



Federal Office for
Agriculture and Food



European *in situ* and on farm information management – vision and options

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on behalf of

ECPGR Documentation and
Information Network



European in situ and on farm information management – vision and options

Outline

- Current state of European PGRFA *ex situ* documentation
- Vision for a coherent documentation for PGRFA (*ex situ* & *in situ*/on farm)
- Starting point: *in situ* / on farm activities
- How to achieve the vision

Current state of European PGRFA documentation – *ex situ*

European Plant Genetic Resources Search Catalogue
EURISCO (<http://eurisco.ecpgr.org>)

- web-based catalogue, provides information about *ex situ* plant collections maintained in Europe
- current content: passport data on approx. 1.1 million samples

Current state of European PGRFA documentation – *ex situ*

key elements

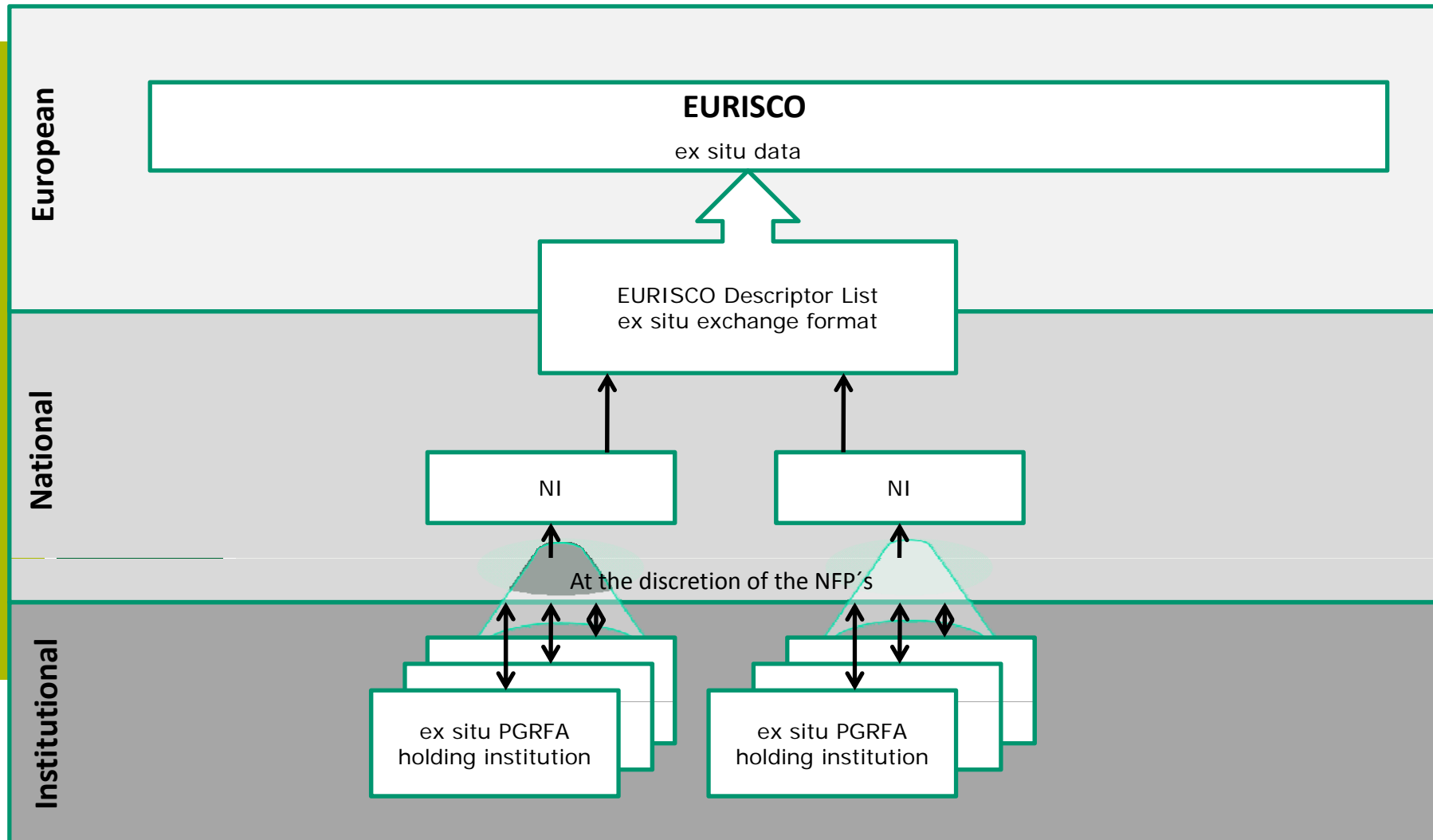
EURISCO (<http://eurisco.ecpgr.org>)

- based on a European network of *ex situ* National Inventories (NIs) / National Focal Points (NFPs)
- Bottom up approach (data provider-NI/NFP-EURISCO)
- standards for data exchange (EURISCO Descriptor List)

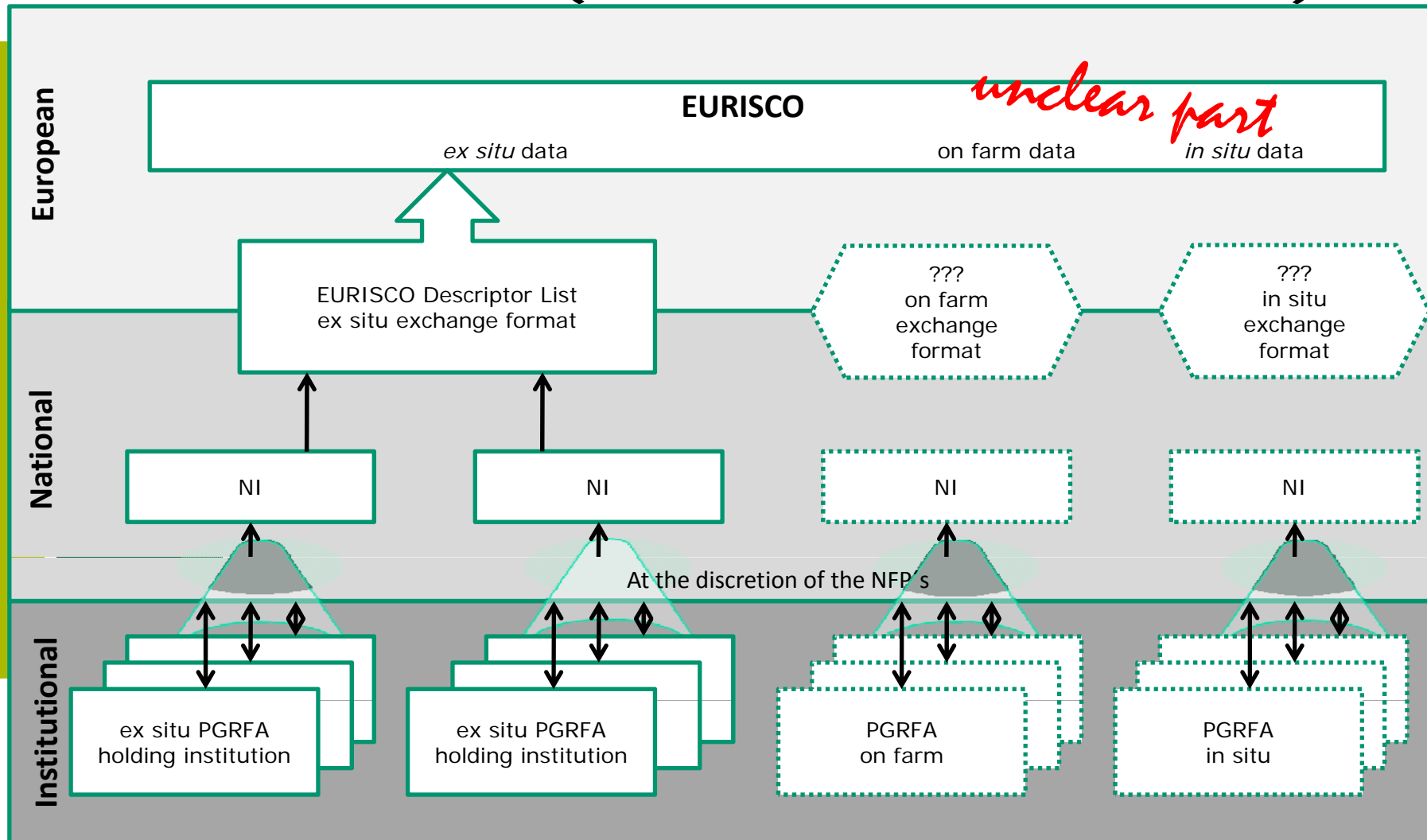


EURISCO DESCRIPTORS	
0. National inventory code	(NICODE)
Code identifying the National Inventory; the code of the country preparing the National Inventory. Exceptions are possible, if agreed with EURISCO such as NGB. Example: NLD	
1. Institute code	(INSTCODE)
FAO Institute Code of the institute where the accession is maintained. Example: NLD037	
2. Accession number	(ACCENUMB)
This number serves as a unique identifier for accessions within a genebank collection, and is assigned when a sample is entered into the genebank collection. Example: CG800254	
3. Collecting number	(COLLNUMB)
Original number assigned by the collector(s) of the sample, normally composed of the name or initials of the collector(s) followed by a number. This number is essential for identifying duplicates held in different collections. Example: FA90-110	
4. Collecting institute code	(COLLCODE)
Code of the Institute collecting the sample, if the holding institute has collected the material, the collecting institute code (COLLCODE) should be the same as the holding institute code (INSTCODE). Example: NLD037	
5. Genus	(GENUS)
Genus name for taxon, in latin. Initial uppercase letter required. Example: Allium	
6. Species	(SPECIES)
Specific epithet portion of the scientific name, in latin, in lowercase letters. Following abbreviation is allowed: 'sp.' Example: paniculatum	

Current state of European pgrfa documentation – *ex situ*



Vision for a coherent documentation for PGRFA (*ex situ* & *in situ*/on farm)



Starting point: *in situ* / on farm activities

- ECPGR On farm Conservation and Management Working Group
 -
 - **Minimum descriptors list** for the documentation of on farm conservation and management activities (38 descriptors)

Dipartimento Biologia Vegetale e Biotecnologie Agroambientali e Zootecniche - Università degli Studi di Perugia - Italy
Banca de Resurse genetice vegetale - Suceava - Romania

Minimum descriptors list for the documentation of on-farm conservation and management activities

DRAFT DRAFT DRAFT

Collecting/observation date			
Collecting number			
Name of collector / institution			
THE LANDRACE			
Genus and species			
Vernacular name of species			
Vernacular name of varieties and the synonymous			
IDENTIFICATION OF PLACE			
1 COLLECTING-OBSERVATION PLACE	Area		
	County		
	Village		
	Latitude ('N)		
	Longitude ('E)		
	Altitude (m)		
	Geophysic site description		
	plane	1	
	medium hill	2	
	high hill	3	
	plateau	4	
	mountain bottom	5	
	mountain pass	6	
	mountain	7	
	The soil characteristics		
1	slope	small (<20%)	1
		medium (21-40%)	2
		high (41-60%)	3
		very high (>60%)	4
2	aspect	North	1
		North-East	2
		East	3
		South-East	4
		South	5
		South-West	6
		West	7
		North-West	8
3	texture	clay	1
		loam	2
		loamy-sand	3
		sand	4
		loamy-silt	5



Starting point: *in situ* / on farm activities

ECPGR Documentation and information Network

- Network of **32 ECPGR *in situ* National Inventory Focal Points** nominated by National Coordinators
- Network of **34 ECPGR on farm National Inventory Focal Points** nominated by National Coordinators



The screenshot displays two pages from the ECPGR website. Both pages feature a navigation menu with links for 'ABOUT ECPGR', 'CONTACTS IN ECPGR', 'NETWORKS', and 'GERMPLASM DATABASES'. The main content area lists national inventory focal points for various countries, including Albania, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Czech Republic, Denmark, Estonia, Finland, Georgia, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Moldova, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, and the United Kingdom. Each entry includes the country name, the name of the focal point, the organization, and contact details (phone, fax, and email).

Country	Name	Organization	Contact details
Albania	Mr Belul Gixhari	Albanian Genebank Agricultural University of Tirana 'Rruga 'Siri KODRA', Tirana Albania	Tel: (355) 692 112 252 Email
Azerbaijan	Mr Afig Mammadov	Genetic Resources Institute International Relations, Coordination and Information Department 155-Azadlig Ave., 1106 Baku Azerbaijan	Tel: (994-50) 4636327 Fax: (994-12) 4499221 925 699 Email
Belarus	Ms Svetlana Kuzmenkova	Department for introduction and breeding of ornamental plants Central Botanical Gardens of the National Academy of Sciences of Belarus (CBG NASR), Suvankova str. 20, 220013 Minsk Belarus	Tel: (375) 17 284 14 78 Fax: (375) 17 284 14 84 Email

Starting point: *in situ* / on farm activities



PGR Forum (European Crop Wild Relative Diversity Assessment and Conservation Forum)

- Crop Wild Relative Information System (CWRIS)
- Methodologies for management of CWR data, with a particular emphasis on site and population data

An Integrated European In Situ Management Work Plan: Implementing Genetic Reserves and On Farm Concepts (AEGRO)

- Within the AEGRO project four independent modules collectively called "Population Level Information System" (PLIS) are being developed for *Avena*, *Beta*, *Brassica* and *Prunus* allowing the search for occurrence within a specific species. PLIS exemplarily extends CWRIS.

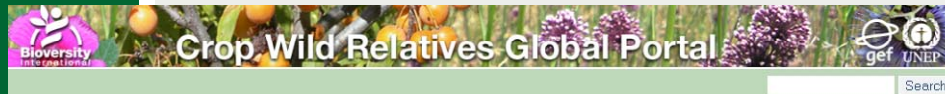


Starting point: *in situ* / on farm activities

Crop Wild Relatives Global Portal

www.cropwildrelatives.org

-descriptors for CWR data...



The Portal will allow you to access information on Crop Wild Relatives (CWR) and useful data resources for the conservation and utilization of these important genetic resources... [Read More]

QUICK LINKS

- Resources
- National Inventories
- Training
- Funding

EVENTS

Symposium "Towards the establishment of genetic reserves for crop wild relatives and landraces in Europe" - Funchal, Portugal, 13-16 September 2010. For more information visit the [symposium website](#).



DATASETS

Search datasets holding information on crop wild relatives. [More >>](#)

NEWS

Conserving 'Ecologically significant' crop wild relatives in India, holding CWR. [Read more >>](#)

CWR for food security: In... Gary Paul Nabhan [Read more >>](#)

Origin and now living relationships between cucumber and melon traced. [Read more >>](#)

Plant Treaty call for proposals to increase capacity for *in situ* conservation of CWR. [Read more >>](#)

PUBLICATIONS

Crop Wild Relatives Homepage > Search

Search CWR data resources

In this section you will be able to search various datasets holding key information on crop wild relatives.

Searches for a particular species can be performed within national inventories at the taxon level or can be restricted to a particular country, depending on your needs. Experts on crop wild relative conservation can also be found by typing part of the expert's name or by selecting a name from the drop-down list. The search result also provides details on related projects and institutes.

In addition to searches within national inventories, users are guided to external datasets, which hold further information on the wild relatives of crops.

Search Form

Taxon Expert Institute Project

Search Taxon

Taxon name

Genus

Species

Country

- Armenia
- Bolivia
- Madagascar
- Sri Lanka
- Uzbekistan

What is already available? (I)

- Networks
 - ECPGR In situ and On-farm Conservation Network
 - > knowledge on needs for documentation
 - ECPGR Documentation and Information Network
 - > experience in *ex situ* documentation
 - Network of 32 *in situ* / on farm 34 NFPs
 - > link to the national/institutional level in each country
- Data standards
 - Some draft standards for exchange of *in situ* / on farm data (incl. e.g. Bioversity Descriptors for Traditional Knowledge)
 - > need for harmonisation

What is already available? (II)

- Information systems (but data?)
 - CWRIS PGR Forum Crop Wild Relative Information System (taxon level) + PLIS (occurrence level, but only data for 4 model crops)
 - Crop Wild Relatives Global Portal (data run through a national authorization process)
 - EURISCO (accession level, but no *in situ* / on farm data yet)
 - > system could be easily adapted / expanded for occurrence level data (relevant for *in situ* / on farm data)

How to achieve the vision? (I)

- Development and agreement of one standard for exchange of *in situ* and on farm data
 - draft developed by ECPGR (both networks) involving other relevant institutions
 - agreement sought between ECPGR, Bioversity and FAO on these minimum standards

- Development of NIs for *in situ* / on farm
 - organize required support for NFPs to create NIs (if not existing) and compile data and create incentives accordingly
 - create interface for data exchange from NIs to EURISCO according to agreed standard

How to achieve the vision? (II)

- Expand data structure of EURISCO for inclusion of *in situ* / on farm data into EURISCO
- Develop transfer mechanism for data from NIs to EURISCO (jointly by Bioversity on behalf of ECPGR and the network of the NFPs)
- Provide capacity building and training (ECPGR and its networks)

...to sum up

- It will be feasible to use the EURISCO and its approach also for *in situ* / on farm data
- Some prerequisites have been met already
- There is still a long way to go before an efficient and effective documentation landscape for PGRFA will be fully established

BUT: A journey of a thousand miles begins with a single step

(Lao-tzu, Chinese philosopher 604 BC - 531 BC)

he assumed you know where you are going !!