

Project Proposal and Budget of the Cereals Network for ECPGR Phase VIII (2009 – 2013)

June 2008

1. Background and justification

The Cereals Network consists of three crop working groups, namely, the *Avena*, Barley and Wheat WG. Besides these, activities on Rye, Triticale, Maize and Minor Cereals are associated with the Network, consisting mostly of the development of respective Central Crop Databases.

During Phase VII, the Barley WG had lower priority and could, therefore, not organise a regular meeting.

2. Objectives of the project

The project of the Cereals Network will focus on the four priorities of ECPGR Phase VIII, namely, (1) task sharing (AEGIS) and capacity building, (2) characterization and evaluation, (3) *in situ* and on-farm conservation and management, (4) documentation and information.

During the Cereals Network Meeting in Foça, Izmir, Turkey, in April 2008, all three groups expressed their intention to have equal high priority, to be able to carry out their planned work.

(1) In this context, the three crop working groups will focus on the implementation of AEGIS for oats, barley and wheat. Criteria for inclusion of accessions into AEGIS and procedures based on the respective European CCDBs will be discussed and finalised in the WG meetings and by e-mail communication between the members. Oat, as one of the AEGIS model crops, will be used as an example for the other cereal crops, but the criteria and approaches may slightly differ between crops. All WGs will start designating AEGIS accessions.

The project on precise genetic stocks of wheat will have a component of capacity building, namely, for the handling of genetic stocks collections by genebanks.

(2) Genebanks represented in the cereals WGs will continue to characterise and evaluate their collections. The pre-breeding project proposal submitted by the Barley WG includes an evaluation element for traits relevant to climate change. The CCDBs on Wheat and *Avena* are encouraging their contributors to submit, besides passport data, also C&E data. Characterisation and evaluation will also be done for *Avena* in the frame of an EU-funded project, in which members of the *Avena* WG are partners.

(3) The project on surveying wild oat populations submitted by the *Avena* WG is focussing on this ECPGR priority. Representatives of the three cereals WGs have been invited to participate in a meeting planned by the *In situ* and On-farm conservation Network. Using available information resources, a list of crop wild relative species of the mandate crops of the Cereals Network, occurring in the ECPGR member countries and Europe, will be compiled, to support decision-making on *in situ* conservation requirements.

(4) The major CCDBs of the Cereals Network, namely, the European *Avena* DB (EADB), the European Barley DB (EBDB) and the European Wheat DB (EWDB), are in need of being updated. A major focus of the respective database managers will be on assuring their institutional support to development work, and to request updates from the contributing genebanks. Information from all contributing genebanks but also from EURISCO (as far as not directly provided by the genebanks) will be gathered to complete the databases. Members of the Cereals Network are also active participants in the Documentation and Information Network and contribute to its discussions and developments.

The Cereals Network aims to strengthen the links between its working groups by discussing topics of common interest and joint developments. Above all, the implementation of AEGIS, supported by an appropriate development of the CCDBs, is a major focus of all three groups. Members of the other cereal WGs will be invited to join the projects on pre-breeding (coordinated by the Barley WG) and genetic stocks (coordinated by the Wheat WG) and thus learn from each other.

Activities on Rye, Triticale, Maize and Minor Cereals will be restricted mainly to the further development of the respective databases and communication between participants of these activities, without the possibility of convening meetings (except for a small meeting on rye and triticale, if funds allow).

3. Workplan

The Workplan is attached as Appendix I of this document. It covers the activities of the three working groups, including full meetings of the groups, special projects (one proposed by each group) and possibly activities in cooperation with other Networks (e.g. the *In situ* and on-farm Network) and some minor activities of the associated crops. The latter activities are not budgeted since the available funds are not sufficiently covering even the main activities planned.

4. Project coordination and administrative structure

The project coordination will be carried out by the Coordinator of the Cereals Network, in close collaboration with, and with support by, the Network Coordinating Group, which consists of seven participants representing the *Avena*, Barley and Wheat WGs, and includes the Rye database manager. Activities No. 1-3 (WG meetings) will be organised by the respective WG chairs and the ECPGR Secretariat. Coordination of the specific projects of each WG will be carried out by the persons indicated in the project descriptions. The project budget will be administered by the ECPGR Secretariat.

Appendix 1: Workplan of the Cereals Network 2009-2013

Activity-No.	Activity	Output	Milestone	Time	Responsibility, comments
1	Meeting of the <i>Avena</i> Working Group	Implementing AEGIS, selection of MAA, procedures for <i>Avena</i> wild relatives multiplication	<i>Avena</i> WG: Full meeting, 3 days, ca. 24 members	2010	Suceava, Romania
1.1	Limited participation in the Pre-breeding meeting for climatic change	Establish a pre-breeding cooperation between breeders, genebanks and researchers in the framework of the ECPGR Cereals Network, with main focus on barley	Meeting held with ca. 15 participants, network established	2009	Ms Marja Jalli, Mr Luke Ramsay, Mr Morten Rasmussen
1.2	Limited participation in the <i>in situ</i> conservation meeting	<i>In situ</i> conservation		?	Mr Nigel Maxted, Cereals NCG
1.3	Limited participation at the Cereals NCG meeting, 2 days (7 members) – before ECPGR phase VIII mid-term Steering Committee Meeting		.	2010 or 2011	Mr. A. Katsiotis, Mr. C. Germeier
2	Meeting of the Barley Working Group	Preparation for AEGIS	Meeting held with ca. 30 participants, criteria and methodology for selecting barley accessions for AEGIS agreed	2009 or 2010	ARI Nicosia, Cyprus
2.1	Start designation of MAAs	Definition of MAAs, with focus on accessions originating from the own country of the holding genebanks	Draft list of MAAs on-line	2010	Mr Helmut Knüpffer (for compilation), all participants (for their genebanks)
2.2	Update European Barley Database, include additional AEGIS descriptors, coordinate with other regional & global compilations of PGR data, include C&E data in new web interface	EBDB updated, C&E data searchable, coordination with other systems using web service technology	EBDB updated for 50% of the present contributors, and with additional data from EURISCO, C&E data included, web service technology applied	2011	
2.3	Assessment of barley genetic stocks collections in Europe	Inventory of barley genetic stocks collections in Europe	Inventory compiled, with description and size of collections, conservation status, contacts, needs	2010	Mr Morten Rasmussen
2.4	Review on study and utilisation of the International Barley Core Collection	Review article on the BCC utilisation	Presentation of Review at the Triticeae Symposium (Kyoto June 2009) and publication	2009	Mr Helmut Knüpffer

Activity-No.	Activity	Output	Milestone	Time	Responsibility, comments
3	Meeting of the Wheat Working Group	Preparation for AEGIS	Meeting held with ca. 30 participants	2010	Institute , country to be defined
3.1		Definition of MAA accessions	Draft list of MAAs on-line by 2010	2010	Individual database managers, EWDB manager
3.2		Agreement on crop quality standards	Crop Quality standards on-line by 2010	2012	Mr Gert Kleijer
3.3		Improvement of the wheat CCDB by introduction of 20 descriptors	20 descriptors introduced by 2011	2011-2012	Ms Iva Faberova + WWG members
3.4		Genebank work relating to traits associated with climatic change	Overview	2011	Mr Gert Kleijer
4	<i>Avena</i> project: Survey of wild oat populations for <i>in situ</i> conservation	Survey of <i>Avena</i> wild relatives in selected geographic areas	Population surveys and seeds collected.	2009-2010	Mr. A. Katsiotis, Mr. G. Ladizinski, Mr. P. Garcia, and Mr. F. Branca
5	Barley project: Meeting on pre-breeding for climatic change	Establish a pre-breeding cooperation between breeders, genebanks and researchers in the framework of the ECPGR Cereals Network, with main focus on barley	Meeting held with ca. 15 participants, network established	2008 (or 2009)	Ms Marja Jalli, Mr Luke Ramsay, Mr Morten Rasmussen
5.1			Project proposal submitted for funding	2009 or 2010	Ms Marja Jalli, Mr Luke Ramsay, Mr Morten Rasmussen
6	Wheat: Project for capacity building for the conservation of precise genetic stocks				Mr Gert Kleijer, Switzerland
7	Ad hoc meeting on rye and triticale		Meeting held with 8 participants		Mr Gert Kleijer
8	Maize	Re-establish contacts with contributors to Maize DB			Ms Violeta Andjelkovic, Serbia
9	In situ / crop WG meeting		Participation of members of the Cereals Network		Mr Nigel Maxted, Cereals NCG