



European Cooperative Programme for Plant Genetic Resources (ECPGR)

Phase IX (2014–2018)

**Annual Progress Report
January-December 2014**

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ECPGR IN 2014 – HIGHLIGHTS

Hosting agreements for Phase IX

The ECPGR Secretariat remains hosted by Bioversity International

The offer made by Bioversity International to continue hosting the ECPGR Secretariat was formally accepted by the Steering Committee in February 2014



EURISCO moves to IPK

The agreement between Bioversity International, acting on behalf of ECPGR, and the Leibniz Institute of Plant Genetics and Crop Plant Research (IPK), Gatersleben, Germany, concerning the terms and conditions for the maintenance and development of EURISCO, was signed on 14 April 2014.



Successful transfer of EURISCO to IPK

The adaptation of EURISCO to the IT infrastructure of its new host required a period of transfer starting April 2014. In September, the system was operating at IPK. A new user interface is available and further functionalities are being developed.

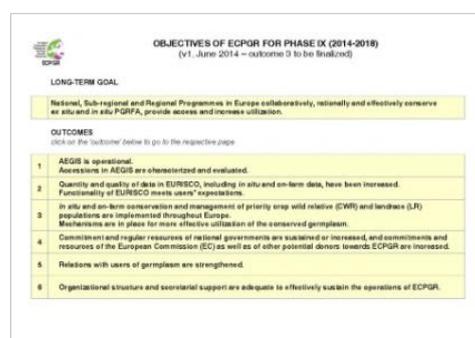
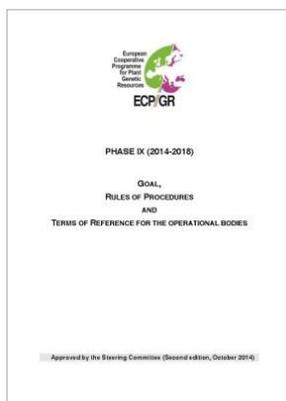


New mode of operation in ECPGR

The Steering Committee endorsed the following operational documents:

Goal, Rules of Procedures and Terms of Reference of the operational bodies
(endorsed May 2014 / 2nd edition October 2014)

Objectives of ECPGR for Phase IX (2014-2018)
(first version, June 2014)



Workshop of the Documentation and Information Working Group

The workshop *'Tailoring the Documentation of Plant Genetic Resources in Europe to the Needs of the User'* was held in Prague, Czech Republic, 19-22 May 2014.

The major focus was on the perspectives for EURISCO and its relationships with the European Central Crop Databases (CCDBs). It was agreed that CCDBs would be encouraged to evolve towards crop portals, providing various types of information of interest for the crop users.

Other topics discussed included the documentation of *in situ* data (crop wild relatives and landraces) and the future role of genebanks in the genomics era.



Activity Grant Scheme – First Call

The call was launched 27 June and closed 30 September 2014. A total of 13 proposals were received, of which 11 were considered eligible. Based on the established evaluation criteria, the ExCo selected for funding eight proposals, involving nine WGs: Barley, Beta, Brassica, Forages, Malus/Pyrus, Prunus, Wheat, Wild Species Conservation in Genetic Reserves, and Documentation and Information.

Acronym	Working Group(s)	Activity Coordinator
1 HordEva	Barley / Doc&Info	Jan Svensson
2 GeDIPa	Beta / Wild species conservation	Lothar Frese
3 COCHEVA BRAS	Brassica	Ferdinando Branca
4 EURISCO Training 2015	Doc&Info	Stephan Weise
5 Forages 2020	Forages/ Wild species conservation/ Doc&Info	Anna Palma
6 ECoHisPy	Malus/Pyrus	Marc Lateur
7 PRUNDOC	Prunus	Stein Harald Hjaltnes
8 TRAD	Wheat	François Balfourier

New ECPGR and AEGIS website

The new website, launched 6 November 2014, now integrates the former EPGR and AEGIS websites and includes many additional functionalities (more details [here](#)).



Information related to previous phases remains accessible on the ECPGR archive website.



Sixth meeting of the Executive Committee

The meeting took place 8-10 December 2014 at Bioversity International. The ExCo made major decisions regarding the financial situation, the Activity Grant Scheme (selection of successful proposals under first call, planning of second call), appointment of new Working Group Chairs, etc. This was the last meeting for the ExCo Chair Gert Kleijer, retiring at the end of 2014, who received warm thanks for his long-lasting dedicated work for ECPGR. Eva Thörn, the new ExCo Chair as of January 2015, also attended the meeting.



1. ECPGR STRUCTURE AND MODE OF OPERATION IN PHASE IX

1.1. MEMBERSHIP AND CONTRIBUTIONS

By the end of December 2014, 29 countries had signed the Letter of Agreement (LoA) for Phase IX. This list includes Portugal, which was only considered a 'potential' participating country at the time of the 13th Steering Committee meeting (Vienna, Austria, December 2013). Two other countries (Austria and Hungary) had not signed the LoA but had, nonetheless, paid contributions for the first year of Phase IX. Two countries that signed the LoA for Phase IX have not yet paid their contribution for the first year (Albania and Azerbaijan).¹

The following expected participants had not yet either signed the LoA or paid their contribution: Belgium, Bosnia and Herzegovina, Greece, Iceland,² Israel, Italy, Macedonia (FYR), Poland and Spain. The list of member countries with respective dates of signature is available online ([Membership webpage](#)).

1.2. HOSTING AGREEMENT

Following the withdrawal of the Crop Trust from their previous offer to host the ECPGR Secretariat, an agreement was reached with Bioversity International for the hosting of the Secretariat for the entire Phase IX (2014-2018) and the respective budget (see Financial report for details). Specifically, Bioversity International confirmed their interest to host the Secretariat, considering the opportunity to maintain a synergistic relationship with the European Programme, especially regarding the interface *in situ / ex situ*, as well as collaborating on policy matters, preparing joint project proposals to the European Commission and strengthening cooperation with ECPGR partners whenever the opportunity arises.

On the financial side, the audited overhead rate agreed with Bioversity for Phase IX funds was 18.15%. However, carry-forward funds from Phase VIII (including outstanding contributions yet to be received) would continue to be charged at the lower Phase VIII overhead rate of 13%. The cost of facilities and IT services were kept at a reduced cost and no overheads will be charged on the funds dedicated to hosting EURISCO at the Leibniz Institute of Plant Genetics and Crop Plant Research (IPK), Germany.

Letters of Agreement to be signed by the countries remained of the same type as were used in previous phases and, differently from the request that had been made by the Trust, Bioversity did not require setting up a reserve fund. Bioversity also agreed to provide the legal framework through a subcontract for the operation of EURISCO, which would remain physically hosted by IPK, but which would operate under the same ECPGR governance structure as before.

The above agreement with Bioversity was consolidated after receipt of a positive answer from 27 countries, with no objections, apart from the condition that the issue of the 'hosting institute' should again be tabled for the agenda of the Mid-term Steering Committee meeting in 2016.

¹ Albania paid the 2014 contribution in February 2015.

² Iceland signed the Letter of Agreement in February 2015 and paid regular contributions in March 2015.

1.3. OPERATIONAL DOCUMENTS ENDORSED BY THE STEERING COMMITTEE

1.3.1. Goal, Rules of Procedures and Terms of Reference for the operational bodies

All existing and new Rules of Procedures and Terms of Reference (ToRs) for the operational bodies of ECPGR were compiled by the Secretariat in a single document. This document also included as an Annex a proposal for a country quota mechanism for the sharing of Working Group (WG) activity funds among the members, as part of the Competitive ECPGR Grant Scheme. An explanation of the necessary steps to implement the transition of ECPGR to the new mode of operation of Phase IX, flow charts and templates for Expressions of Interest to serve as WG Chair and to participate in WG activities were also included as Annexes. The document was completed as soon as the final budget for Phase IX was defined and was formally endorsed by the Steering Committee in May 2014.

1.3.2. Objectives for Phase IX (logframe table)

The ECPGR objectives for Phase IX, in the form of a logframe table, were completed as a result of a Task Force under the leadership of Bert Visser, The Netherlands (see Annual Report 2013). The document containing six objectives, each elaborated into outputs, activities, responsibility, indicators and assumptions was approved by the Steering Committee in June 2014, with few amendments. However, the details related to objective 3 (*in situ* and on-farm conservation and management), remained pending as the respective concepts, prepared in draft form by two Task Forces, had not yet reached the endorsement of the SC (see also below, *In situ* and on-farm conservation and management, p. 12).

1.4. ACTIVITIES OF THE EXECUTIVE COMMITTEE (ExCo)

At the end of 2014, the ExCo was composed of Gert Kleijer (Chair), Zofia Bulińska-Radomska, Flavio Roberto De Salvador (replacing Fernando Latorre as of September 2014), Gordana Đjurić (replacing Alvina Avagyan as of January 2014), Jens Weibull, and Lorenzo Maggioni (ex officio).

During 2014, the main activities of the ExCo were related to the following items:

- Negotiation with Bioversity International regarding hosting arrangements and transfer of EURISCO to IPK
- Advice to the Secretariat regarding the 'AEGIS reporting and monitoring' procedure
- Monitoring the process of preparation of the *in situ* and on-farm concepts by the respective Task Forces
- Advice to the Secretariat on the preparation and finalization of the ECPGR ToRs and objectives
- Advice to the Secretariat on the preparation of the *Framework report on the use of plant genetic resources within ECPGR*
- Follow-up on the launching of the first ECPGR Grant Scheme and evaluation of the proposals received
- Advice to the Secretariat on the presentation by the Secretary of the 'ECPGR position' at the PGR Secure-EUCARPIA Conference in Cambridge, June 2014
- Advice to the Secretariat on its involvement in the preparatory process for Horizon 2020 project proposals
- Response to PGR Secure Task Force regarding the proposal to endorse a policy paper and final report to build a stronger European Plant Germplasm System.

The **Sixth ExCo meeting** took place 8-10 December 2014 at Bioversity International HQ in Maccarese, Italy. All ExCo members attended. Eva Thörn, who had been appointed as new Chair of

the ExCo, effective as of 1 January 2015, and Jan Engels (AEGIS Coordinator) also attended as observers. A summary of the main points of discussion and decisions is given below:

Selection of successful Grant Scheme proposals: ExCo approved for funding eight proposals for activities submitted under the Grant Scheme. These involved the following nine WGs: Barley, *Beta*, Brassica, Forages, *Malus/Pyrus*, *Prunus*, Wheat, Wild Species Conservation in Genetic Reserves, and Documentation and Information (see below, pp. 6-7).

Financial situation of ECPGR: the financial balance of ECPGR in 2014 was estimated to be positive, with extra funds (approximately € 80 000) raised partly by receiving outstanding contributions related to previous phases and partly through savings made in 2014. The ExCo decided to propose to the SC to allocate these funds as follows (and the proposal was subsequently accepted):

- Meeting devoted to on-farm concept (12.5%)
- Documentation and Information meeting on Crop Portals (12.5%)
- Reserve fund (37.5%)
- Grant Scheme activities (37.5%).

Future calls for proposals under the Grant Scheme: a second call for proposals under the ECPGR Grant Scheme will be launched in April 2015, making available approximately € 145 000. Subsequently, third and fourth calls of similar size were expected to be launched in 2016 and 2017 respectively.

Appointment of new Working Group Chairs: Chairs were selected on the basis of nominations received from the National Coordinators and of Expressions of Interests received from the nominated candidates (see below, p. 6).

AEGIS: in order to give support to the development of AEGIS, the ExCo encouraged the Secretariat to write a paper highlighting with clear evidence what the benefits of AEGIS would be for the member countries. The Secretariat was also invited to liaise with countries in the process of implementing AEGIS with targeted help and provision of information on the necessary steps.

Horizon 2020: the ExCo supported the current engagement of the Secretariat for the preparation of a project proposal for the Horizon 2020 Call SFS-07b-2015 'Management and sustainable use of genetic resources'.

ECPGR strategy: the ExCo agreed on the need to prepare an ECPGR strategy including a vision for the next ten years that would enable progress towards the long-term goal of ECPGR.

The **Mid-term Steering Committee meeting** was scheduled for Spring 2016. The Secretariat will explore convenient options for a suitable location.

Farewell to Gert Kleijer: this was the last meeting for the ExCo Chair Gert Kleijer, who was retiring at the end of the year. He received notes of thanks and appreciation from the ExCo and the Secretariat, also on behalf of the SC, for his long-lasting dedicated work for ECPGR. Eva Thörn was scheduled to start her term as new ExCo Chair as of January 2015.

2. ACTIVITIES CARRIED OUT IN 2014

2.1. RENEWAL OF MEMBERSHIP IN ECPGR WORKING GROUPS

According to the procedures set out in the endorsed Terms of Reference for the operational bodies, in May 2014 the National Coordinators (NCs) were asked to nominate their Working Group Experts and to propose WG Chair candidates. Nominations were received and the [new lists of WG members](#), including their respective categories of expertise, are available online. These lists are constantly being updated, based on nominations received from NCs. Proposals for WG Chairs were also received and the nominated candidates were invited to complete the Expression of Interest for endorsement by their NC.

Working Group Chairs for Phase IX were selected by the ExCo, as follows (the list of [New Chairs for ECPGR Working Groups during Phase IX](#) is available online):

- *Avena*: Andreas Katsiotis (Cyprus)
- Barley: Ahmed Jahoor (Denmark)
- *Brassica*: Ferdinando Branca (Italy)
- Cucurbits: María José Díez (Spain)
- Fibre crops (Flax and Hemp): Martin Pavelek (Czech Republic)
- Forages: Anna Palmé (NordGen)
- Grain Legumes: Creola Brezeanu (Romania)
- *Malus/Pyrus*: Marc Lateur (Belgium)
- Medicinal and Aromatic Plants: Ana Maria Barata (Portugal)
- *Prunus*: Daniela Giovannini (Italy)
- Solanaceae: Willem van Dooijeweert (The Netherlands)
- Umbellifer Crops: Charlotte Allender (United Kingdom)
- *Vitis*: Thierry Lacombe (France)
- Wheat: François Balfourier (France)
- Wild Species Conservation in Genetic Reserves: Nigel Maxted (United Kingdom)
- On-farm Conservation and Management: Valeria Negri (Italy)
- Documentation and Information: Theo van Hintum (The Netherlands)

In the cases of the *Allium*, *Beta*, Leafy Vegetables and Potato Working Groups, there were no candidates expressing interest to become Chair and the ExCo planned to proceed with the search for suitable candidates, with the help of former Chairs and of the Secretariat. Performance of all Chairs will be evaluated by the ExCo, who will reserve itself the opportunity to propose changes at the Mid-Term Steering Committee meeting.

2.2. ECPGR ACTIVITY GRANT SCHEME – FIRST CALL

The First Call for proposals under the ECPGR Activity Grant Scheme was launched on 27 June 2014, with a closing date 30 September 2014. The call was sent by email to the NCs, WG Chairs and WG members. A total of 13 proposals were received, of which 11 were considered eligible. Based on the established evaluation criteria, the ExCo selected for funding eight proposals, involving nine WGs: Barley, *Beta*, *Brassica*, Forages, *Malus/Pyrus*, *Prunus*, Wheat, Wild Species Conservation in Genetic Reserves, and Documentation and Information (see Table 1). The ExCo also noted that the ratio between meetings and other activities was 38/62, that is very distant from the expected 75/25 ratio, and hoped to see more proposals including meetings in the next rounds.

Table 1. Proposals approved by the ExCo (December 2014)

Title	Working Groups	Coordinator	Budget
1. Identification and updating of C&E data EDBD of AEGIS <i>Hordeum</i>	Barley; Doc&Info	Jan Svensson, Sweden	€ 15 000
2. Genetic diversity of <i>Patellifolia</i> species	<i>Beta</i> ; Wild species	Lothar Frese, Germany	€ 14 300
3. Collection, characterization and evaluation of wild and cultivated brassicas	<i>Brassica</i>	Ferdinando Branca, Italy	€ 15 000
4. EURISCO NFP regional training workshop for Southeast Europe 2015	Doc&Info	Stephan Weise, Germany	€ 15 000
5. ECPGR Working Group for Forages towards 2020	Forages; Wild species; Doc&Info	Anna Palmé, Sweden	€ 16 500
6. Building and promoting a European <i>Pyrus</i> collection - a Case study	<i>Malus/Pyrus</i>	Marc Lateur, Belgium	€ 15 000
7. Identification of a representative set of <i>Prunus domestica</i> accessions of European origin, well documented and characterized, to be included into the AEGIS system	<i>Prunus</i>	Stein Harald Hjeltnes, Norway	€ 15 000
8. Identification and update C&E data of AEGIS <i>Triticum</i> sp. accessions	Wheat	Francois Balfourier, France	€ 14 850

2.3. AEGIS

2.3.1. AEGIS membership

By the end of December 2014 the 34 countries listed below had returned their signed Memorandum of Understanding (MoU) to Bioversity International. Italy signed the MoU in March 2014. A total of 57 AEGIS Associate Membership Agreements between institutions holding *ex situ* accessions and the respective National Coordinators were concluded in 26 AEGIS member countries, compared to 54 Associate Members and 26 countries respectively in 2013. The number in brackets following the member country names below indicates the number of Associate Members in those countries:

Albania (2), Austria (1), Azerbaijan (2), Belarus (9), Belgium (1), Bosnia and Herzegovina (0), Bulgaria (1), Croatia (2), Cyprus (1), Czech Republic (8), Denmark (1), Estonia (2), Finland (1), Georgia (1), Germany (3), Hungary (1), Iceland (1), Ireland (0), Italy (0), Latvia (3), Lithuania (0), Montenegro (0), the Netherlands (2), Norway (1), Poland (1), Portugal (0), Romania (1), Slovakia (1), Slovenia (5), Sweden (1), Switzerland (1), Turkey (1), Ukraine (0) and the United Kingdom (3).

The membership status is kept updated online (see the respective webpages [AEGIS membership](#) and [Associate Member Institutions](#)).

2.3.2. Status of the European Collection

By end December 2014 a total of 12 500 accessions from four countries were included in the European Collection.

- The Netherlands: 5864
- Germany: 5324
- Czech Republic: 1222 (of which 1078 added in 2014)
- Croatia: 90 (all added in 2014).

The [European Collection webpage](#) is regularly updated.

In September 2014 the Secretariat circulated to all National Coordinators and AEGIS Associate Members a *White paper on the slow rate of inclusion of accessions in the European Collection*, inviting them to share their experiences and thus contribute in the identification and solving of bottlenecks. Following the few comments received from the SC, the Secretariat was invited by the ExCo to write a paper highlighting with clear evidence what the benefits of AEGIS would be for the member countries. The Secretariat was also invited to liaise with countries in the process of implementing AEGIS with targeted help and provision of information on the necessary steps.

2.3.3. AEGIS Competitive Grant Scheme

The final report of the following project was received and published on the [AEGIS Grant Scheme webpage](#):

'Identification of old potato clones having unreliable variety name by means of fingerprinting using microsatellite (SSR) markers to assist in setting up the AEGIS collection for potato cultivars' (Centre for Genetic Resources (CGN), the Netherlands).

Fingerprinting of over 400 accessions from 9 countries were studied, allowing the identification of uncertain accessions, fine-tuning of a methodology and drafting of recommendations for further investigations. The results are useful to help countries to prioritize their accessions for inclusion into AEGIS.

2.3.4. AQUAS (AEGIS Quality System)

- **Operational genebank manuals**

The Crop Research Institute (CRI) Prague, Czech Republic, and the Estonian Crop Research Institute, Jõgeva, prepared their genebank manuals using the provided template. The Secretariat provided comments and the final versions were awaited.

- **Crop-specific standards**

A start was made to contact individual Working Group Chairs during 2014 to verify the formal acceptance of the FAO *Genebank Standards for PGRFA* and/or to provide crop-specific standards. The WGs were requested to indicate and justify any modification or addition made to meet their own needs, according to their crop specificities.

In order to facilitate easy access to the standards it was decided to integrate the crop-specific standards into one table that will include the general FAO *Genebank Standards* for 1) orthodox seed germplasm, 2) field genebanks and 3) *in vitro* cultures and cryopreservation (as relevant to the crop). This work is in progress.

- **Establishment of a monitoring and reporting plan**

A draft document on *Record keeping, reporting and monitoring of the European Collection*, prepared by the Secretariat, was discussed and approved by the ExCo and subsequently shared with the National Coordinators for comment. Unfortunately, only a very limited number of responses (addressing concerns about complexity, bureaucracy and policing) was received, which did not provide sufficient guidance to the Secretariat to prepare a revised draft. Instead, the Secretariat focused more on issues that would facilitate the inclusion of accessions in the European Collection, hoping that the participation of countries and institutions in AEGIS would increase and thus indirectly also increase interest in the topic of reporting and monitoring.

2.3.5. Transfer of responsibilities of the AEGIS Advisory Committee to the ExCo

The Fifth ExCo Meeting (November 2013) had “*agreed that the tasks so far assigned to the AEGIS Advisory Committee could be largely taken up by the ExCo itself*”. This proposal was endorsed by the Steering Committee and thus on 3 March 2014 ExCo formally assumed the responsibilities previously assigned to the AEGIS Advisory Committee.

2.4. EURISCO

2.4.1. Hosting agreement for the transfer to IPK

The agreement between Bioversity International, acting on behalf of ECPGR, and the Leibniz Institute of Plant Genetics and Crop Plant Research (IPK), Gatersleben, Germany, concerning the terms and conditions for the maintenance and development of EURISCO, was signed on 14 April 2014.

After a period of transfer (April to September 2014), the system is now operating at IPK. The new system remains accessible at <http://eurisco.ecpgr.org/>.

Concomitantly with the transfer of EURISCO from Bioversity to IPK, the EURISCO Coordinator function passed from Sónia Dias (Bioversity) to Stephan Weise (IPK).

2.4.2. EURISCO coverage

The EURISCO Catalogue gathers data from 43 countries recorded by 39 National Inventories (data from the five Nordic Countries being jointly represented by the NordGen Inventory).

By end 2013 the total number of accessions was 1 065 766.

In 2014 the number of accessions increased by 49 229, reaching by end December 2014 a total of 1 114 995 accessions, representing 5681 genera and 36 612 species.

New data of several National Inventories are currently under revision and will be used for update soon.

2.4.3. EURISCO development

Due to technical and organizational issues, both the frontend (public EURISCO application) and the backend (EURISCO Intranet) had to be re-engineered from scratch by IPK. It was necessary to find a balance between developments visible to the user (search interface) and those which completely took place in the background. Therefore, compared to the previous installation at Bioversity, the new system has certain functional limitations that will be overcome in the near future. Some of the most significant achievements consist in a new user interface to search the catalogue and a new export function to create customized export files for each National Inventory (NI) dataset. A completely new system for inserting/updating the NI datasets has also been developed.

Due to the implementation of the incremental updates (see below), the discussion about the characterization and evaluation (C&E) data exchange format was postponed to 2015.

During the EURISCO transfer process, the development of a new upload mechanism with only limited functionality was planned, which needs to be extended.

To avoid encoding errors which often occur when preparing text files in EURISCO format, the development of an MS Excel importer for passport data was started and will be continued in 2015.

In contrast to the old system which was based on the full replacement of NI datasets during the update, the new system focusses on incremental updates. Thus, National Focal Points (NFPs) only need to send data that were really changed – additional accessions and existing accessions with modified content. New accessions will then be inserted while existing accessions will be updated. If necessary, the update will also work with the full data set of a NI.

2.4.4. EURISCO coordination and representation

A short report about the status of the EURISCO transfer was sent by email to all NFPs, NCs and ECPGR WG members, inviting them to provide their inputs for the future development of EURISCO. The aim was to shift the development of EURISCO towards a demand-driven development in order to improve the system acceptance and usability. Personal communication took place with several NFPs and NCs on various issues (e.g. support for updates, provision of specific database queries and special data export formats, discussion about future developments). Users' feedback on the new public search portal was collected to be used to define a priority list for improvements.

The EURISCO coordination team provided substantial legwork to the preparation of project proposals (Horizon 2020 and others) in order to acquire additional funding for the future development of EURISCO, and also participated in meetings where EURISCO was presented (workshop of the Documentation and Information Working Group, 20-22 May 2014, Prague, Czech Republic and 'SEEDNet – the Way Ahead', 5-6 November 2014, Ljubljana, Slovenia). A publication was submitted to *Agriculturae Conspectus Scientificus* (<https://acs.agr.hr/acs/index.php/acs>).

In response to the first call for proposals under the ECPGR Activity Grant Scheme, the Documentation and Information WG submitted a successful proposal entitled '[EURISCO NFP regional training workshop for Southeast Europe 2015 \(EURISCO Training 2015\)](#)'.

The Activity report for 2014 and the Workplan for 2015 were in preparation at the end of 2014 (published online in January 2015 and March 2015 respectively).

2.5. DOCUMENTATION

A **Workshop of the Documentation and Information Working Group**, *Tailoring the Documentation of Plant Genetic Resources in Europe to the Needs of the User*, was held in Prague, Czech Republic, from 20 to 22 May 2014.

This workshop, attended by 49 participants from 29 different countries, gathered a selected group of National Inventory Focal Points, ECPGR Central Crop Database managers and international experts in PGR documentation and informatics. The relationship between EURISCO and the ECPGR Central Crop Databases (CCDBs) was discussed, based on an extensive survey of the current status of the 48 CCDBs. An agreement was reached, indicating that CCDBs will be encouraged to evolve towards crop portals, providing various types of information of interest for the crop users. The Workshop also discussed documentation of *in situ* data (crop wild relatives and landraces) and about the future role of genebanks in the genomics era.

The main highlights of the meeting are listed below:

Discussion on the development of EURISCO was useful to prioritize the main activities. It was also agreed that EURISCO will be prepared to receive non-standardized C&E data based on the data exchange formats and that EURISCO should include information about crop wild relative (CWR) populations that have been nationally designated for *in situ*-managed conservation. Existing data flow mechanisms (through the National Focal Points) should be used for data provision, according to data exchange formats to be established. No consensus was reached on the inclusion of on-farm information in EURISCO, since there was no agreement on what type of information should be included and for what purpose. It was therefore recommended to continue discussion and collaboration with the On-farm Conservation and Management WG to better explore collaborative options. A EURISCO Advisory Group, to be selected among the members of the Documentation and Information Working Group, will be re-established to monitor the progress.

Regarding Central Crop Databases, it was recommended that CCDB managers should consider developing the supply-driven CCDBs into demand-driven Crop Portals, with support of the respective Working Groups. Scope, function, key elements and quality requirements of these Portals,

to be developed under the ECPGR umbrella, should be identified by an ad hoc ECPGR meeting. The examples of the Lettuce and Potato Portals developed by CGN were presented.

The full report of the workshop is available [here](#). Recommendations from this workshop will be circulated to the ECPGR Steering Committee for endorsement.

Among the ongoing documentation activities implemented by the Working Groups, the **Leafy Vegetables WG** updated the status of their national collections and finalized the *Minimum Descriptors for asparagus* (*Asparagus spp.*). Both documents are available online ([here](#)).

2.6. GENE BANK MANAGEMENT / STANDARDS / PROTOCOLS

Beta Working Group

An updated version of the *Seed increase protocol for Beta and Patellifolia species*, written in 1996, was developed and published [online](#).

Vitis Working Group

Collaboration with the [COST action FA1003 'GRAPENET, East-West Collaboration for Grapevine Diversity Exploration and Mobilization of Adaptive Traits for Breeding'](#) continued in 2014.

Several WG members participated in the Final Conference 'Progress in *Vitis vinifera* - Diversity Evaluation and Use' (7-9 October 2014, Oeiras, Portugal) and contributed to the final results published as a document titled *Three protocols for germplasm sustainable conservation* (available [online](#)) which includes:

- Phytosanitary rules for grapevine (*Vitis vinifera* L.) propagation material introduction into EU for germplasm conservation and scientific purposes
- Field genebank standards for grapevines (*Vitis vinifera* L.)
- *Vitis spp.* operational field genebank collections manual.

2.7. COLLECTING, CHARACTERIZATION AND EVALUATION OF GERmplasm

The project 'Bio-morphological and genetic characterization of the *Brassica* Working Group collection', funded by ECPGR in the framework of Phase VIII, was finalized with the submission of the *Final report from the Italian partner (DISPA, University of Catania)* (available [online](#)).

This work allowed us to observe a considerable variance among *Brassica* wild species. It could be noted that the morphological and genetic descriptors used could not discriminate the species according to the existing taxonomy.

The 'Umbellifer wild relatives project' funded by ECPGR in the framework of Phase VIII was completed. New Umbellifer CWRs accessions from Albania are now available for research and breeding, as well as are being conserved for the long term. Flow cytometry was tested at the University of Warwick as a tool to quickly check for major taxonomic inaccuracies in collections. The results indicate that differences in the DNA ratio will allow certain taxonomic identities to be excluded, although the technique is not suitable for definitively confirming the identity of an accession, particularly at the subspecies level. Characterization of Nordic accessions of wild carrot was completed at NordGen, Alnarp, confirming their taxonomic identity. The most interesting trait analysed was early bolting, which showed a high variability among accessions. Taxonomic identification of accessions from French, German and UK genebanks was carried out by Agrocampus Ouest-Institut de Recherche en Horticulture et Semences (ACO-IRHS), Angers. Non-identified or misidentified wild carrots were given the appropriate taxonomic status and this action proved the value of collaborative action to improve the quality of the European collections. Carrot wild relatives were evaluated by the Julius Kühn-Institut (JKI), Quedlinburg, as resistance sources to *Alternaria*. The

data suggested no increased resistance potential to *A. radicina* in the tested accessions, but a considerable resistance potential to *A. dauci* and *A. alternata*. After further verification these accessions could be potential candidates for resistance breeding or research. Finally, review and characterization of Umbellifer wild relatives' accessions were also carried out by the Crop Research Institute (CRI), Olomouc. The final reports from Albania, NordGen and JKI were made available [online](#).

2.8. IN SITU AND ON-FARM CONSERVATION AND MANAGEMENT

Following the recommendations made by the Steering Committee during their last meeting in Vienna in December 2012, the two Task Forces established (see AR2013) completed their draft concepts, respectively on 'In situ conservation of crop wild relatives' and 'On-farm management and conservation of landraces'. Based on the comments made by the Steering Committee, the 'Wild relatives concept' Task Force was requested to address a number of points and to provide a new version, which was expected to be delivered in 2015. The 'Landraces concept' received remarks of a more fundamental nature which required setting up a meeting to streamline differences of opinion before the drafting of a new concept could be commissioned. This meeting was scheduled for March 2015.

The Joint Conference of the PGR Secure Consortium and the European Association for Research on Plant Breeding (EUCARPIA) on utilization and conservation of crop wild relative (CWR) and landrace (LR) diversity for crop improvement was held 16–20 June 2014 at the National Institute of Agricultural Botany (NIAB) Innovation Farm, Cambridge, UK, with the title 'Enhanced gene pool utilization—Capturing wild relative and landrace diversity for crop improvement'. Outcomes of the conference are available at <http://www.pgrsecure.org> (see also below, Links with other Networks and initiatives).

3. LINKS WITH OTHER NETWORKS AND INITIATIVES

3.1. EUROPEAN COMMISSION

A number of relevant calls for proposals and initiatives with relevance for plant genetic resources were launched by the European Commission and the ECPGR Networks were involved in various ways:

- The Directorate-General for Agriculture and Rural Development awarded a public contract for a 'Preparatory action – EU plant and animal genetic resources in agriculture' to a Consortium led by Arcadia International and including CGN, the Netherlands. The ECPGR Secretariat had signed a letter of intent in support of this Consortium, with the intention to cooperate with the preparatory action.
- In the framework of 'A European Innovation Partnership for Agricultural productivity and Sustainability (EIP-AGRI)', a Focus Group on 'Genetic Resources – cooperation models', established by the Directorate-General for Agriculture and Rural Development, was ongoing in 2014. Members of this Focus Group include a few members or close partners of ECPGR WGs (Charlotte Allender, Ahmed Jahoor, Maria José Suso and Merja Veteläinen). The Focus Group is mainly addressing the questions of 'What are the bottlenecks that limit cooperation between the different types of stakeholders? How can cooperation between the different types of stakeholders be promoted?'. Reports of two meetings held in 2014 are available from EIP-AGRI's website (<http://ec.europa.eu/eip/agriculture/en/content/genetic-resources-cooperation-models>).

- As part of the EU Research and Innovation Programme Horizon 2020, the ECPGR Secretariat was either directly involved, or supportive of consortia for the preparation of proposals to the call SFS-7-2014/2015 Genetic resources and agricultural diversity for food security, productivity and resilience, Part B, 'Management and sustainable use of genetic resources', with deadline in February 2015.

3.2. EUCARPIA

The Joint Conference of the PGR Secure Consortium and the European Association for Research on Plant Breeding (EUCARPIA) on utilization and conservation of crop wild relative (CWR) and landrace (LR) diversity for crop improvement was held 16–20 June 2014 in Cambridge, UK. During a panel discussion on the *Vision of future European PGRFA utilization and conservation*, the ECPGR Secretary summarized the objectives of ECPGR during Phase IX. As a vision for the future, he expressed the need to develop an EU-specific strategy for the conservation of genetic resources in food, agriculture and forestry (GRFA) as a policy framework for action in conservation, use, research and breeding. ECPGR (through the Secretariat) would be happy to contribute to the drafting if requested by the EC. On the basis of such a strategy, which would be expected to overlap with the ECPGR objectives to a large extent, EU funding of genebanks' activities in documentation, characterization and evaluation of genetic resources activities, could be raised to a funding volume, roughly estimated by ECPGR to require up to € 100M, and a duration of at least 10 years. The implementation of such an EU strategy for PGRFA could therefore take the form of a permanent programme and benefit from the already existing ECPGR structure as a suitable implementation platform.

3.3. ERA-NET PLUS ACTIONS

Some members of the Forages Working Group were involved in the project [Grasslandscape - Bridging landscape genomics and quantitative genetics for a regional adaptation of European grasslands to climate change](#) (ERA-NET Plus action 'Climate Smart Agriculture: Adaptation of agricultural systems in Europe'). The project is coordinated by J.P. Sampoux, French member of the Forages WG.

4. PUBLICATIONS AND PUBLIC AWARENESS

4.1. PUBLICATIONS PRODUCED IN 2014

4.1.1. Proceedings of Working Group Meetings

The following publications were produced in 2014 and are available in electronic format from the [ECPGR publications webpage](#) or from the respective WG webpages.

- [Report of a Working Group on Leafy Vegetables, Second Meeting, 8-9 October 2013, Ljubljana, Slovenia.](#)
- [Report of a Working Group on Umbellifer Crops, Second Meeting, 26–28 June 2013, St. Petersburg, Russian Federation.](#)
- [Tailoring the Documentation of Plant Genetic Resources in Europe to the Needs of the User. Workshop of the ECPGR Documentation and Information Working Group, 20-22 May 2014, Prague, Czech Republic.](#)

4.1.2. Administrative documents

- ECPGR Annual Progress Report 2013 and Financial Report 2013
- ECPGR Objectives for Phase IX
- Phase IX - Goal, Rules of Procedures and Terms of Reference for the operational bodies

4.1.3. ECPGR Information bulletin

This is a new communication tool prepared by the ECPGR Secretariat for the attention of the National Coordinators, to provide regular updates on activities and relevant developments in ECPGR. The bulletin is distributed by email to all members of the Steering Committee and is also available [online](#).

The first issue, dated 7 November 2014, covered the period elapsed since the beginning of Phase IX (01 January-07 November 2014). Future issues will provide regular updates on a quarterly (3-months) basis.

4.1.4. External paper

Maggioni L, Engels J. 2014. [Networking for plant genetic resources](#). Pan European Networks: Science & Technology 10:285-287.

4.2. NEW ECPGR AND AEGIS WEBSITE

The [new ECPGR and AEGIS website](#) was launched on 6 November 2014. It now integrates the former ECPGR and AEGIS websites and includes many additional functionalities (see [here](#)).

Information related to previous phases remains accessible on the [ECPGR archive website](#).

4.3. PUBLICATIONS IN PREPARATION IN 2014

- Minutes of the 6th ECPGR Executive Committee meeting, Maccarese, Italy, 8-10 December 2014 (*published online 30 January 2015*).
- Record keeping, reporting and monitoring of the European Collection (AEGIS)

4.4. PRESENTATIONS AT NATIONAL WORKSHOPS AND INTERNATIONAL MEETINGS

The Secretary represented ECPGR in the following meetings, offering presentations and/or contributing to project planning:

- Annual meeting of the Italian National Programme for the Implementation of the International Treaty, Monsampolo del Tronto, Italy, 16 April 2014
- First meeting of a Consortium for the preparation of a project proposal under Horizon 2020 (SFS7-b), Schiphol, The Netherlands, 8 May 2014
- PGR Secure Consortium and European Association for Research on Plant Breeding (EUCARPIA) - Joint International Conference on utilization and conservation of crop wild relative (CWR) and landrace (LR) diversity for crop improvement, Cambridge, UK, 16-20 June 2014

- Second meeting of a Consortium for the preparation of a project proposal under Horizon 2020 (SFS7b), Schiphol, The Netherlands, 3 October 2014
- SeedNet Workshop 'SeedNet – the Way Ahead', Ljubljana, Slovenia, 5-6 November 2014.

5. MEETINGS HELD IN 2014

- [Tailoring the Documentation of Plant Genetic Resources in Europe to the Needs of the User. Workshop of the Documentation and Information Working Group](#), 19-22 May 2014, Prague, Czech Republic.
- [Sixth meeting of the Executive Committee](#), 8-10 December 2014, Maccarese, Italy.

6. COORDINATING SECRETARIAT AND BIOVERSITY INTERNATIONAL

During 2014, the following staff have worked for the Coordinating Secretariat: Jan Engels (as half-time AEGIS Coordinator); Lidwina Koop (as ECPGR Programme Assistant, assisting in all administrative and financial matters and website maintenance); Elinor Lipman (as half-time Scientific Assistant, based in Montpellier, France, involved in the compilation and layout of ECPGR publications, website quality check and general support to the Secretariat activities); and Lorenzo Maggioni (ECPGR Secretary).

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.

★★★

Lorenzo Maggioni
ECPGR Secretary

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

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