

# **European Cooperative Programme for Plant Genetic Resources (ECPGR)**

Phase VIII (2009-2013)

# Progress Report for the 12<sup>th</sup> Meeting of the Steering Committee, 14-16 December 2010, Bratislava, Slovakia

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# 1. IMPLEMENTATION OF ECPGR Phase VIII (2009-2013)

# 1.1. Status of membership and outstanding contributions

As of the end of November 2010, 34 countries had signed the Letter of Agreement for Phase VIII. Four other countries had not signed the Letter of Agreement but had, nonetheless, started to pay annual contributions for Phase VIII. Montenegro and Russian Federation joined ECPGR as new members in 2009 and Belarus in 2010.

#### Issues

A number of countries (Azerbaijan, Georgia, Portugal, Russian Federation and Ukraine) have signed the Letter of Agreement for Phase VIII, but maintain outstanding contributions for 2 or more years.

Other countries (Armenia, Belgium, France, Israel, FYR Macedonia and Malta) have not signed the Agreement for Phase VIII and maintain outstanding contributions for 2 or more years.

The SC is asked to give advice on the approach that the Secretariat should take with these countries.

• Among the possible options, for countries with 2 or more years of outstanding contributions, participation in meetings could be granted on a self-funded basis only.

# 1.2. Meetings held and use of country quota

The Working Group (WG) meetings that are subject to country quota present a challenge, since they have been budgeted by the Networks according to an hypothetical number of participants, but the actual number of participants depends on the choice made, sometimes at the last minute, by the National Coordinators.

Meetings held in the first two years of Phase VIII are listed in Table 1, including the estimated financial balance and the comparison between expected and actual participation. Overall, these meetings cost less than expected. This is partly due to an average lower than expected participation and partly due to true savings. Considering that the value of a country quota was originally set at € 1200, unspent funds due to lower use of country quota by the countries can be estimated at about € 39 600 and the true savings at about € 13 500. Savings would have been much higher if we didn't have to cancel at the last minute the Grain Legumes WG meeting due to the Icelandic volcanic ashes emergency. A number of travel tickets were not refundable and the cost has been absorbed by the Programme, without charging the use of country quota to the members. Additional savings (estimated at € 3435 but not shown in this table) derive from lower costs than expected of the ad hoc meetings held in 2009 and 2010 (Training Workshop for National Inventory Focal points, Sugar, Starch and Fibre Crops Network Coordinating Group (NCG) meeting, Barley workshop on pre-breeding and Documentation and Information Network NCG meeting).

Table 1. Cost of meetings subject to country quota and the actual use of quota

Year	Meeting	Estimated balance (€)	Budgeted country quota (expected participation)	Actual country quota used
September 2009	Medicinal and Aromatic Plants	(854)	23	23
December 2009	Vegetables Network	530	50	51
March 2010	Brassica	5266	16	14
April 2010	Grain Legumes (cancelled due to volcanic ashes)	10157	17	n/a
April 2010	Forages	10764	23	20
July 2010	Fibre Crops (Flax and Hemp)	14045	16	5
September 2010	Prunus	6872	19	21
September 2010	In situ and On-farm	(14038)	30	37
October 2010	Avena	16183	22	13
November 2010	Cucurbits	4189	11	10
TOTAL		53114	227	194

#### Issues

The *In situ* and On-farm Conservation Network has used most of its budget for its meeting in Madeira and will not have enough funds to organize the meeting of the On-farm Conservation and Management WG that had been planned for 2011.

• The SC is asked whether this meeting should be cancelled or if the savings from other Networks can be transferred in order to regularly hold the On-farm Conservation and Management WG meeting.

The Grain Legumes WG meeting had to be cancelled. However, half of the budget was lost due to non-refundable travel tickets.

- The SC is asked whether the meeting can be reconvened (subject to country quota), using the remaining Network funds (€ 17 457).
- The SC is asked to clarify whether a Network should be given the possibility to re-allocate its own savings for other Network activities, or if the unspent funds according to the workplan should be used to compensate for situations of overspending by other Networks (e.g. as the In situ and On-Farm Conservation Network has overspent on its meeting, it may or may not be compensated by savings made for instance by the Cereals Network).

# 1.3. Planned meetings and use of country quota

With reference to meetings that are subject to country quota, the plan for the rest of Phase VIII is summarized in Table 2. The number of currently booked quota is very low compared to the budgeted expectation. The delayed decision of National Coordinators regarding the use of the available quota makes it difficult to organize the meetings, since the level and type of participation is not clear sufficiently ahead of time.

A new tool has been set up on the ECPGR Web site, where National Coordinators can check online the status of use of their quota (<a href="http://www.ecpgr.cgiar.org/Information/ECPGRMeetings">http://www.ecpgr.cgiar.org/Information/ECPGRMeetings</a> Temporany.htm).

Table 2	<b>2.</b> Plann	ed meetings	subject to co	untry quota an	d booke	d quota
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Year, country	Meeting	Budget	Budgeted country quota (expected participation)	Country quota booked
March 2011, Germany	Umbellifer Crops	8400	7	1
March 2011, Turkey	Solanaceae	13520	11	5
May 2011, Cyprus	Barley	28500	24	5
September 2011, ??	On-farm Conservation and Management	19380	16	3
September 2011, Greece	Allium	19400	16	4
October 2011, Slovenia	Leafy Vegetables	13520	11	2
2011, ??	Potato	15800	13	8
February 2012, ??	Malus/Pyrus	23000	19	5
September 2012, Germany	Vitis	9800	8	4
2012, Slovakia	Wheat	25900	21	8
2012, France	Beta	9680	8	4
2013, ??	Umbellifer Crops	5120	4	1
TOTAL		172640	158	50

#### **Issues**

National Coordinators are requested to quickly decide on the use of their remaining country quota.

## 1.4. Plans for the second part of Phase VIII

The extraordinary meeting of the Steering Committee (SC) that was proposed following the recommendations of the Independent External Review and approved by the SC has been organized in December 2010 in Bratislava, Slovakia, without any budgetary coverage.

#### Issues

This extraordinary event opens up a question regarding the regular continuation of Phase VIII, in particular the meeting of all the Network Coordinating Groups (NCGs) (planned for February 2011) and the Mid-Term Steering Committee meeting (planned for September/October 2011).

Assuming that Phase VIII will continue according to the previous plans, the Secretariat is suggesting to postpone the NCG meeting from February to November 2011, in order to avoid overlaps with the large number of meetings planned in 2011 and to allow sufficient and quality time for its preparation, which has not yet started due to the intervening preparation for the extraordinary SC meeting. Consequently, it is also suggested to postpone the Mid-Term SC meeting to April/May 2012. The budget for Phase VIII would not allow to hold a third SC meeting during the Phase (i.e. the final SC meeting in 2013), but this meeting could nonetheless be held and budgeted as part of the subsequent Phase IX of ECPGR, should there not be enough remaining funds at the end of Phase VIII to cover the meeting with the existing Phase VIII budget.

• The SC is asked to take a decision on the suggestion to postpone the NCG meeting from February to November 2011 and the Mid-Term SC meeting to April/May 2012. It is also asked to decide whether the end-of-Phase meeting could be held and budgeted as part of the subsequent Phase IX of ECPGR.

#### 1.5. Status of use of Phase VII funds

As indicated in detail in the financial table provided as background document to the meeting, Phase VII carry-over funds have been spent in the first two years of Phase VIII without major divergences from the original allocation. The budget for the ECPGR External Review has not been touched, since the Review was carried out at lower cost than expected and additional funds raised in Phase VIII were sufficient to cover these costs. Therefore, this budget item can be re-allocated in the future to cover other costs.

#### 2. ACTIVITIES CARRIED OUT WITHIN THE NETWORKS

#### 2.1. Cereals Network

Working Groups: Avena; Barley; Wheat.

#### Meetings held

A **Pre-breeding Workshop on Cereals** was held in Alnarp, Sweden on 24-25 November 2009, with 49 participants from 12 countries.

It was concluded that characterization of germplasm for biotic and abiotic (particularly drought) stress resistance would be critical to face climate change needs of adaptation. In order to overcome the lack of specific funding programmes devoted to pre-breeding, it was proposed to lobby in favour of pre-breeding at EU and national levels, and support the establishment of private-public collaboration, where they do not yet exist. It was decided to form a Task Force to produce concept notes on pre-breeding issues. Ten participants volunteered for this and a concept note on small grain cereals is now ready and publicly available on the ECPGR Web site at (<a href="http://www.ecpgr.cgiar.org/Networks/Cereals/PreBreeding\_Concept\_Note\_2.pdf">http://www.ecpgr.cgiar.org/Networks/Cereals/PreBreeding\_Concept\_Note\_2.pdf</a>).

**The Sixth Meeting of the Working Group on** *Avena* was held in Bucharest, Romania, 21-22 October 2010, jointly with the final meeting of the GEN RES project AVEQ on "*Avena* Genetic Resources for Quality in Human Consumption".

The Group benefited from its involvement in the AVEQ project, resulting in the evaluation of a working collection of about 600 accessions. Regeneration and multiplication protocols for wild *Avena* species were tested during the project. Protocols on regeneration of wild *Avena* to be agreed for the AEGIS Quality System were planned to be drafted by a Group's Task Force. The ECPGR *Avena* Database is facing the challenge to integrate the *in situ* data produced by the AEGRO project and the evaluation data generated by the AVEQ project. The advantages of the decentralized approach of a Crop database was stressed, but this will require attracting new funds to make it sustainable, while the prevailing tendency of the European Information landscape is moving towards centralized approaches (EURISCO and GENESYS, the gateway to genetic resources of the Global Information on Germplasm Accessions (GIGA) project).

The Group identified pre-breeding of *A. strigosa* and of other wild species as topics of interest for future joint project proposals.

## **Future meetings**

The Barley WG meeting is planned in Larnaca, Cyprus in May 2011 and the Wheat WG meeting in Piešťany, Slovakia, in 2012. An ad hoc meeting to discuss the selection of accessions for AEGIS and the Quality System is planned for autumn 2011.

#### **Activities**

Survey missions to collect and monitor wild oat populations for *in situ* conservation were carried out in 2009 (Cyprus) and 2010 (Sicily and Andalusia). Ideal situations for *in situ* management were described and the local authorities were informed of the importance of existing populations. New samples were collected where possible and deposited in genebanks.

#### **Future activities**

An activity on capacity building for conservation of precise wheat genetic stocks of cereals is planned.

# 2.2. Forages Network

Working Group: Forages.

#### Meetings held

The Network Coordinating Group organized a self-funded ad hoc meeting on 11 May 2009 in La Rochelle, France, in preparation of the regular meeting.

The **Tenth Meeting of the Working Group on Forages** was held on 27–29 April 2010, Poel Island, Germany.

Considering the inefficient fragmentation of the Forages Databases (23), it was agreed to merge some of the databases and reduce them to 12. The Central Crop Database managers are leading the process of selection of accessions for the European Collection and steps to make progress in their identification were defined. This process is expected to be facilitated by submitting a proposal to the AEGIS Grant Scheme. The status of safety-duplication was monitored, with the intention to increase its coverage. The use of the agreed standards for regeneration was also monitored and it was verified that these are followed to a very large extent by the members. Inclusion of characterization and evaluation (C&E) data in the Forages Databases can be made possible with the help of NordGen or IPK technical advice. National experiences were shared, specifically regarding inventory of on-farm activities and diversity studies.

#### **Future meetings**

The Network's budget was only sufficient to hold one meeting. However, the meeting cost less than the allocated budget and remaining funds can be used for new actions, depending on the decision of the SC on the approach to take for budget re-allocation.

# 2.3. Fruit Network

Working Groups: Malus/Pyrus; Prunus; Vitis.

## **Meetings held**

The Eighth Meeting of the Working Group on *Prunus* was held on 7–9 September 2010 in Forli, Italy.

Lists of agreed molecular markers for cherry, apple and pear are being finalized, as well as guidelines for taking photographs of the accessions.

Survey of the collections revealed that the main problems that the *Prunus* accessions are facing are the health status (virus infections) and lack of funds for the maintenance of the plants due to decreasing national budgets for activities such as identification, collecting, introduction, evaluation and regeneration; some very old field collections need urgent regeneration. In order to overcome this situation with possible solutions, a model based on successful examples of national networks of fruit tree conservation will be described and proposed for adoption.

The ECPGR *Prunus* Database was improved with new search features and the possibility to host phenotypic and genotypic data.

The procedure to select accessions for the European Collection had been tested with cherry accessions and the Group is in the process of finalizing agreed selection criteria.

Specific standards for conservation of *Prunus* accessions were discussed and a consensus document is in the process of being finalized. The task to prepare a specific safety-duplication methodology was assigned to a small Task Force. Primary descriptors for almond, apricot, cherry, plums and peaches were agreed.

#### **Future meetings**

Meetings of the WGs on *Malus/Pyrus* ad on *Vitis* are planned for 2012. A meeting on fruit synonyms is planned for February 2012. A meeting of the Fruit Database Managers is planned for 2011 or 2012. An AEGIS ad hoc meeting is planned for 2012 or 2013 with the objective to discuss lists of candidate accessions for the European Collection.

#### **Activities**

The Network is planning for the harmonization of the four European Fruit Databases and the sharing of tools to assist in assessing trueness-to-type of the European accessions. INRA-Bordeaux is completing the ECPGR *Prunus* database structure with ECPGR project funds and extending it to other *Prunus* crops.

#### **Future activities**

The *Prunus* Database structure will be tested for adoption by the *Pyrus* Database. *Malus* and *Vitis* Databases also need to plan for their further development with ECPGR project funds.

# 2.4. Oil and Protein Crops Network

Working Group: Grain Legumes.

#### Meetings held

The Fifth Meeting of the Working Group on Grain Legumes was planned to be held in Antalya, Turkey on 22-23 April 2010, including the ad hoc meeting of the Grain Legume Database Managers. Unfortunately, the meeting was cancelled at the last minute due to the air transport difficulties caused by the Icelandic volcanic ashes. One third of the Network's budget was lost since a number of air tickets were no longer refundable. Presentations prepared for the meeting were uploaded on the ECPGR Web site, reporting updates of the Grain Legume Databases and national experiences. The WG intended to mainly focus on defining its engagement towards AEGIS, with particular interest in the AQUAS elements related to the regeneration of allogamous species.

#### **Future meetings**

Remaining funds are sufficient to organize one Grain Legumes WG meeting and the WG will need to make appropriate plans, pending the SC decision (see above, Chapter 1.2).

#### **Future activities**

The Network did not plan for project activities funded through ECPGR.

## 2.5. Sugar, Starch and Fibre Crops Network

Working Groups: Beta; Fibre Crops (Flax and Hemp); Medicinal and Aromatic Plants; Potato.

# **Meetings held**

The **Network Coordinating Group held its Third Meeting** in Quedlinburg, Germany on 8-9 October 2009, to coordinate Network's activities.

The Fourth Meeting of the Working Group on Medicinal and Aromatic Plants (MAPs) was held on 29 September-1 October 2009 in Kuşadası, Turkey.

The finalization of the crop-specific characterization and evaluation descriptors for the ten target species selected by the WG was given high priority. Plans were made to expand the priority list of MAP species and to produce a document showing the level of threat and the Red List status for MAP species in Europe.

Appropriate areas for future collaboration were identified with the need to increase the focus on *in situ* conservation of MAPs; the potential of *in vitro* or cryopreservation methods to improve the status of safety-duplication of MAP collections, which is insufficient; the usefulness of micropropagation methods for rare and threatened species, for conservation and reintroduction of species into former habitats and for commercial production of plants and MAP products.

The workplan for the ECPGR Network project for "Conservation and characterization of oregano (*Origanum vulgare* L.) wild populations in Europe" was agreed.

The Second Meeting of the Working Group on Fibre Crops (Flax and Hemp) was held on 7-9 July 2010 in Šumperk – Velké Losiny, Czech Republic.

The Group is developing the International Flax Database, even though resources are insufficient at the managing institute in the Czech Republic. The development of the ECPGR Hemp Database was reconfirmed as an intention of CRA-CIN, Bologna, Italy. Preliminary recommendations for the implementation of AEGIS include focusing on the procedures to select flax accessions for the European Collection, under the coordination of the Chair.

In order to collaborate with the *In situ* Network, two Members of the Network attended the final meeting of the AEGRO project and First Meeting of the On-farm Conservation and Management Working Group and Wild Species Conservation in Genetic Reserves Working Group in Madeira, Portugal, September 2010.

#### **Future meetings**

Meetings of the *Beta* (France, 2012) and Potato WGs are planned as well as a meeting of the NCG and ECCDB managers in 2013.

#### **Activities**

The project on inventory and sampling of *Origanum vulgare* L. populations was started in June 2010. Samples were collected by 19 partners and sent to the University of Veterinary Medicine in Vienna, Austria, where they are being evaluated through molecular and chemical analysis. The data collected within the Oregano Project will contribute to the selection of oregano accessions to be included in the European Collection according to the AEGIS concept.

#### **Future activities**

Sampling of *Beta nana* for geneflow analysis in Greece and monitoring of a genetic reserve of *Beta patula* are planned activities for the remaining part of Phase VIII.

#### 2.6. Vegetables Network

Working Groups: Allium; Brassica; Cucurbits; Leafy Vegetables; Solanaceae; Umbellifer Crops.

#### **Meetings held**

The Vegetables Network held its Third Meeting in Catania, Italy, on 10-12 November 2009, involving 59 participants. The experiences made by the AEGIS model crop groups (*Allium* and *Brassica*) and by the Solanaceae WG in their attempt to identify Most Appropriate Accessions (MAAs) were shared and agreement was reached that efforts to identify European Accessions will focus, as a priority, on leek and wild alliums, lettuce and spinach, carrot, melon, *B. rapa* and various Solanaceae crops. Consensus was expressed by the Group about the principles of AQUAS and the need to define common standards.

The Fourth Meeting of the Working Group on *Brassica* was held on 2-3 March 2010, Linguaglossa, Italy. The ECPGR *Brassica* Database (Bras-EDB) has been updated and used to flag core collections of *B. oleracea*, *B. rapa*, *B. napus* and *B. carinata*. A duplicate search function was used to identify duplicates within *B. rapa* accessions (preliminarily 30% duplicates were identified) and it will be extended to search among *B. oleracea* accessions. A Group Task Force was formed, with the aim of verifying whether the genepool of wild *Brassica* can be considered safely conserved in *ex situ* genebanks or if further collecting is needed, and to identify the accessions requiring multiplication and prepare a detailed time-frame for such multiplication. Plans for project activities were refined (see "Activities" below).

The **Second Meeting of the Working Group on Cucurbits** was held on 9-11 November 2010, Tbilisi, Georgia. The Group agreed to prepare guidelines for regeneration of cucumber, melon, watermelon and *Cucurbita*. The criteria for selection of European Accessions were agreed and the analysis of the ECPGR Cucurbits Database in this regard is expected to take place in 2011 after further improvement of data quality in the database.

## **Future meetings**

Meetings of the WGs on Umbellifer Crops (March, Germany), Solanaceae (March, Turkey), Leafy Vegetables (October, Slovenia) and *Allium* (autumn, Greece) are planned for 2011. A second meeting of the Umbellifer Crops WG is planned for 2013. A meeting of the GEN RES project EURALLIVEG will be attended by three ECPGR guests.

#### **Activities**

Ninety-seven accessions of *B. rapa* were selected from the Bras-EDB for characterization through ECPGR project funds. The N.I. Vavilov Research Institute of Plant Industry (VIR), Russian Federation, volunteered to carry out the characterization for morphological and phenological descriptors.

Various populations of wild brassicas obtained from genebanks were planted in Catania, Italy, in the same environmental conditions for comparison, with the aim to establish a core collection of well characterized and diverse wild accessions. The material is also available (either seed or freeze-dried samples) to anyone interested in carrying out characterization or evaluation work.

#### **Future activities**

Morphological and nutraceutical characterization of selected *B. rapa* and wild *Brassica* species will be partially supported with ECPGR funds.

Still to be planned in detail: activities to improve safety-duplication of Cucurbits and Solanaceae; and development and implementation of specific algorithms to facilitate the identification of duplicates in databases.

Fingerprinting of garlic accessions, activities to develop a unified molecular characterization protocol for lettuce and a project to survey, identify and characterize umbellifer wild relatives are planned for the remaining part of Phase VIII.

#### 2.7. Documentation and Information Network

An **EPGRIS3 self-funded Workshop** was held on 7 May 2009 in Bonn, Germany. A proposal for inclusion of characterization and evaluation (C&E) data into EURISCO reached general consensus and the principle of creating a repository of non-standardized C&E data in the framework of EURISCO was adopted. A revised proposal was eventually sent for information to the Steering Committee and approved by the Documentation and Information Network in June 2009.

The road map to the inclusion of C&E data into EURISCO foresees a process of collaboration with Bioversity International, apart from the implementation of the procedures in EURISCO, also specifically in the context of the development of the GENESYS catalogue of the Global Information on Germplasm Accessions (GIGA) project. A self-funded meeting to discuss the options for creating synergies between EURISCO and GENESYS was held at CGN in Wageningen, The Netherlands in December 2009. CGN, NordGen, BLE and IPK made themselves available to deliver the first data sets for developing and testing the EURISCO infrastructure in Rome.

The Documentation and Information (D&I) Network Coordinating Group (NCG) had its Fourth Meeting on 17-18 February 2010 in Maccarese (Rome), Italy. A "road map to the inclusion of C&E data in EURISCO" outlined a recommended process that will eventually enable provision of European C&E data to EURISCO and GENESYS. Given the obvious complementarity and relatively small differences between GENESYS and EURISCO, it was considered advisable to make the two approaches converge. A number of action points to take the necessary steps forward in this direction were agreed, but their implementation resulted to be slow. Following the improvements made to the EURISCO Internet functionalities, development of components to host C&E data into EURISCO is planned for early 2011. Advice was given on the EURISCO development and a workplan for EURISCO activities until September 2010 was approved, taking note that the Internet improvement task had the highest priority.

# **EURISCO**

The catalogue contains data from 41 National Inventories and 314 collection holdings. The total number of accessions, as of 9 December 2010 is 1 083 447. These accessions are listed as Wild/weedy species (41%), Landraces (25%), Advanced cultivars (19%), Breeding/research material (14%) and Others (1%).

Between November 2008 and December 2009, seminars and trainings were carried out in Armenia, Bosnia and Herzegovina, Czech Republic, Russian Federation, Spain and Ukraine, thereby training a total of 113 people.

The EURISCO Internet functionalities were improved in 2010, implementing new search options and introducing various features that improve effectiveness and user-friendliness.

A new EURISCO Data Sharing Agreement (DSA) has been finalized, after the expiration in the end of 2009 of the previous one. New Terms of Use have also been prepared by the legal experts.

#### **Outlook**

Activities planned by the Network include the organization of two Inter-regional Workshops to support International Treaty Implementation, jointly with the Inter-regional Cooperation Network. A meeting of the On-farm /*In situ* National Inventory Focal Points is planned for 2011 and a meeting of the NCG is planned for 2013.

## 2.8. In situ and On-farm Conservation Network

WGs: On-farm Conservation and Management; Wild Species Conservation in Genetic Reserves.

The First Meeting of the two Working Groups on "Wild Species Conservation in Genetic Reserves" and "On-farm Conservation and Management" was held in Funchal, Madeira, Portugal, on 16 September 2010, jointly with the final meeting of the project "An Integrated European *In Situ* Management Work Plan: Implementing Genetic Reserves and On Farm Concepts" (AEGRO).

The WGs were involved in the activities of the AEGRO project, which has developed a methodology for *in situ* management of crop wild relatives. This methodology is a component of the CWR *In Situ* Strategy Helpdesk which is available online at <a href="http://aegro.bafz.de">http://aegro.bafz.de</a>. It assists the systematic identification of candidate genetic reserve sites. The next step towards progress in data management will consist in a better integration of the Population Level Information System (PLIS) into the Crop Wild Relative Information System (CWRIS) and in building a European inventory of landraces. The PGR Secure project "Novel characterization of crop wild relative and landrace resources as a basis for improved crop breeding", funded under the EU 7th Framework Programme will address these needs. This project will include, inter alia, the establishment of Europe-wide national CWR and landraces checklists and European inventories, as well as national and generic strategies for European CWR and landraces conservation actions.

The On-farm Conservation and Management WG reviewed the national experiences on landraces' threats, inventories and promoting use. Creating a clearing-house mechanism for landraces (i.e. a European inventory) will be facilitated by the availability of the draft standards prepared by the WG (see <a href="http://www.ecpgr.cgiar.org/Networks/Insitu">http://www.ecpgr.cgiar.org/Networks/Insitu</a> onfarm/Docs/OnfarmDescr DRAFT271107.pdf) which represent a solid base for developing agreed standards and of a specific Web site (see <a href="http://www.sharinginformation.eu/">http://www.sharinginformation.eu/</a>) which can be used in reaching European stakeholders and institutions aware of landraces maintained on-farm.

The Wild Species Conservation in Genetic Reserves WG surveyed the status of progress of National CWR conservation in each of the participants' countries by reviewing national progress towards the establishment of 11 specific indicators of CWR maintenance. The results presented indicate for the majority of European countries that very few had made significant progress, except that the majority of countries had some ex situ samples of CWR germplasm in the genebanks. Among the priorities for the future, the WG members suggested the establishment of a European network of CWR genetic reserves, ensuring that  $\geq$  50% of European CWR are conserved reliably; the establishment of an information network for CWR; the building of a Web-accessible central European database detailing where adaptively important genes or alleles from CWRs have been successfully transferred to crops; and others.

# **Future meetings**

The large part of the funds allocated to this Network were spent for the meeting in Madeira and therefore the Second Meeting of the WG on On-farm Conservation and Management, that was planned for September 2012, may need to be cancelled, depending on the decision of the SC (see Chapter 1.2 above).

# 2.9. Inter-regional Cooperation Network

The ECPGR Secretariat and the Network Coordinator have been trying to establish a formal collaboration with the International Treaty Secretariat and to jointly organize inter-regional workshops to facilitate the implementation of the Treaty in other regions, within the framework of a joint capacity building programme for developing countries.

A Workshop for capacity building was organized in March 2009 in Entebbe, Uganda, jointly by ASARECA, EAPGREN, ECPGR, the FAO-Treaty Secretariat and Bioversity. The European experience regarding the regional implementation of the Treaty (National information systems, EURISCO and AEGIS) was conveyed to the Workshop. As a result, a road map for the national implementation of the Multilateral System (MLS) was drawn up, with priority assigned to the documentation of designated material, including the establishment and management of information systems.

The Treaty Secretariat acknowledged its intention to further promote such a partnership, based on the guidance that the Governing Body of the International Treaty will impart at its upcoming Fourth Session. Activities and results under the joint capacity building programme will be detailed in the working documents for the Session and ECPGR will be adequately referred to.

#### Outlook

Subject to availability of resources, the Treaty Secretariat is looking forward to organizing together with ECPGR a workshop in the Near East with the Association of Agricultural Research Institutions in the Near East and North Africa (AARINENA) and in any other region in which further capacity building is required.

By combining the remaining allocated funds from Phase VII and Phase VIII budgets of the Doc & Info Network and Inter-regional Cooperation Network, ECPGR still has the availability of about € 47 000 to be used for activities in collaboration with the Treaty Secretariat during the remaining part of Phase VIII.

The Network Coordinating Group is meeting in Bratislava, Slovakia on 14 December 2010.

## 3. AEGIS INITIATIVE FOR "A EUROPEAN GENEBANK INTEGRATED SYSTEM"

The major milestones reached in the development of AEGIS in the first two years of Phase VIII are summarized below:

- On 22 April 2009 the AEGIS Memorandum of Understanding (MoU) was sent to the ECPGR National Coordinators for signature by the respective country authorities.
- On 23 July 2009, upon signature of the tenth country eligible for membership, AEGIS entered into force.
- By the end of November 2010 the following 25 countries had returned the signed MoU to Bioversity International: Albania, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Georgia, Germany, Iceland, Ireland, Lithuania, The Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Switzerland, Ukraine and the United Kingdom. In addition, in ten countries, nineteen AEGIS Associate Membership Agreements between institutions holding *ex situ* accessions and the respective National Coordinators were concluded.
- In September 2009 the Secretariat, in close collaboration with Theo van Hintum (CGN, The Netherlands), finalized the discussion paper "Quality Management System for AEGIS", AQUAS in short. The paper includes a definition of a quality management system, the principles of such a system, the operational framework including responsibilities, and the implementation steps of AQUAS.
- In September 2009 the Steering Committee approved the Terms of Reference and the composition of the newly established AEGIS Advisory Committee. The Committee consists of Dave Astley (UK), Ladislav Dotlačil (Czech Republic), Gert Poulsen (Denmark), Anke van den Hurk (The Netherlands) and Vladimir Meglič (Slovenia).

- Two calls for proposals for the Competitive Grant Scheme were launched on 26 June 2009 and 13 October 2010, inviting ECPGR Networks, Network Coordinating Groups and Working Groups to submit proposals. A total of 17 proposals were received for the first call and 3 were granted. The deadline for applications to the second call for proposals is 31 December 2010.
- On 3 December 2009 a project proposal (EUROGENEBANK in short), coordinated by the ECPGR
  Secretariat, was submitted to a Call under the Seventh Framework Programme of the EU (Research
  Infrastructures Support to existing research infrastructures Integrating Activities). The proposal
  successfully passed the thresholds of eligibility, but was not funded due to a shortage of funds.
- The following publication, previously printed as a "Discussion paper", was made available on the Web in a revised form and as a "Policy guide":

ECPGR. 2009. A Strategic Framework for the Implementation of a European Genebank Integrated System (AEGIS). A Policy Guide. European Cooperative Programme for Plant Genetic Resources (ECPGR). Bioversity International, Rome, Italy.

- A new dedicated Web site for AEGIS was developed and launched in December 2009 (http://www.aegis.cgiar.org/).
- The Secretariat developed a template for an operational genebank manual. This document was tested by NordGen, Sweden and IPK, Germany and it was presented in various WG meetings. It was finally approved by the AEGIS Advisory Committee and the final version is available on the AEGS Web site (September 2010).
- The Secretariat has been actively involved in the process of revision of the FAO Genebank Standards, with the intention to ensure the participation of the EPGR community in the revision process. The first draft of the revised standards is expected to be circulated to the ECPGR Networks for comments in early 2011. The revised FAO Genebank Standards document could eventually be adopted for AEGIS.
- A "simplified" procedure for the selection of European Accessions has been prepared by the Secretariat (24 November 2010) and it has been proposed for adoption by the Working Groups
- The Secretariat attended several WG and other meetings, presenting the concept and status of development of AEGIS. Presentations given are available on the AEGIS Web site.

## 4. LINKS WITH OTHER NETWORKS AND INITIATIVES

#### **▶** Global Crop Diversity Trust

A two-year project funded by the Global Crop Diversity Trust for the regeneration and safety-duplication of regionally prioritized crop collections was jointly prepared by the ECPGR Cereals Network and the Oil and Protein Crops Network, aiming at carrying out regeneration and safety-duplication of over 5000 threatened accessions identified in ten European countries (Albania, Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Greece, Hungary, Israel and Portugal). The total grant is nearly US\$ 130 000 and the ECPGR Secretariat is acting as the backstopping agent for the project.

#### > SEEDNet

Collaboration with the Sida-funded South East Europe Development Network on Plant Genetic Resources (SEEDNet) consisted in the participation of the ECPGR Coordinator in the SEEDNet Regional Steering Committee meetings, generating exchange of information regarding ECPGR, AEGIS and EURISCO.

## > European Commission

The ECPGR Networks were involved in the development of GEN RES projects: AEGRO (*in situ* management), AVEQ (*Avena* for quality in human consumption), EURALLIVEG (vegetative *Allium* core collection), LEAFY VEG (use of leafy vegetables germplasm) and GrapeGen06 (management of *Vitis* genetic resources).

The communication efforts undertaken by the Secretariat and supported by Bioversity in 2009 led to the adoption of three significant research topics on agricultural biodiversity in the Seventh Framework Programme, i.e.: "Genetic and genomic tools to increase the breeding efficiency in fruit trees", "Characterisation of biodiversity resources for wild crop relatives to improve crops by breeding" and the call for proposals on the "Strengthening of the European research infrastructure for the conservation and use of PGRFA", for which the AEGIS proposal (EUROGENEBANK) was submitted in December 2009.

During 2010, communications have intensified between the Secretariat and the Directorate General for Agriculture and Rural Development, Environment, GMO and Genetic Resource Unit of the European Commission. On behalf of the Steering Committee, in November 2010, the Secretariat sent a letter of support with recommendations regarding the continuation of the Community programme on the conservation, characterisation, collection and utilization of genetic resources in agriculture (AGRI GEN RES) – Regulation (EC) No 870/2004 of 24 April 2004.

The Secretariat intends to further strengthen the dialogue with the EU Commission during 2011, with the purpose to find ways to join efforts towards the development and implementation of a coherent strategy for plant genetic resources conservation in Europe.

#### ➤ The International Treaty on PGRFA

Collaboration with the Secretariat of the International Treaty for capacity building on the implementation of the Treaty in other regions is described above in Chapter 2.9.

Following approval by the Steering Committee in September 2008 of a mechanism of registration of accessions in the Multilateral system (MLS) and the introduction of a descriptor field in EURISCO regarding MLS status of each accession, nearly 211 000 accessions had been registered as part of the MLS by 13 countries at the end of November 2010.

#### **EUCARPIA**

The ECPGR Secretariat participated in the 19th EUCARPIA Genetic Resources Section Meeting, Ljubljana, Slovenia, 26–30 May 2009, offering an invited presentation on AEGIS and presenting a poster on EURISCO. Participation of ECPGR in the EUCARPIA meeting has allowed the breeders to be informed on the ECPGR activities, although it has not led so far to any concrete joint initiatives or strengthened collaborations in a visible way.

#### 5. ECPGR EXTERNAL REVIEW

The ECPGR Independent External Review was completed in July 2010 with the finalization of the External Panel Report and its circulation to the Steering Committee. The proposal to anticipate the Steering Committee meeting for an extraordinary session dedicated to discuss the review recommendations was accepted by the SC and the meeting was organized in December 2010 in Bratislava, Slovakia. The Panel's Chair, Thomas Gass, will present the outcomes of the review and recommendations to the SC.

The final cost of the Review is estimated to be ca.  $\leq$  26 500. The total of raised and pledged voluntary contributions (ca.  $\leq$  33 900) provided by Finland, the Nordic Countries, Switzerland and the United Kingdom, is therefore more than sufficient to cover the cost of the Review.

# 6. Publications produced in 2009 and 2010

The following publications were produced in 2009 and 2010 and can be obtained free of charge from the Secretariat. The ECPGR publications are also available in electronic format through the ECPGR Web site.

# 6.1. Publications produced in 2009

## **ECPGR** printed publications (also available online)

- Report of a Working Group on *Beta* and the World *Beta* Network. Third Joint Meeting, 8-11 March 2006, Puerto de la Cruz, Tenerife, Spain.
- Report of a Working Group on Medicinal and Aromatic Plants. Second Meeting, 16-18 December 2004, Strumica, Macedonia FYR / Third Meeting, 26–28 June 2007, Olomouc, Czech Republic.
- European landraces: on-farm conservation, management and use. Bioversity Technical Bulletin No. 15.
- Crop genetic resources in European home gardens. Proceedings of a Workshop, 3-4 October 2007, Ljubljana, Slovenia.

#### **ECPGR** electronic documents

- A Strategic Framework for the Implementation of a European Genebank Integrated System (AEGIS) A Policy Guide.
- Report of a Vegetables Network. Second Meeting. 26-28 June 2007, Olomouc, Czech Republic.
- Report of a Task Force on On-farm Conservation and Management. Third Meeting, 2-3 October 2007, Ljubljana, Slovenia.
- Report of a Cereals Network. Second Meeting, 21-24 April 2008, Foça, Turkey (*draft*, February 2009).
- Report of a Network Coordinating Group on Forages. Ad hoc Meeting, 11 May 2009, La Rochelle, France.
- Report of a Working Group on Medicinal and Aromatic Plants. Fourth Meeting, 29 September-1 October 2009, Kuşadası, Turkey.
- Report of the Network Coordinating Group on Sugar, Starch and Fibre Crops. Third Meeting, 8-9 October 2009, Quedlinburg, Germany.
- Report of a Vegetables Network. Third Meeting, 10-12 November 2009, Catania, Italy.
- ECPGR Annual report 2008.
- ECPGR Financial report 2008.

# **Bioversity publications**

- Issues 38 and 39 of Bioversity's **Regional Newsletter for Europe** were also published in 2009 with contributions and partial financial support from ECPGR.

# 6.2. Publications produced in 2010

#### **ECPGR** electronic documents

- Report of a Working Group on Fibre Crops (Flax and Hemp). First Meeting, 14-16 June 2006, Wageningen, The Netherlands.
- Report of a Working Group on *Malus/Pyrus*. Third Meeting, 25-27 October 2006, Tbilisi, Georgia.
- Report of a Working Group on Forages. Ninth Meeting, 23-25 October 2007, Piešt'any, Slovakia.
- Report of a Working Group on Grain Legumes. Fourth Meeting, 16-17 November 2007, Lisbon, Portugal.
- Report of the Documentation and Information Network Coordinating Group. Fourth Meeting, 17-18 February 2010, Maccarese, Rome, Italy.
- Report of a Working Group on *Brassica*. Fourth Meeting, 2-4 March 2010, Linguaglossa, Catania, Italy (*draft*, *September* 2010).
- Report of a Working Group on Fibre Crops (Flax and Hemp). Second Meeting, 7-9 July 2010, Šumperk
   Velké Losiny, Czech Republic (*draft*, October 2010).
- Report of a Working Group on *Prunus*. Eighth Meeting, 7-9 September 2010, Forlì, Italy (*draft*, *December* 2010).
- ECPGR Annual report 2009.
- ECPGR Financial report 2009.

#### **Bioversity publications**

- Issues 40 and 41 of Bioversity's **Regional Newsletter for Europe** were also published in 2010 with contributions and partial financial support from ECPGR. From Issue 41 onwards the Newsletter will only be published electronically.

# 7. ECPGR MEETINGS HELD IN 2009 AND 2010

# 7.1. Meetings held in 2009

- ASARECA, EAPGREN, ECPGR, FAO-Treaty Secretariat and Bioversity International Inter-regional Cooperation Workshop for Capacity building on the Implementation of the International Treaty, 18-21 March 2009, Entebbe, Uganda.
- EPGRIS3 Workshop on characterization and evaluation data and the link between EURISCO and the ECPGR Central Crop Databases, 7 May 2009, Bonn, Germany.

- Ad hoc Meeting of the Forages Network Coordinating Group, 11 May 2009, La Rochelle, France.
- Training workshop of the EURISCO National Inventory Focal Points, 29-30 June 2009, Prague, Czech Republic.
- Fourth Meeting of the Medicinal and Aromatic Plants (MAPs) Working Group, 29 September-1 October 2009, Kuşadası, Turkey.
- Third Meeting of the Sugar, Starch and Fibre Crops Network Coordinating Group, 8-9 October 2009, Quedlinburg, Germany.
- Third Meeting of the Vegetables Network, 10-12 November 2009, Catania, Italy.
- Pre-breeding workshop on cereals, 24-25 November 2009, Alnarp, Sweden.

# 7.2. Meetings held in 2010

- Fourth meeting of the Documentation and Information Network Coordinating Group, 17-18 February 2010, Maccarese, Rome, Italy.
- Fourth Meeting of the Working Group on *Brassica*, 2-4 March 2010, Linguaglossa, Catania, Italy.
- Tenth Meeting of the Working Group on Forages, 27-29 April 2010, Poel, Germany.
- Second Meeting of the Working Group on Fibre Crops (Flax and Hemp), 7-9 July 2010, Šumperk - Velké Losiny, Czech Republic.
- Eighth Meeting of the Working Group on *Prunus*, 7-9 September 2010, Forlì, Italy.
- First Meeting of the Wild Species Conservation in Genetic Reserves Working Group and On-farm Conservation and Management Working Group, 16 September 2010, Funchal, Madeira, Portugal.
- Sixth Meeting of the Working Group on Avena, 20-21 October 2010, Bucharest, Romania.
- Second Meeting of the Working Group on Cucurbits, 8-10 November 2010, Tbilisi, Georgia.

#### 8. COORDINATING SECRETARIAT AND BIOVERSITY INTERNATIONAL

As of December 2010, the Coordinating Secretariat is composed of Jan Engels (as half-time AEGIS Coordinator); Lidwina Koop (as ECPGR Programme Assistant); Elinor Lipman (as half-time Scientific Assistant, based in Montpellier, France, involved in the compilation and layout of ECPGR publications and general support to the Secretariat activities); and Lorenzo Maggioni (ECPGR Coordinator).

The scientific and technical contributions, as well as management and administrative support provided by Bioversity International and its staff to the work of ECPGR are duly acknowledged. In particular, Bioversity provided funding for the half-time EURISCO Coordinator (Sónia Dias). In the development of the AEGIS MoU Gerald Moore, Honorary Research Fellow at Bioversity, played a significant role and his contributions are duly acknowledged. In 2010, Patti Sands offered her services and expertise in support of the organization of the Independent External Review.



# Lorenzo Maggioni ECPGR Coordinator

(with inputs from Jan Engels, Elinor Lipman and Lidwina Koop)

Rome, 12 December 2010

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