus* projects which were prepared within the respective ECP/GR Working Groups. Projects presented by the Working Groups on Barley, Forages, *Avena* and *Brassica* were unsuccessful.

Following the second call for proposals of the EU Genetic Resources Programme (EC 1467/94), two additional project proposals of direct relevance to ECP/GR, namely the proposal on Maize and the proposal on *Vitis*, have been approved for funding. Unfortunately, the proposals submitted on *Malus* and Wheat were unsuccessful.

*To implement the decisions made by Steering Committee with regard to funds carried over from Phase IV (TCC, 1993; TCC, 1995), arrangements have been made to facilitate collaboration with institutes from non-EU countries for the projects approved by the European Commission. The projects relevant to ECP/GR are:*

- *Allium* project Gen Res 20: Czech Republic and Poland.
- *Prunus* project Gen Res 61: Czech Republic, Hungary, Norway, Poland, Romania, Slovak Republic, Switzerland, Turkey.
- *Beta* project Gen Res 42: Czech Republic, Poland, Russian Federation.
- Potato project Gen Res 34/45: Czech Republic, Hungary, Poland, Russian Federation, Ukraine.
- Grapevine project Gen Res 81: Bulgaria, Hungary, Switzerland.
- Maize project Gen Res 88: F.R. Yugoslavia.

A detailed breakdown of the expenditure from Phase IV, as recommended at the TCC in Nitra, 1995, is reported in **Appendix 1, Table 3.**

## 6. Publications

The following publications have been produced during Phase V by ECP/GR or in collaboration with ECP/GR. These can be obtained free of charge from IPGRI's Regional Office for Europe:

- ❖ Report of the Fifth Technical Consultative Committee, held in August 1993, Bulgaria;
- ❖ Report of the Sixth Technical Consultative Committee, held in September 1995, Slovakia;
- ❖ Directory of European Institutions Holding Crop Genetic Resources Collections (Fourth Edition), IPGRI/FAO 1995;
- ❖ Report on the preparatory process in Europe for the ITC, Leipzig, IPGRI/FAO, 1996;
- ❖ ECP/GR Brochure, 1995;
- ❖ Descriptions of national plant genetic resources documentation systems in eastern European countries, CPRO-DLO and ECP/GR, 1995;
- ❖ Report of the Second *Brassica* Working Group meeting, held in November 1994, Portugal;
- ❖ Report of the Fifth Forages Working Group meeting, held in March/April 1995, Bulgaria;
- ❖ Report of the First Grain Legumes Working Group meeting, held in April 1995, Denmark;
- ❖ Report of the Fifth *Allium* Working Group meeting held in May 1995, Poland;
- ❖ Report of the *Malus* genetic resources workshop held in June 1995, UK;
- ❖ Report of the Fifth *Prunus* Working Group meeting held in February 1996, Turkey;
- ❖ Report of a Workshop on Wheat Genetic Resources, held in March 1996, France;
- ❖ Report of a Workshop on Maize Genetic Resources, held in May 1996, Italy;
- ❖ Report of a Workshop on Central Crop Databases: Tools for Plant Genetic Resources Management, held in October 1996, Hungary;
- ❖ Report of an Extraordinary Meeting of the ECP/GR *Prunus* Working Group and the First Coordination Meeting of the Project GEN RES 61, held in October 1996, Italy;
- ❖ Report of the Third *Brassica* Working Group meeting, held in November 1996, Italy;
- ❖ Report of the Fourth International *Beta* Genetic Resources Workshop, held in Izmir, Turkey, 1995;
- ❖ IPGRI Newsletter for Europe Issues 1 to 13;
- ❖ European Cooperative Programme *Allium* Newsletter No. 6, 7 and 8 (edited by Dave Astley, HRI Wellesbourne, UK);
- ❖ *Prunus* Genetic Resources Newsletter No. 1 of the ECP/GR *Prunus* Working Group (compiled at Horticulture Research International, East Malling, UK);
- ❖ *Prunus* Genetic Resources Newsletter No. 2 of the ECP/GR *Prunus* Working Group (compiled at the Aegean Agricultural Research Institute, Menemen, Turkey);
- ❖ *Prunus* Genetic Resources Newsletter No. 3 of the ECP/GR *Prunus* Working Group (compiled at the Agricultural Research Institute of Cacak, F.R. Yugoslavia);
- ❖ Report of a *Secale* Workshop, held in July 1996, Poland;
- ❖ Report of the First *Malus*/*Pyrus* meeting, held in May 1997, Ireland;

The following publications are at different stages of preparation and will be published as outputs of Phase V:

- ❖ Report of an Extraordinary Meeting of the ECP/GR *Prunus* Working Group and the Second Coordination Meeting of the Project GEN RES 61, held in November 1997, Spain;
- ❖ Report of the Sixth Forages Working Group meeting, held in March 1997, Norway.
- ❖ Report of the Fifth Barley meeting, held in July 1997, Germany;
- ❖ Report of the Sixth *Allium* Working Group meeting held in October 1997, Bulgaria;
- ❖ Report of the Fifth *Avena* Working Group meeting held in May 1998, Lithuania;
- ❖ Report of the Second Grain Legumes Working Group meeting, held in October 1998, UK.;
- ❖ *Prunus* Genetic Resources Newsletter No. 4 of the ECP/GR *Prunus* Working Group (compiled at Fruit Growing Station Valcea, Romania)

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## Appendix 1: Intermediate Financial Report

This intermediate financial report is annexed to the End of Phase V report of ECP/GR to provide members of this Committee with an overview of the status of contributions and expenditures of the Programme. The final financial report will be submitted on completion of Phase V of the Programme.

**Table 1. ECP/GR Contributions received for 1994, 1995, 1996 and 1997**

Participating country <sup>9</sup>	Contributions for 1994	Contributions for 1995	Contributions for 1996	Contributions for 1997	Contributions still due on 31/12/97
Austria	10 000	10 000	10 000	10 000	
Belgium	10 000	10 000	10 000	10 000	
Bulgaria <sup>10</sup>	5 000	5 000	5 000		97 = 5 000 <sup>11</sup>
Croatia		5 000	5 000	5 000	
Cyprus	2 000	2 000	2 000	2 000	
Czech Republic	5 000	5 000	5 000	5 000	
Denmark	10 000	10 000	10 000	10 000	
Finland	5 000	5 000	5 000	5 000	
France	30 000	30 000	30 000	30 000	
Germany	30 000	30 000	30 000	30 000	
Greece	5 000	5 000	5 000	5 000	
Hungary	5 000	5 000	5 000	5 000	
Iceland	2 000				95 / 96/ 97 = 6 000 <sup>12</sup>
Ireland	5 000	5 000	5 000	5 000	
Israel	5 000	5 000	5 000	5 000	
Italy	30 000	30 000			96/97 = 60 000
Lithuania		5 000	5 000		97 = 5 000 <sup>13</sup>
Malta			2 000	2 000	
Netherlands	10 000	10 000	10 000	10 000	
Norway	5 000	5 000	5 000	5 000	
Poland	5 000	5 000	5 000	5 000	
Portugal	5 000				95/96/97 = 15 000 <sup>14</sup>
Romania	5 000	5 000	5 000	5 000	
Slovakia	5 000	5 000	5 000	5 000	
Spain	10 000	10 000	10 000	10 000	
Sweden	10 000	10 000	10 000	10 000	
Switzerland	10 000	10 000	10 000	10 000	
Turkey	5 000	5 000	5 000	5 000	
UK	30 000	30 000	30 000	30 000	
Yugoslavia	5 000	5 000	5 000	5 000	
<b>Total</b>	<b>264 000</b>	<b>267 000</b>	<b>239 000</b>	<b>229 000</b>	<b>91 000</b>

	US\$
Total receipts Phase V by 31/12/97	999 000
Total receipts expected during 1998	377 000
Revised Budget Phase V	1 376 000
Total Budget Phase V (TCC Report, 1993)	1 520 000 <sup>15</sup>

<sup>9</sup> Albania, the Russian Federation and Ukraine were represented at the Steering Committee meeting in Bulgaria (1993) where Phase V

of ECP/GR was approved. These countries have not yet joined Phase V. Croatia and Lithuania joined in 1995, Malta joined in 1996.

<sup>10</sup> Bulgaria covered the local expenses of the Forages Working Group meeting in Hissar, April 1995 and the *Allium* Working Group meeting

in Plovdiv, October 1997. This is considered equivalent to a contribution of US\$ 15 000.

<sup>11</sup> Bulgaria's contribution for 1997 (5 000 US\$) was received in January 1998.

<sup>12</sup> Iceland's contribution for 1995, 1996 and 1997 was received in July 1998.

<sup>13</sup> Lithuania covered the local expenses of the *Avena* Working Group meeting in Vilnius, May 1998. This is considered equivalent to 7 500 US\$, covering Lithuania's contribution for 1997 and half of 1998.

<sup>14</sup> Portugal's contribution for 1995, 1996 and 1997 (15 000 US\$) was received in April 1998.

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<sup>15</sup> This is no longer the Budget for Phase V of ECP/GR

Seventh meeting of the Steering Committee of ECP/GR

Table 2. Expenditures during 1994 and 1995, 1996 and 1997

	Budget 1994 US\$	Expenses 1994 US\$	Budget 1995 US\$	Expenses 1995 US\$	Budget 1996 US\$	Expenses 1996 US\$	Budget 1997 US\$	Expenses 1997 US\$	Cumulated expenses Phase V US\$
Full-time ECP/GR Network Coordinator	80 000	69 050	82 000	95 229	84 000	70 421	86 000	74 513	309 213
Direct administration support On average 1/2 time IPGRI secretary	20 000	8 868	20 500	7 670	21 000	34 438	21 500	45 479	96 455
Official travel	14 000	172	14 000	18 944	14 000	19 148	14 000	10 759	49 023
Crop meetings and consultations <sup>1</sup> (Working Groups)	74 667	29 210	74 667	45 843	74 667	78 093	74 667	100 906	254 052
Crop meetings and consultations ( <i>ad hoc</i> actions) <sup>2</sup>	21 333	0	21 333	7 415	21 333	63 826	21 333	15 018	86 259
Technical Consultative Committee	0	0	50 000	29 000	0	0	0	0	29 000
Publications	25 000	0	32 000	47 541	32 000	21 543	32 000	20 020	89 104
Newsletter	3 000	0	3 000	4 287	3 000	3 719	3 000	3 595	11 601
Contingencies (including communications)	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000	40 000
Overhead (indirect support) 13% <sup>3</sup>	32 300	12 974	40 000	31 478	33 800	44 895	34 100	49 657	139 004
<b>TOTAL</b>	<b>280 300</b>	<b>130 274</b>	<b>347 500</b>	<b>297 407</b>	<b>293 800</b>	<b>346 083</b>	<b>296 600</b>	<b>329 947</b>	<b>1 103 711</b>
								<b>Total contributions for 1994-1997</b>	<b>999 000</b>
								<b>Balance</b>	<b>-104 711</b>

Note:

In addition to the above, the following expenses were charged in 1997 against the fund balance remaining from Phase IV (Ref. TCC report, Nitra, 1995)

- 77 300 Participation of non-EU countries in the EU projects on *Allium*, *Beta*, potato and *Prunus* genetic resources
- 16 955 Participation of non-EU countries in the meetings of the EU projects on potato, *Prunus* and *Vitis* genetic resources
- 4 899 Emergency funds (Apple genetic resources, Maikop, Russia)

<sup>1</sup>Includes a contribution equivalent to \$7 500 from Bulgaria in hosting the Forages Working Group meeting in 1994 plus \$ 7 500 in hosting the *Allium* Working Group meeting in 1997, covering local expenses.

<sup>2</sup>In September 1995, the Steering Committee of ECP/GR decided to allocate US\$ 96 000 of the budget previously foreseen for crop meetings and consultations to *ad hoc* actions (TCC Report, 1995).

<sup>3</sup>13% overhead was applied on all funds spent during Phase V (including funds remaining from Phase IV)



**Table 3. ECP/GR Phase IV, Financial Status as of 31.12.1997 (in US \$)**

	<b>Available funds 1.1.1994</b>	<b>Expenses 1996</b>	<b>Expenses 1997</b>	<b>Available funds 31.12.97</b>
Secretarial support and contingencies to be recovered during Phase V	30 000	30 000	0	0
Emergency fund	25 000		4 899	<b>20 101<sup>16</sup></b>
Support to institutions from non EU countries to participate in EC funded projects	159 375	14 080	94 255	<b>51 040</b>
Total	214 375	44 080	99 154	<b>71 141</b>

**Participation of non-EU countries in coordination meetings of the EU funded projects**

1996: *Prunus*, US\$ 14 080

1997: potato, US\$ 6 744; *Prunus*, US\$ 8 785; *Vitis*, US\$ 1 426;

**Participation of non EU countries in activities of the EU funded projects**

1997 - *Beta*, US\$ 14 300; potato, US\$ 20 000; *Prunus*, US\$ 30 000, *Allium*, US\$ 13 000

**Emergency funds**

1997 - Apple genetic resources, Maikop, Russia, US\$ 4 889

<sup>16</sup> In 1998 Emergency funds are allocated to the following actions:

- Collecting of threatened *Vitis* germplasm in Albania, by the University of Milan, Italy
- Regeneration of threatened *Phaseolus* accessions from the collection of the University of Cambridge, carried out by Italian Experimental Station and Universities.
- Multiplication of forages accessions for the reconstruction of the Albanian national collection

**Table 4. Expected results of Phase V (1994-1998) (US\$)**

	Cumulated Budget (1994-1997)	Cumulated expenses (1994-1997)	Expected Expenses 1998	Expected cumulated expenses Phase V
Full-time ECP/GR Network Coordinator	332 000	309 213	75 000	384 213
Direct administration support 1/2 time IPGRI secretary	83 000	96 455	22 000	118 455
Official travel	56 000	49 023	7 000	56 023
Crop meetings and consultations (working groups)	298 668	254 052	54 500	308 552
Crop meetings and consultations ( <i>ad hoc</i> actions) <sup>17</sup>	85 332	86 259	16 000	102 259
Technical Consultative Committee	50 000	29 000	50 000	79 000
Publications	121 000	89 104	35 500	124 604
Newsletter	12 000	11 601	3 399	15 000
Contingencies (including communications)	40 000	40 000	10 000	50 000
<b>Subtotal</b>	<b>1 078 000</b>	<b>964 707</b>	<b>273 399</b>	<b>1 238 106</b>
Overhead (indirect support) 13% <sup>18</sup>	140 200	139 004	44 790	183 794
<b>Total</b>	<b>1 218 200</b>	<b>1 103 711</b>	<b>318 189</b>	<b>1 421 900</b>
<b>Total contributions expected for 1994-1998<sup>19</sup></b>				<b>1 376 000</b>
<b>Balance</b>				<b>- 45 900</b>

<sup>17</sup> In September 1995, the Steering Committee of ECP/GR decided to allocate US\$ 96 000 of the budget previously foreseen for crop meetings and consultations to *ad hoc* actions (TCC Report, 1995).

<sup>18</sup> 13% overhead on all funds spent during Phase V (including funds remaining from Phase IV)

<sup>19</sup> Includes a contribution equivalent to \$15 000 from Bulgaria in hosting the Forages Working Group meeting in 1994 and the *Allium* Working Group meeting in 1997, covering local expenses and a contribution equivalent to \$ 7 500 from Lithuania in hosting the *Avena* Working Group meeting in 1998.

## European Cooperative Programme for Crop Genetic Resources Networks (ECP/GR)



### **Annex V. Proposal for a Phase VI of ECP/GR**

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#### ***Introduction and background***

The European Cooperative Programme for Conservation and Exchange of Crop Genetic Resources (ECP/GR), as it was originally called, was established as a UNDP/FAO project in 1980, following the recommendation of EUCARPIA. As of 1983, European countries requested IPGRI to provide overall coordination for the Programme. At that time, the Programme was funded to 50% by its participating countries and to 50% by UN agencies, although since 1986, ECP/GR has been fully funded by its members. In 1998, 32 European countries participate actively in the Programme.

Phase V of ECP/GR was initiated in 1994 for a duration of five years. In 1995, the Steering Committee of ECP/GR decided to modify the Programme's structure to enable it to catalyse a broader range of activities in the region. At the subsequent FAO Regional Meeting on Plant Genetic Resources for Food and Agriculture (Nitra, Slovakia, 1995), European countries agreed that: "...the European Cooperative Programme for Crop Genetic Resources Networks, the basis of which are active national programmes, be used as the platform to facilitate the implementation of the Global Plan of Action for the European region as part of the FAO Global System on Plant Genetic Resources"<sup>20</sup>.

The context within which ECP/GR is implemented has changed during the past five years:

- Phase V has been marked by a number of international policy events which have given more visibility and accountability to ECP/GR (i.e. the ICPPGR Process and the Leipzig Conference; the negotiations of the International Undertaking on PGRFA; Conferences of the Parties to CBD; etc.);
- The number of ECP/GR member countries has increased from 26 countries (Phase IV) to 32 and is likely to increase further in the future;
- Within countries, the interest in genetic resources activities is growing. Consequently, countries wish to send representatives to many of the ECP/GR Working Group meetings;
- Representatives of the private sector (ASSINSEL) have been invited to attend the Steering Committee meetings and the Working Group meetings as observers. This participation is considered very valuable;
- The non-governmental sector has expressed interest in being associated more closely with the Programme. At its Seventh meeting, the Steering Committee invited NGOs to send one representative to its meetings;

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<sup>20</sup> IPGRI/FAO. 1996. International Technical Conference on PGR: Preparatory Process for Europe. IPGRI/FAO, Rome, Italy.

#### *Seventh meeting of the Steering Committee of ECP/GR*

- An EU genetic resources programme was initiated in 1994. ECP/GR has interacted closely with this programme through a range of activities. In particular, ECP/GR has facilitated the participation of institutions from non-EU countries in projects funded under the Programme EC 14676/94.
- The past five years have seen significant changes in the area of communication/documentation technology. Despite a relatively moderate availability of funds in institutes managing the European Central Crop Databases, and at the ECP/GR Secretariat, the Programme has adapted to these changes (relational databases were established, Internet access was provided to the Databases, an ECP/GR central home page was established, etc.); and
- The past five years have been marked by an increased economic gap between countries situated at opposite extremes of economic development in the region.

### ***Impact of the Programme since its establishment in 1981***

When assessed against its objectives, ECP/GR has had a significant impact in a number of areas:

- Since its establishment, ECP/GR has contributed significantly towards raising the awareness of policy makers and the agricultural research community on the importance of conserving genetic resources. This has led *inter alia* to an increase in plant genetic resources related activities in the region and an increase in the number of countries participating in the Programme.
- The Programme has led to a considerable level of coordination of collecting and conservation activities and to the submission of a large number of collaborative project proposals to funding agencies, such as the European Commission.
- ECP/GR has stimulated a high willingness to cooperate beyond national boundaries in matters related to plant genetic resources (e.g. development of regeneration guidelines, exchange of data and germplasm).
- It has played an important role in stimulating the establishment of national coordination structures on plant genetic resources, as illustrated by the active participation of the countries within the region in the preparatory process leading up to the FAO International Technical Conference on Plant Genetic Resources for Food and Agriculture, held in June 1996 in Leipzig.
- During initial phases of the Programme and again during Phase V, ECP/GR has played an important role as an information hub in matters relating to training opportunities and the identification of suitable candidates for training courses.
- It has facilitated a better international access to collections through documentation systems that have been established within its framework and which are increasingly available through a common access point on the Internet<sup>21</sup>.
- It has led to a relatively high degree of harmonization of characterization activities on a crop-by-crop basis, by facilitating the preparation of international descriptor lists.
- It has promoted the use of a wider range of diversity in breeding and has supported the development of international evaluation projects and the establishment of core collections.
- It has facilitated consensus on strategic and policy matters in a very heterogeneous region (e.g. in fora such as the FAO Commission on Genetic resources for Food and Agriculture).
- It has promoted alliances between strong and weak countries, by bringing together researchers on a more informal basis, or by actually supporting the collaboration of east European institutes in EU- projects.

It should be noted that the above-mentioned impact cannot be attributed to the Programme alone. ECP/GR has been a successful catalyst in a context in which highly motivated individuals and institutions have carried

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<sup>21</sup> European Information Platform on Crop Genetic Resources (<http://www.cgiar.org/ecpgr/platform/index.htm>)

conservation concerns forward. It is these persons and institutions, and the activities which they agreed to contribute as an input in kind, that ultimately constitute the core of the Programme.

A number of areas exist in which ECP/GR has only partially achieved an impact. These areas are challenges for European cooperation on PGRFA and need to be addressed in the near future:

- For budgetary reasons, ECP/GR has focused on those crops which are important to the region's agriculture, for which Europe holds valuable *ex situ* collections, and for which no other regional initiative existed. The changes made in 1995 to broaden the Programme's structure (see Report of Phase V) were not accompanied by increases in funding, instead the funding to the Programme remained stable during the five years of Phase V. Consequently, a number of important crops and themes are yet to be adequately covered.
- Although a concept is being developed to possibly establish decentralized European Collections, ECP/GR has only partially succeeded in facilitating a real prioritization of conservation activities (identification and safety duplication of unique material, reduction of redundancies, etc.). Actual sharing of collections still remains rare.
- The shifting of breeding activities from the public to the private sector has, to some extent, detached the breeders from the genetic resources collections. ECP/GR has only partially succeeded in counterbalancing this trend. A more intensive utilization of genetic resources through renewed and enhanced cooperation between breeders and genebanks is essential to a sustainable regional conservation effort.
- More needs to be done to stimulate a long-term commitment of countries towards plant genetic resources conservation. Genebanks have been built, national strategies have been put in place to address plant genetic resources conservation, staff have been trained, but a low level of operating funds shows that the strategic nature of plant genetic resources has not yet been recognized in many countries.

## ***The continuation of ECP/GR***

Strong recommendations have been received from National Coordinators, from the ECP/GR Working Groups, and recently during the European Symposium on PGRFA<sup>22</sup>, that the Programme be continued and that it be developed further in the sense of the above-mentioned "Nitra-recommendation".

It is widely agreed that ECP/GR should primarily play a convening and a catalysing role - in full complementarity with the activities being carried out at the national level as an input-in-kind to European cooperation on PGRFA.

A proposal for Phase VI of ECP/GR is presented below, in response to what is perceived as a strong request from member countries to propose ways in which ECP/GR can still more effectively fulfil its mandate, as a Platform to facilitate the implementation of the Leipzig Global Plan of Action. This implies, on the one hand, that the Programme should stimulate collaborative activities for a broader range of crops and themes and, on the other, that it should actively facilitate a more effective conservation and use of PGRFA, *inter alia* through a greater sharing of responsibilities among member countries and through making better use of the complementarity offered by *in situ* and *ex situ* strategies. Budgetary implications are given in Table 1.

The proposed Programme consists of two components:

- a) A core component funded through regular member contributions to address what are perceived as the minimum coordination services considering the budgetary frame; and

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<sup>22</sup> European Symposium on Plant Genetic resources for Food and Agriculture, 30 June-4 July 1998, Braunschweig, Germany.

- b) Complementary *Modules* for which funding will be raised on a voluntary basis from various sources and which will support the implementation of specific GPA Priority Activities at the regional level.

### **Phase VI: An updated set of objectives**

The original objectives of ECP/GR include the creation of a system to promote direct contact between National Programmes and institutions involved in crop genetic resources activities. ECP/GR is to promote the unhindered exchange of crop genetic resources and related data. Consequently, up to date information on genetic resources is to be made easily available to users. ECP/GR is also a framework in which joint activities such as documentation, collecting expeditions, characterisation and evaluation of germplasm are implemented.

These activities reflect the role of ECP/GR as the platform to facilitate the implementation of the Global Plan of Action for the conservation and sustainable utilisation of plant genetic resources for food and agriculture, at the European level. As such, they are an important input for the development of sustainable agriculture.

The following new set of objectives will characterize Phase VI of ECP/GR:

- to facilitate the long-term *in situ* and *ex situ* conservation of plant genetic resources in Europe;
- to facilitate the increased utilization of plant genetic resources in Europe;
- to strengthen links between all plant genetic resources Programmes in Europe and promote the integration of countries which are not members of ECP/GR;
- to encourage cooperation between all stakeholders, including NGOs and private breeders;
- to increase the planning of joint activities, including the development of joint project proposals to be submitted to funding agencies;
- to encourage the sharing of conservation responsibilities for PGRFA in Europe;
- to increase awareness, at all levels, of the importance of PGRFA activities including conservation and sustainable use; and
- to seek collaboration with other relevant regional and global initiatives.

### **Phase VI: An enhanced mode of operation**

To achieve greater coordination within the Crop Networks during Phase VI, Network Coordinating Groups will be activated to establish priorities for action for the extended range of crops covered by the Network. These self-organizing Coordinating Groups, will be composed of Working Group Chairs and Vice-Chairs or Database managers. The Network Coordinating Groups will work closely with the secretariat to which they will submit proposals for activities and review progress, achievements and future workplans. In the case of crops for which no Working Group exists or in the case of Networks in which no activities have been carried out in the past, the Network Coordinating Groups can initiate *ad hoc* actions and may propose the establishment of a Working Group to the Steering Committee. The Network Coordinating Group will strive for a balanced regional participation in the Networks' activities. The Group Members ensure effective links between ECP/GR and the respective stakeholders at the national level.

The main implementation of the Networks' activities continues to be through Working Groups. These Working Groups will no longer necessarily meet several times during a given phase. However, the respective Chairs and Vice-Chairs will ensure that both attending and corresponding members are involved in the planning and implementation of the crop specific workplans. The main vehicle for facilitating action for any given crop will be focused meetings of a restricted number of Working Group members and resource persons, as necessary.

#### *Seventh meeting of the Steering Committee of ECP/GR*

In the case of a meeting involving the whole Working Group, the participation through either attending or corresponding members will be determined by priorities established at the national level, as agreed at the Sixth Steering Committee meeting<sup>23</sup>. As a consequence of the increased number of Working Groups and the re-scaling of the funding categories (Table 4), the quota for attending members are now as follows:

A	4	D	7
B	5	E	8
C	6		

It is agreed that the Secretariat can welcome to the meeting self-funded corresponding members as long as the overall size of the Group remains conducive to working effectively.

During Phase VI, the Thematic Networks will play their full role to support the Crop Networks by addressing issues common to several or all of the Crop Networks. Within the thematic Networks, activities will be carried out primarily through *ad hoc* actions.

Making full use of the complementarity between the different Networks, emphasis will be shifted from establishing and standardizing Databases, to promoting the characterization and primary evaluation of existing accessions and the effective distribution of related information. Collaboration with users is strengthened mainly through the national networks and through a strong user-driven orientation of the Programme. The Internet presence of the Programme is strengthened (e.g. more Central Crop Databases on line, ECP/GR Home Page and Information Platform updated on a monthly basis) and the sharing of responsibilities between institutions and countries is actively promoted. The additional flexibility provided by the above mentioned changes in structure will be exploited to address relevant crops and themes of the Global Plan of Action which require new or increased attention.

#### **Phase VI: an intensive workplan**

The small increase in the overall budget is based on the assumption that about 8 out of the 10 Networks require a Network Coordination Meeting, that these meetings would not give rise to published reports, and that 7-8 larger meetings may be required (possibly at the Network level). The remaining funds budgeted under *Network Operations* are foreseen for small focused technical meetings and actions as part of the implementation of crop specific workplans, as well as *ad hoc* actions to further develop and advance the workplans within the Thematic Networks (Table 1). The secretarial support at the ECP/GR Secretariat is increased from half to full time to take into account the additional workload associated with the broadening of the scope of the Programme. Overhead charges by IPGRI remain at 13%.

#### **Complementary Programme Modules**

While the operative basis for and the governance of the implementation of the Global Plan of Action clearly lie with the national programmes, a number of Priority Activities of this Global Plan gain in effectiveness if they are facilitated by a regional hub. ECP/GR has been requested to play this role but lacks the core resources to be pro-active in all the relevant activities. Following a recommendation by the Steering Committee a number of complementary Modules have been proposed to provide flexibility in supporting and managing such initiatives.

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<sup>23</sup> Gass, T., G. Kleijer, M. Waldman and E. Frison, editors. 1995 Report of the Technical Consultative Committee. Sixth Meeting, 21-23 September 1995, Nitra, Slovakia. European Cooperative Programme for Crop Genetic Resources Networks (ECP/GR). International Plant Genetic Resources Institute, Rome, Italy.

*Seventh meeting of the Steering Committee of ECP/GR*

In order to avoid further strain on the Programme's Core Budget, and consequently on Member Countries' contributions, it is proposed that funding for these activities be raised independently and on a voluntary basis (Table 2). The possibility for the funding of Modules is not restricted to the institutions which have formally joined ECP/GR and which pay the annual contributions. It is expected that other donors and interested parties will be approached for support. The benefits of a given module will, in principle, be accessible to all member countries of ECP/GR, irrespective of whether they have financed the module or not (Module E would constitute an exception as it concerns non-EU countries in particular). Technical and financial reports on the activities carried out within the modules will be provided annually to the National Coordinators.

An overview of possible Modules is given below with an indication of the GPA Priority Activity to which they relate.

- Module A:     Surveying and inventorying PGRFA (GPA/PA 1).
- Module B :    Emergency actions (GPA/PA 6).
- Module C:     Compilation of crop specific regeneration guidelines (GPA/PA6).
- Module D :    Supporting targeted collecting (GPA/PA 7).
- Module E :    Characterization and evaluation of *ex situ* collections and establishment of core collections (GPA/PA 9).
- Module F:     Genetic diversity studies to analyze comparative genetic diversity in wild relatives and their respective crop genepools (GPA/PA9).
- Module G :    Cooperation with EU-funded projects (GPA/PA 16).
- Module H:     Training activities (GPA/PA 19).
- Module I:     Genetic enhancement of pre-breeding genepool via base-broadening (GPA/PA 10).
- Module L:     Inventorying and monitoring legal framework of seed production and distribution in Europe (GPA/PA 13).

Together with the Letter of Agreement for participation in Phase VI, the Secretariat will initially request voluntary contributions for Modules B, G and H. These correspond to activities which have been initiated during Phase V of ECP/GR with special funding from various donors (Table 2). It is considered that the continuation and further development of these activities is essential to maintain the momentum achieved by the Programme during Phase V. Modules A, C, D, E, F, I and L should be developed further by *ad hoc* groups within ECP/GR before they are submitted to participating countries and other donors.



**Table 1: Workplan and budget breakdown for "Network Operations" and "Publications"**<sup>24</sup>

Timing	Activity	Estimated number of participants	Meeting and travel cost US\$	Publication and distribution of proceedings	Total US\$
Years 1 and 2	Network coordination meetings:				
	- Cereals	15	25,000		25,000
	- Forages (full meeting of the Network)	25	30,000	10,000	40,000
	- Vegetables	10	20,000		20,000
	- Fruit	10	20,000		20,000
	- Minor crops	10	20,000		20,000
	- Industrial crops	10	20,000		20,000
	- <i>in situ</i> conservation (task force)	10	20,000		20,000
	- on farm management (task force)	10	20,000		20,000
	- Technical cooperation (task force)	10	20,000		20,000
Years 3 and 5	Full Network meetings:				
	- Cereals	25	30,000	10,000	40,000
	- Grain legumes	25	30,000	10,000	40,000
	- Vegetables	25	30,000	10,000	40,000
	- Fruit	25	30,000	10,000	40,000
	- Minor crops ( <i>ad hoc</i> meeting)	25	30,000	10,000	40,000
	- Industrial Crops	25	30,000	10,000	40,000
	- Technical Cooperation ( <i>ad hoc</i> meeting)	10	20,000	10,000	30,000
	- Documentation and Information	45	50,000	10,000	60,000
	Focused thematic and crop meetings:				
	- Small technical meetings (10 events)	5-10 (in each)	110,800	10,000	120,800
<b>Total:</b>			555,800	100,000	655,800

**Table 2: Budget break down for Modules B, G and H**

Module	Minimum funding for initiation US\$	Optimum funding level (5 years)	Breakdown	
B: Emergency Actions	5,000	50,000	<ul style="list-style-type: none"> <li>Regeneration, germplasm transfer, safety duplication</li> <li>Coordination (20% as of a total volume of 50.000)</li> </ul>	80-100% 0-20%
G: Cooperation with EU-funded projects	10,000	250,000	<ul style="list-style-type: none"> <li>Participation in Project meetings (100% up to a total volume of 50.000)</li> <li>Partial support to types of activities foreseen within the EC funded project</li> <li>Coordination (20% as of a total volume of 100.000)</li> </ul>	100-50% 50% 0-20%
H: Training activities	25,000	300,000	<ul style="list-style-type: none"> <li>Database management and information distribution</li> <li>Specialised training courses organised by IPGRI in collaboration with relevant national institutes (3 weeks, 30 trainees)</li> <li>Partial sponsorship of trainees to attend courses or to have practical training in laboratories/ genebanks</li> </ul>	25,000/ year 50,000/ year 0-20,000/ year

<sup>24</sup> For the full budget of Phase VI refer to Table 3.

## Budget of Phase VI

Table 3 provides an overview of the budget of the Core Programme.

## Funding Phase VI of ECP/GR

For the duration of Phase V, the annual contribution to be paid by a member country was determined on the basis of the country's UN assessment rate, whereby groups of countries were distinguished (TCC, Bulgaria 1993). The UN General Assembly has recently adopted a revised scale of assessments, taking into account the economic development and the financial situation of its member countries (UNGA Resolution 52/215). Table 4 provides an overview of country contributions, taking into account these new assessment scales. An expected annual and five-year revenue is provided considering that a few countries may not be able to join the Programme for financial reasons.

**Table 3: Budget for Phase VI of ECP/GR (in US\$)**

	Phase VI					
	Total Phase VI	1999	2000	2001	2002	2003
Coordinator at IPGRI	420,000	80,000	82,000	84,000	86,000	88,000
Secretarial support	219,000	43,800	43,800	43,800	43,800	43,800
Coordinator travel	60,000	12,000	12,000	12,000	12,000	12,000
Network Operations	555,800	100,000	100,000	100,000	155,800	100,000
Steering Committee mtgs.	90,000	0	0	45,000	0	45,000
Publications	100,000	0	10,000	30,000	30,000	30,000
European Internet platform	30,000	6,000	6,000	6,000	6,000	6,000
Newsletter	15,000	3,000	3,000	3,000	3,000	3,000
Communication and office consumables	50,000	10,000	10,000	10,000	10,000	10,000
Sub-total	1,539,800	254,800	266,800	333,800	346,600	337,800
Overhead (13%) <sup>25</sup>	200,174	33,124	34,684	43,394	45,058	43,914
Total	1,739,974	287,924	301,484	377,194	391,658	381,714

<sup>25</sup> This includes provision of space in IPGRI headquarters, the input and time of IPGRI professional staff, etc.

**Table 4: ECP/GR table of annual contributions during Phase VI (US\$)**

	UN rates (%) 1)	Cat. 2)	Annual contributions
ALBANIA	0,003	A	2000
MACEDONIA (FYR)	0,004	A	2000
ARMENIA	0,011	A	2000
MALTA	0,014	A	2000
ESTONIA	0,015	A	2000
MOLDOVA	0,018	A	2000
BULGARIA	0,019	A	2000
GEORGIA	0,019	A	2000
AZERBAIJAN	0,022	A	2000
LITHUANIA	0,022	A	2000
LATVIA	0,024	A	2000
ICELAND	0,032	B	5000
CYPRUS	0,034	B	5000
YUGOSLAVIA (FR)	0,034	B	5000
CROATIA	0,036	B	5000
SLOVAKIA	0,039	B	5000
SLOVENIA	0,061	B	5000
ROMANIA	0,067	B	5000
LUXEMBOURG	0,068	B	5000
BELARUS	0,082	B	5000
HUNGARY	0,12	C	7500
CZECH REP	0,121	C	7500
POLAND	0,207	C	7500
IRELAND	0,224	C	7500
UKRAINE	0,302	C	7500
ISRAEL	0,345	C	7500
GREECE	0,351	C	7500
PORTUGAL	0,417	C	7500
TURKEY	0,44	C	7500
FINLAND	0,542	C	7500
NORWAY	0,61	D	12500
DENMARK	0,691	D	12500
AUSTRIA	0,941	D	12500
SWEDEN	1,084	D	12500
BELGIUM	1,103	D	12500
SWITZERLAND	1,215	D	12500
RUSSIA	1,487	D	12500
NETHERLANDS	1,631	D	12500
SPAIN	2,589	D	12500
UK	5,09	E	35000
ITALY	5,432	E	35000
FRANCE	6,54	E	35000
GERMANY	9,808	E	35000
<b>total</b>			<b>394500</b>
Unlikely contributions:			46500
Realistic annual:			348000
<b>Total 5 years:</b>			<b>\$1.740.000</b>

1) UN Assesment Rates for 1999 as % of the regular budget, UN General Assembly 20 January 1998, A/RES/52/215

2) Key to calculation of annual contributions to ECP/GR

threshold	Annual contribution
0 x < 0.03	2000
0,1 0.03<= x < 0.1	5000
0,6 0.1<= x < 0.6	7500
5 0.6<= x < 5	12500
5 <= x	35000

## Annex VI: Statement by EUROMAB

Jurgen Nauber  
EUROMAB Bureau, Rapporteur  
Federal Agency for Nature Conservation,  
Germany

Natalia Rybianets  
Secretary, EUROMAB  
Belarus Academy of Sciences

Communication for the ECP/GR Steering Committee 4 July 1998, FAL, Braunschweig.

Unfortunately our schedule does not allow us to participate in the meeting of the Steering Committee. However, we would like to ask Thomas Gass to read out this communication which is made on behalf of the European MAB-Cooperation (EUROMAB).

Biosphere reserves are a well suited instrument to contribute to *in situ* and on farm conservation and sustainable management of plant genetic resources for food and agriculture. After the Braunschweig Symposium it seems that this could be one point for intensifying the cooperation between the "Plant genetic resources family" and the MAB Programme which stands for conservation, sustainable use and scientific cooperation.

It is recommended that the Steering Committee takes into account for implementing the GPA in the field of *in situ* conservation and on farm management and conservation of PGRFA the experience and capacity of the biosphere reserves of the MAB Programme of UNESCO.

It can be observed that parallel structures, those of MAB and ECP/GR, exist in nearly every country of Europe. So far only limited cooperation between those two networks exist.

Biosphere reserves have the explicit task the conservation and rational use of plant genetic resources as taken down in the "Seville Strategy" under objective I.2.5. ECP/GR is considering to use existing protected areas and their Networks as sites for conservation of plant genetic resources. Cooperation between the two programmes should be sought according to the following recommendations:

- MAB should be present at the next meeting of the Steering Committee;
- The European Cooperative Programme for Crop Genetic Resources should participate in the next meeting of EUROMAB (a participation was foreseen in the EUROMAB VI-Conference 1997 in Minsk, but had to be cancelled unfortunately);
- on national level contacts between the European Cooperative Programme for Crop Genetic Resources and the MAB-structures should be established.

Action:

- MAB to inform its structure about possible cooperation;
  - ECP/GR to inform its structure about possible cooperation.
- select a few biosphere reserves to conduct model projects on plant genetic resources.

Synergisms should be sought, avoiding double work and waste of financial resources. Details of the cooperation should be discussed by the Secretariates according to the considerations of the ECP/GR Steering Committee and the EUROMAB-Conference. The presentation of Mrs Rybianet is annexed giving the rationale of the cooperation.

Braunschweig, 2 July 1998



## Annex VII: Replies of National Coordinators to a questionnaire on ECP/GR

**How would you rate the effectiveness of ECP/GR during the past 5 years in achieving the following:**

(in each case please give a score from 0-3)

**0 = was not effective**

**1 = was little effective**

**2 = was effective**

**3 = was very effective**

1. Facilitating and encouraging the use of germplasm collections
2. Improving access to information about germplasm collections
3. Increase the planning of joint activities
4. Strengthening the links between east and west European programmes
5. Developing joint project proposals to be submitted to funding agencies
6. Facilitating the long-term conservation of crop genetic resources
7. Contribute to monitoring the safety of collections
8. Taking emergency actions for the safety of collections
9. Increasing public awareness of the importance of crop genetic resources

Question No.	1	2	3	4	5	6	7	8	9
Total no. of answers	26	26	26	26	25	26	25	25	26
not effective (0)	0	0	0	0	2	2	1	4	1
little effective (1)	7	0	5	5	14	9	7	5	8
effective (2)	14	13	14	11	7	13	14	11	9
very effective (3)	5	13	7	10	2	2	3	5	8

**How much should ECP/GR get involved in the following activities in the future?**

(in each case please give a score from 0-3)

**0 = should not get involved**

**1 = should get involved a little**

**2 = should get fully involved**

**3 = should play the leading role**

1. Facilitating and encouraging the use of germplasm collections
2. Promoting collecting activities
3. Promoting eco-geographic surveys
4. Promoting the development of core collections
5. Developing safety guidelines for germplasm exchange
6. Monitoring the use of collections
7. Improving the access to information about germplasm collections
8. Increasing the on-line access to Central Crop Databases
9. Encouraging the development of national documentation systems
10. Developing a regional documentation network
11. Encouraging increased standardization of germplasm documentation systems
12. Promoting the planning of joint activities
13. Strengthening the links between east and west European plant genetic resources programmes
14. Supporting the participation of non EU countries in EC funded projects
15. Facilitating scientific exchange between eastern and western Europe
16. Developing joint project proposals to be submitted to funding agencies
17. Facilitating the long-term conservation of crop genetic resources
18. Monitoring the safety of collections
19. Establishing a permanent inventory of safety duplication agreements
20. Clarifying and informing about legal and policy aspects related to PGR
21. Establishing through its Working Groups guidelines and monitoring mechanisms for the quality of storage and regeneration procedures in genebanks
22. Taking emergency actions for the safety of threatened collections
23. Maintaining an emergency fund
24. Increasing public awareness of the importance of crop genetic resources



Question No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Total no. of answers	34	34	33	34	34	34	34	34	34	34	34	34	34	34	34	34	33	34	34	33	34	34	33	34
should not get involved (0)	0	1	1	1	3	3	0	0	0	0	1	0	0	0	0	1	3	1	0	1	0	0	4	1
should get involved a little(1)	4	6	6	0	5	11	1	2	8	4	2	1	0	2	3	3	4	11	10	4	1	2	2	5
should get fully involved (2)	16	15	14	19	10	15	17	12	15	16	14	15	11	9	15	12	13	14	16	14	14	11	10	14
should play the leading role (3)	14	12	12	14	16	5	16	20	11	14	17	18	23	23	16	18	13	8	8	14	19	21	17	14

## Annex VIII: Crop Working Group Process Analysis

### Crop Working Group Process Analysis

Activities	Conservation regular	emergency	Documentation	Collecting	Characterization/ Evaluation	Collaboration
Minimum	<p>Uniform standards for regeneration, multiplication and conservation adopted.</p> <p>Duplicates and synonyms identified based on available information.</p> <p>Unique material identified.</p> <p>Most appropriate methods of conservation determined.</p>	<p>Regeneration needs identified.</p> <p>Procedures for emergency regeneration established.</p> <p>Safety duplication implemented.</p> <p>Emergency regeneration carried out.</p>	<p>European database established.</p> <p>Database manager nominated.</p> <p>Passport data included.</p> <p>Protocol for updating data elaborated.</p>	<p>Genetic diversity of crops inventoried based on available data.</p> <p>Gaps and potential needs for collecting identified.</p>	<p>Descriptor lists for (preliminary) characterization and evaluation agreed.</p>	<p>Priorities for complementary activities identified in collaboration with other relevant actors.</p>
Undecided			<p>Database accessible through Internet</p>		<p>Descriptor lists for (further) characterisation and evaluation finalised.</p> <p>Core collection established.</p>	
Additional	<p>Appropriate alternative/complementary ex situ conservation strategies implemented.</p>		<p>Characterisation data included.</p> <p>Evaluation data included.</p> <p>Crop-specific links with other programmes/networks/databases established.</p>	<p>Collecting activities, where needed, carried out.</p>	<p>Characterization of collection carried out.</p> <p>Evaluation of collection experiments carried out.</p> <p>Pre-breeding (base broadening) undertaken.</p>	<p>Above priorities implemented.</p> <p>Collaboration with other regions established.</p>

## General comments

1. The ECP/GR Steering Committee has attempted to develop a matrix which distinguishes minimum and additional tasks for Working Groups. The Process Analysis is meant for guidance of ECP/GR Working Groups in determining their activities and the relative priorities of these activities, given the limited available budget.
2. For the moment no agreement has been reached on some activities, which are located in the segment 'Undecided'. The matrix should be regarded as preliminary and will be finalised by the Steering Committee in 2001 after an extensive consultation process within countries and within the ECP/GR Working Groups.
3. The above Crop Working Group Process Analysis considers both *ex situ* collections and on-farm/in-garden/*in situ* populations. It is realised that the matrix still focuses strongly on *ex situ* activities. The Working Groups are requested to carefully address alternative and complementary approaches.
4. Management of collections and populations of various crops has different requirements. Also, different institutions participating in the Working Groups may have different priorities. This process analysis may therefore have to be adapted by individual Working Groups.
5. All activities of Working Groups assume sharing of responsibilities. This aspect has not been separately mentioned.

## Specific comments

### *Conservation*

6. Alternative and complementary strategies include cryopreservation, *in vitro* conservation and *ex situ* field conservation.

### *Documentation*

7. Internet may provide database information down-loadable or on-line searchable.
8. Links with other programmes includes those of the informal sector.

### *Collaboration*

9. Other relevant actors include other ECP/GR Networks and Working Groups.

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