



Joint PGR Secure/ECPGR workshop
Conservation strategies for European crop wild relative and
landrace diversity
7–9 September 2011, Palanga, Lithuania



Report on Working group 1: CWR conservation

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Developing a European CWR strategy

- Approaches to establishing CWR conservation strategy
 - Individual-national-regional-global
 - Inside/outside protected areas
 - Holistic approach

CWR Inventories: the backbone for conservation and use

- Different approaches to creation of National Inventory
- Upcoming version of the CWR Catalogue for Europe and the Mediterranean (v. 4.0) improved and updated.
- Arguments in favor of being inclusive in the creation of the National CWR Inventory. E.g., use of exotic species in plant breeding should not be discarded. However a very inclusive list may make it not different from a National Flora Checklist.
- Problems derived from the changes in nomenclature and the existing synonymies .

CWR prioritization

- Main criteria for prioritization: crop prioritization, potential use & threat. Once crops are prioritized, how much weight should be put into the criteria concerning potential use & threat?
 - Select taxa of potential use (GP1&2) that are threatened (restrictive approach)
 - Select taxa of potential use (GP1&2) and rank them according to threat
 - Select taxa of potential use (GP1&2) or threatened taxa (most inclusive approach)

CWR prioritization

- Take into account transboundary distribution when assessing threat factors. Coordination and collaboration between neighbouring countries is recommended.
- Simultaneous use of different variables that measure the same criteria may artificially inflate some criteria.
- Important to work together with the stakeholders (plant breeders, scientists, other end users) in the process of prioritization.
- It is important to view priorities as working hypotheses that can be constantly updated.

CWR prioritization

- To identify flag CWR species that could be used to promote CWR conservation in the different countries.
- To pay attention to the infraspecific levels throughout the process of prioritization, and *in situ* and *ex situ* gap analysis.

CWR diversity and gap analysis

- Process of *in situ* and *ex situ* gap analysis discussed, including applications of ecogeographical and genetic diversity analysis.
- The use of ecogeographical data and neutral variation genetic data were compared and discussed through the example of white clover, and that stirred a discussion on the pros and cons of these approaches.

CWR diversity and gap analysis

- The threat assessment of European CWR provides a comprehensive account of the threat status of our CWRs.
 - Need to obtain additional information for those classified as data deficient.
- Develop methodology to assess genetic diversity loss and species threat using genetic criteria.

CWR conservation data management

- Need to provide a system for *in situ* CWR conservation that would be equivalent to the *ex situ* accession information system. The link between both is occurrence and there is a need to define what an *in situ* accession is.
- CWRIS and Bioversity CWR descriptors should be taken into account when deciding upon the establishment of an information system within EURISCO dedicated to *in situ* accessions of CWRs.

CWR conservation data management

- Additional thoughts and proposals are needed in relation with the development of the Trait Information Portal within PGR Secure.
- An information system that helps the user go from the initial draft CWR National Catalogue provided by PGR Forum to the final CWR National Catalogue or even the reduced list of priority CWR species would be desirable to accommodate the information used as filter or ranking criteria.

Development and implementation of national CWR conservation strategies by the ECPGR network members

- PGR Secure offers a help desk facility to assist all those countries interested in developing national strategies. Different possibilities for funding are discussed.
- What is being sought is the design of the strategy, not its implementation.
- National CWR conservation strategies can be developed in a flexible way adapting to available funding.

Major strengths

- Development of a conceptual framework for the establishment of a national conservation strategy
- FAO Agrobiodiversity Toolkit made available to help out in the process of establishing a national conservation strategy
- Comprehensive CWR Catalogue for Europe and the Mediterranean filtered out for each country, as starting point for the creation of National CWR Inventories.
- Flexibility to create national conservation strategies and national CWR inventories adapted to each country needs.

Major strengths

- Shared views on the relevance of crop importance, potential use (genepools1&2) and threat as the three main criteria for prioritization.
- List of genepool concepts developed for priority genera available online (<https://nacms.co.uk/croptrust>).
- Well-established methodology of *in situ* and *ex situ* gap analysis with scalable levels of complexity depending on the needs and available resources.

Major weaknesses

- Urgent need to define criteria for the development of a CWR conservation strategy at the European level
- The flexibility to create national conservation strategies and national CWR inventories adapted to each country needs, can be a major weakness when trying to standardize, build a common policy for Europe or make comparisons between countries.
- Using the same prioritization criteria the application of different methods of scoring can lead to different sets of prioritized species. Working on consensus species obtained from the use of different scoring methods is a possible solution, but the whole process is complex and may be difficult to implement in many countries.

Major weaknesses

- Need to clarify ideas on what is needed to have a CWR *in situ* accession information system equivalent and running in parallel to the existing *ex situ* component within EURISCO.
- Need to clarify ideas on what is sought in the establishment of the Trait Information Portal.