

### *Discussion*

The following points were clarified in the discussion:

- The term “genetically unique material” should be used as a general guideline to avoid evident and unnecessary genetic redundancy in the European Collection.
- The accessions in the European Collection can be “of European origin or introduced germplasm that is of actual or potential importance to Europe (for breeding, research, education or for historical and cultural reasons)”.
- While setting the timeframe for implementing AEGIS, the SC should consider the different speeds of the various WGs. These will depend on the respective levels of funding available to the WGs. Concrete progress should be shown after each meeting.
- The benefit of being an Associate Member institution should be evaluated from the point of view of the collective interest. All stand to benefit if the tasks for conservation are shared in Europe. Each institution will be able to focus on its priority crops for conservation and rely on others for the remaining genetic resources.

### ***Update by members on actions related to AEGIS***

Gert Kleijer, referring to the list of countries having signed the AEGIS Memorandum of Understanding (MoU) (<http://aegis.cgiar.org/membership.html>), requested the representatives of countries that had not yet signed to update the Group on the current status of the MoU process in their country. The participants gave the following information:

**Austria:** The issue is currently under discussion at ministerial level in Vienna.

**Bosnia and Herzegovina:** The MoU has been signed, and the conclusion of Associate Membership Agreements is under way.

**France:** A new law will facilitate definition of the status of PGR and their conservation. This should accelerate the signing of the MoU.

**Greece:** The NC is aware of the need to sign the AEGIS MoU, but it has not been signed so far due to shortage of scientific staff and administrative reasons related to the genebank.

**Israel:** The Head of the genebank has just completed a sabbatical period and will follow up on this issue soon.

**Italy:** A member of the Ministry of Agriculture discussed this issue at a recent meeting, indicating the intention to sign the MoU in the near future.

**Macedonia FYR:** The new NC from the Ministry of Agriculture still needs to examine the AEGIS issue.

### ***Identification of Most Appropriate Accessions for the European Collection***

#### **Preamble: Definitions**

**Most Appropriate Accession (MAA):** an accession that has been selected from a set of assumed duplicates through the application of the selection criteria, which the Working Group concerned had agreed upon, in a well-defined and transparent selection process. The identified MAAs will be proposed by the WG concerned to the respective National Coordinators for acceptance as a European Accession.

**European Accession:** a genetically unique and/or important plant genetic resources accession for Europe that fulfils the selection requirements, that has been identified by the respective Working Group after a selection process, and that subsequently has been designated by the National Coordinator of the maintaining country to be conserved for the

long term according to agreed technical standards and to be made available to any *bona fide* user, that will form part of the European Collection. (Synonym: AEGIS Accession).

### **The example of rye (AEGIS Grant Scheme: Improving the prerequisites for a European rye collection)**

M. Rasmussen

The project funded under the AEGIS Grant scheme (project proposal available at [http://aegis.cgiar.org/aegis\\_grant\\_scheme/second\\_call.html](http://aegis.cgiar.org/aegis_grant_scheme/second_call.html)) has the general objective of initiating closer cooperation on rye germplasm and specifically to update the European *Secale* Database (ESDB), to propose common standards for conservation of *Secale* germplasm, and to clarify requirements and propose guidelines for identification of Most Appropriate Accessions (MAAs) within the *Secale* germplasm preserved in European *ex situ* collections.

Plans were made for completion of the ESDB by including missing data.

Criteria and the procedure for the selection of European rye accessions had already been agreed, starting with landraces, wild *Secale* accessions and cultivars, while genetic stocks and breeder's lines will follow. Duplicate search will be focused on cultivars released after 1950. A proposed list of European rye accessions is expected as a product of this project, which is scheduled to be completed in 2012.

### **Discussion of preliminary selection criteria proposed by the EWDB Manager and determination of final criteria**

Iva Faberová presented the proposed selection mechanism for wheat AEGIS Accessions. The two AEGIS documents "Selection Procedure of the European Accessions" (version November 2010) and "Selection requirements for European Accessions" approved by the Steering Committee during its eleventh meeting (2-5 September 2008, Sarajevo, Bosnia and Herzegovina) were used as a basis for selecting European Accessions in wheat.

Both information and plant material criteria should be considered for the selection procedure. Several criteria could be derived from information recorded in the EWDB: maintenance of accession in country of origin, known information on origin, comprehensiveness of passport information and validated accession name. Whereas recommended criteria such as number of regenerations, health status, presence of C&E data are related to the plant material and genebank standards. The presentation focused mainly on the use of the available information to define selection criteria.

Positive or negative selection and a combination of the two were recommended. Positive criteria such as known and reliable information on origin of the accession, existence of C&E data and safety-duplication could be used for pre-selecting AEGIS candidates. Or an accession could be eliminated from the list of possible candidates due to absence of important information. Sets of probable duplicates implied by the repetition of the accession name should be given special attention. Additional information like known breeding company, country and year of first registration should also be considered. In case of repeated accession names within one national collection, the local collection holder should decide on the selection of the proper candidate accession.

An analysis of the information available in the EWDB revealed the following:

- for *Triticum*, few lists were proposed for confirmation as European accessions: 8 advanced cultivars from the Estonian collection, 19 original cultivars and breeding materials from the Belorussian collection and 80 *T. durum* accessions collected in Cyprus. To increase the number of lists, a simplified procedure was recommended, given the large size of the EWDB: as a first step, the focus should be on the set of original advanced cultivars kept in their countries of origin that have reliable passport information, available C&E data and guaranteed safety-duplication.

- for *Aegilops*, it was suggested to start with the 101 accessions of *A. sharonensis* collected in Israel during a rescue expedition.

**Table 1.** Summary of first candidates proposed as AEGIS accessions

Genus	Country	No. of accessions	Notes
<i>Triticum</i>	Belarus	19	Domestic cultivars and breeding material, full pedigree available, no safety-duplication (SD), no C&E, AEGIS member
	Cyprus	80	<i>T. durum</i> , collecting mission, SD in Bari, no C&E, AEGIS member
	Estonia	8	Exclusively domestic cultivars, full pedigree, SD, C&E, AEGIS member
	<b>Total</b>	<b>107</b>	
<i>Aegilops</i>	Israel	101	Rescue collecting mission of <i>Aegilops sharonensis</i> organized by ECPGR
	<b>Total</b>	<b>101</b>	

### Compilation of first lists of possible AEGIS accessions: Wheat

#### Discussion

Mike Ambrose recommended that the criterion for the designation of unique accessions should be defined, since it will distinguish the European Collection in the eyes of the users.

M. Rasmussen agreed that this was an important point and gave the example of NordGen, which is characterized by its clear mandate of conserving and giving access to all the diversity of Nordic origin.

G. Kleijer asked the Group if anyone could propose a definition of what should be considered "unique" in the European Collection; this concept would then be discussed by the Group. He also requested the genebanks not to discard any material until the selection of AEGIS accessions is completed.

A general discussion on the most effective approach for constituting the European Wheat Collection concluded with the following decisions:

#### Workplan

- *Triticum*

1. A **first set of 107 *Triticum* accessions** was proposed for flagging as European Accessions. These had been selected by the DB Manager primarily because they are held in the country of origin by AEGIS member countries. Among these accessions, those from Estonia (8) have safety-duplication, pedigree, known breeder and C&E data; those from Cyprus (80) have safety-duplication and those from Belarus (19) have full pedigree and breeder information. **By the end of June 2012**, the respective WG members will notify the DB Manager whether they agree on the proposed selection. As soon as the WG members confirm the lists, the DB Manager will send them to the respective National Coordinators, inviting them to flag these accessions in EURISCO as belonging to the AEGIS European Collection.

2. The separate lists prepared by I. Faberová of *Triticum* accessions conserved in their country of origin will be distributed by the **end of June 2012** to the respective country WG members (irrespective of the MoU signature status). The members will select European Accession candidates according to agreed criteria (see below) and verify whether the holding institutions agree to flag them as part of AEGIS. Only accessions that are already safety-duplicated should be flagged; or those for which safety-duplication by genebanks is under way, in which case the date by which the process will be completed should also be indicated. The DB Manager suggested starting with advanced cultivars. The decision of the country WG member should be communicated to the DB Manager **by the end of October 2012**, after which the DB Manager will send the approved lists to the National Coordinators as per point 1 above (**by end 2012**).
3. WG members are invited to prepare lists of additional accessions that they are conserving as genetically unique (to their best knowledge) and that the holding institutions are prepared to conserve as AEGIS accessions. These lists should be sent to the Wheat DB Manager **by the end of 2012** (extension of the delivery date is exceptionally allowed for the larger collections). The safety-duplication provision as per point 2 above also applies here.

The Wheat DB manager will then screen the lists, mainly to verify that there are no evident duplications of accessions or gaps in the compiled list of proposed accessions. Prior to this screening, all wheat AEGIS candidates should be entered in the EWDB, along with passport and C&E data, if available. The DB Manager will interact with WG members whenever clarifications are needed and will circulate to all the concerned countries for comments a proposed final list of accessions to be flagged as part of AEGIS (**by end 2013**).

- *Aegilops*

1. The EWDB Manager suggested starting with a set of *A. sharonensis* accessions maintained at the Institute for Cereals Crop Improvement (ICCI), Tel Aviv University, which were collected as part of an ECPGR-funded mission. H. Sela clarified that these accessions are not maintained under long-term conditions; moreover, Israel has not yet signed the AEGIS MoU, but he would follow up on the necessary procedure to ensure that these accessions become part of AEGIS (**by end 2012**).
2. I. Faberová prepared separate lists of *Aegilops* accessions conserved in their country of origin, and all the steps as per point 2 of *Triticum* above should be followed, except for the recommendation to start with advanced cultivars.
3. Countries are invited to prepare lists of additional *Aegilops* accessions as per point 3 of *Triticum* above.

## Descriptors and criteria for the selection of MAAs

### Descriptors

Passport descriptors (following MCPD/EURISCO standards and EWDB descriptors) required for the selection of the MAAs were agreed as listed in Table 2 below; all other passport descriptors should also be entered to the extent possible.

**Table 2.** Lists of mandatory and highly recommended passport descriptors required for the selection of MAAs

	<b>Mandatory descriptors</b>	<b>Highly recommended descriptors</b>
<b>For all accessions</b>	Accession number (ACCENUM) Institute code (INSTCODE) Genus (GENUS) Species (SPECIES) Country of origin (ORIGCTY) Biological status of accession (SAMPSTAT)	Species author (SPAUTHOR) Other identification (numbers) associated with the accession (OTHERNUMB) Donor accession number (DONORNUMB) <b>and</b> Donor institute code (DONORCODE) <b>or</b> Decoded donor institute (DONORDESCR) C&E data, if available Location of safety-duplicates (DUPLSITE)
<b>Only for cultivars and breeding lines</b>	Accession name (ACCENAME)	Ancestral data (ANCEST) Breeding institute code (BREDCODE) <b>or</b> Decoded breeding institute (BREDESCR) Year of registration (REG_YEAR)
<b>Only for wild species</b>	Collecting number (COLLNUMB) Collecting institute code (COLLCODE) <b>or</b> Decoded collecting institute (COLLDESCR) Collecting date of sample (COLLDATE) Latitude of collecting site (LATITUDE) <b>and</b> Longitude of collecting site (LONGITUDE) <b>and/or</b> Location of collecting site (COLLSITE)	
<b>Only for landraces</b>		Collecting number (COLLNUMB) Collecting institute code (COLLCODE) <b>or</b> Decoded collecting institute (COLLDESCR) Collecting date of sample (COLLDATE) Latitude of collecting site (LATITUDE) <b>and</b> Longitude of collecting site (LONGITUDE) <b>and/or</b> Location of collecting site (COLLSITE) Accession name (ACCENAME), if available

### Genebank management criteria

- **Safety-duplication**

It was agreed that if accessions are not already safety-duplicated, safety-duplication by genebanks of the accessions flagged as part of AEGIS should be under way, in which case the date by which the process will be completed should also be indicated. Safety-duplicates should be sent to another Associate Member genebank, possibly in a different country, and/or at the Svalbard Global Seed Vault.

- **Seed quantity**

The appropriate quantity of seed that should be conserved for a typical AEGIS Accession was discussed, but it was concluded that the WG should not be too prescriptive and leave this decision to the genebank managers, as long as the AEGIS Associate Members can make the material available under the conditions of the Treaty.

### Compilation of first lists of possible AEGIS accessions: Rye and Triticale

- **Rye**

*Morten Rasmussen*

The final results of the AEGIS-funded project on rye were expected around the time of this meeting, but will be delayed by six months. M. Rasmussen suggested waiting for the final outcome of the project before proposing a list of rye accessions. Three outcomes are expected: (1) a Task Force coordinated by Külli Annamaa will update standard C&E descriptors; (2) standards required for maintenance will be proposed on the basis of the results of the questionnaire that was sent to holders of rye collections to identify critical aspects of conservation management; and (3) criteria for the selection of MAAs were defined: the process will start with landraces and wild accessions, followed by cultivars and genetic stocks; cultivars produced after 1950 will be screened for duplicates.

- **Triticale**

*Gert Kleijer*

The development of the first list of possible triticale AEGIS accessions will have to be postponed until the Triticale DB has been updated. It will also be useful to wait for the development of the approach defined for wheat and to learn from it. The scheme proposed for wheat can then be adopted for triticale.

In the meantime, new descriptors can be proposed for inclusion in the ECPGR Triticale DB. This task will be taken up by Beate Schierscher, the new ETDB Manager.

### Standard Material Transfer Agreement

Marcin Zacziński described the Polish experience of using the Standard Material Transfer Agreement (SMTA). Seed samples can be ordered and the SMTA signed online. The English version of the SMTA was signed, but users can view the Polish version for information. Requests for accessions are centralized, but collections are decentralized. Once the curators receive an email with the order, they prepare the material, print the SMTA and passport data for delivery to the user. Seed accessions are sent to the users either from the central seed storage or from working collections. Vegetative material is sent directly from the curators of field collections. Heads of genebanks and institutions have delegated the responsibility to sign the SMTA to the curators. If there are several collections in one institute, one person is