Spanish Plant Genetic Resources Centre

Centro Nacional de Recursos Fitogenéticos

(CRF)

The National Institute for Agricultural and Food Research and Technology

(INIA)

Lucía De la Rosa

The National Institute for Agricultural and Food Research and Technology

One of the 7 **Public Research Organizations** of the Spanish State Secretariat for Research. It belongs to the Ministry of Economy and Competitiveness

- Only PRO dedicated exclusively to agrifood and forestry research.

- Dual responsibility:
-national coordination of agrifood and forestry research
-execution of research projects in these areas

- 1,000 staff, 800 in research activities

- The Secretary of State for Research is the **President** of **INIA.**

Programme for the Conservation and Utilisation of Plant Genetic Resources for Food and Agriculture *(ex situ)*

Creation

Order of Ministry of Agriculture 23 April1993

Main Objetives

To avoid loss of genetic diversity of autochthonous plant species, varieties, ecotypes

To evaluate and document those materials, so that they can be used for breeding purposes

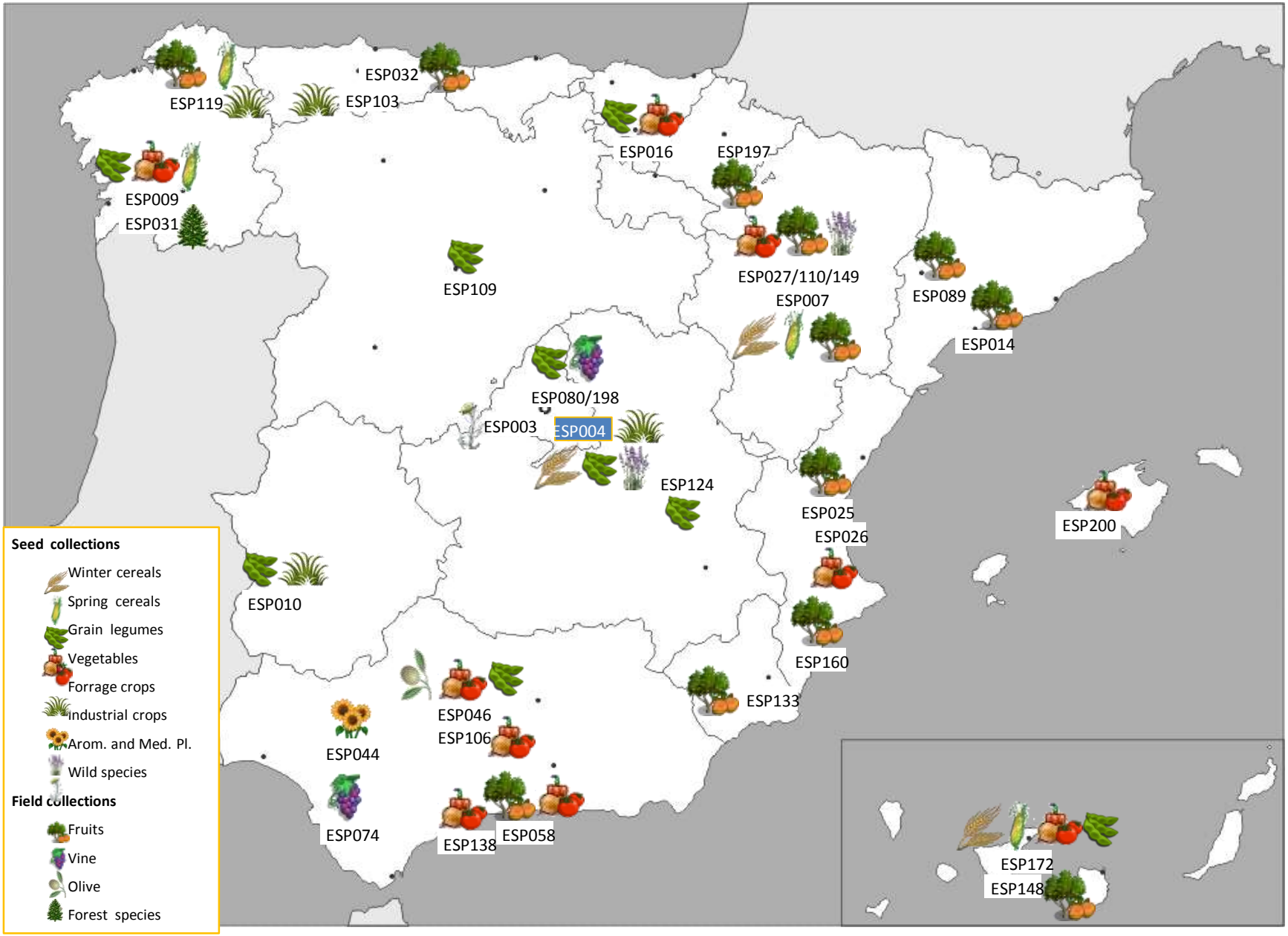
***CRF mission**:*

To help prevent the loss of genetic diversity contained in native plant species, landraces and ecotypes and neglected cultivars with a genetic potential to be used in agriculture and food.

CRF Main activities areas

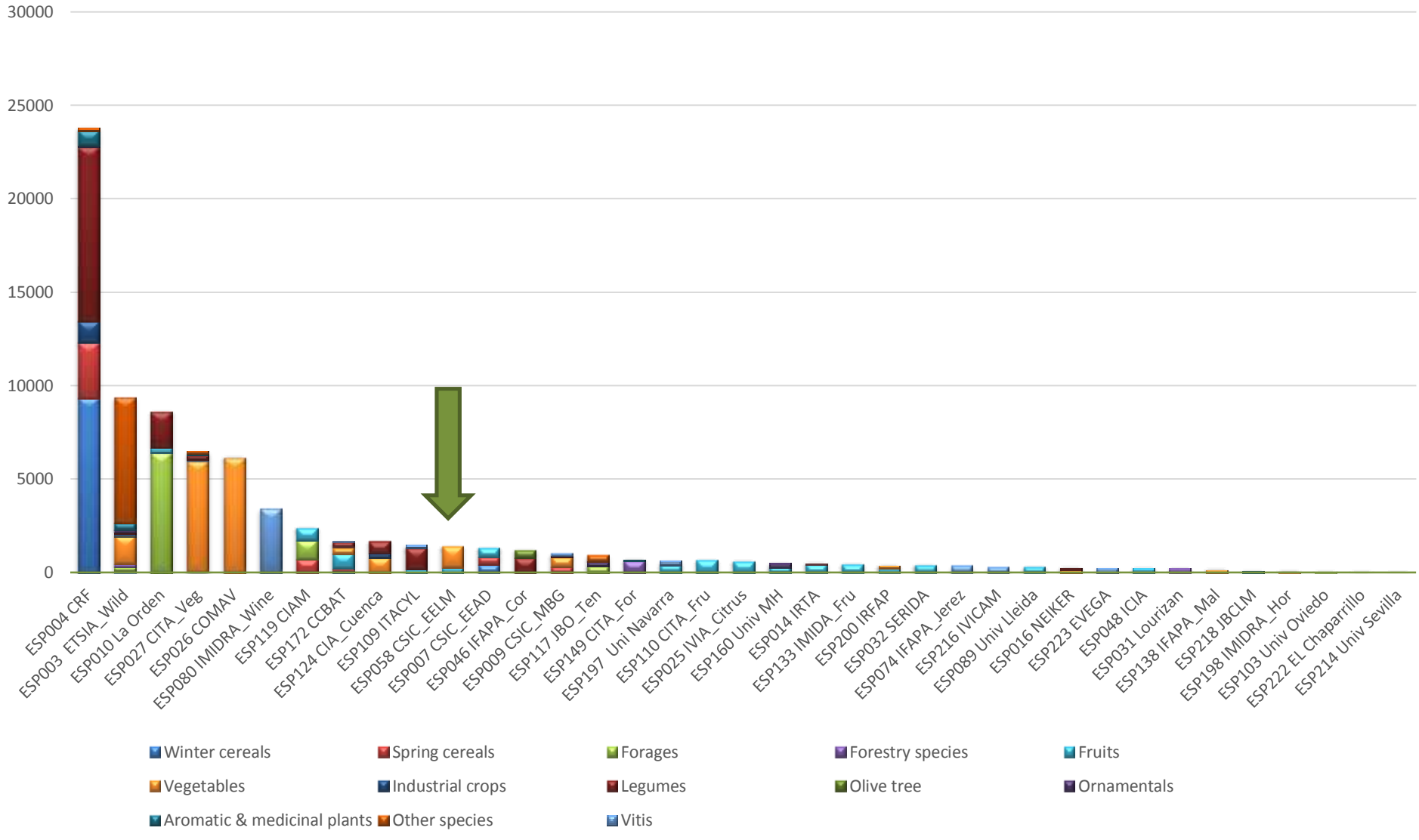
- Base collection: Conservation of safety duplicates of all Spanish seed collections.
- **Documentation and National Inventory of the National Network of PGRFA collections under the National Programme.**
- Prospection and collection of landraces under threat of extinction.
- Management of the Spanish active collection of cereals and grain legumes.
- Characterization and evaluation of their active collections.
- Research studies related to PGRFA.
- Exchange of material
- **National Coordination**
- Participation in the National Commission on PGRFA and international fora

Spanish PGRFA *ex situ conservation* Network

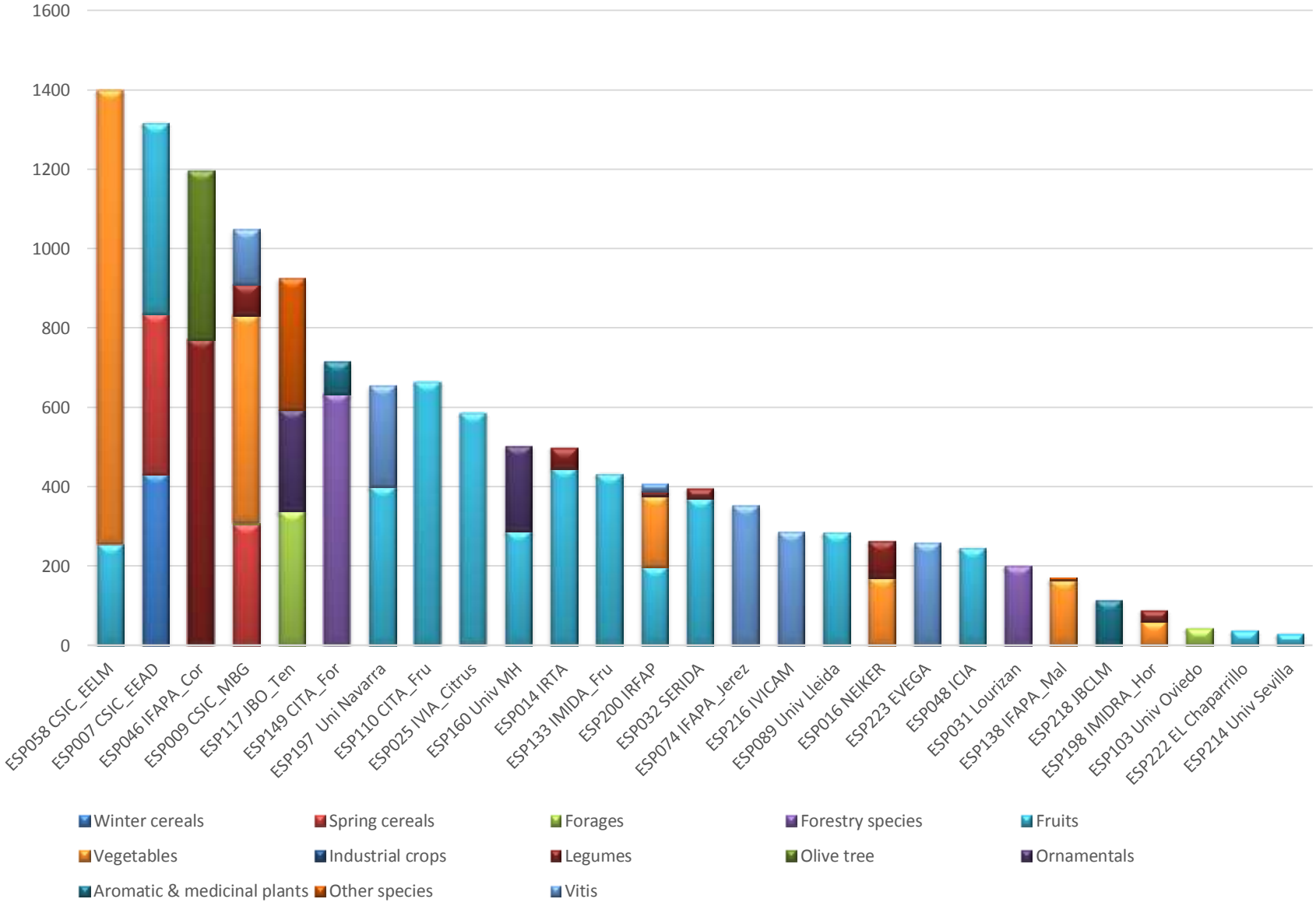


37public collections

Spanish PGRFA *ex situ* conservation Network



Spanish PGRFA *ex situ* Network



Origin of Spanish Network

Before eighties

INIA's facilities were distributed over all the Country. Regional centres was devoted to agricultural research related with the most relevant activities in each region.

After eighties (State of Autonomies)

INIA facilities were transfer to the local governments.

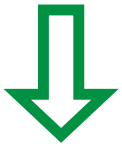
Nowadays

Agricultural research has a double dependence and funding (central and regional governments)

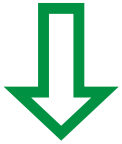
There are genebanks in almost all the regions, with national and/or local collections

National Inventory

Created by Ministerial Order 23 April 1993



National Inventory of *ex situ* collections of the Programme Network



Since 2000, available in

www.inia.es

Intercomunication between PGRFA DB: a common structure

FAO/Bioversity 2012 Multi Crops Passport Descriptors

Accession data

NUMCAT	ORDEN	NOMBAN	NUMBAN	FECADQ	NOMBA1	NUMBA1	FECAD1	NOMBA2	NUMBA2
NC018448	1	ESP004	BGE007200	198312--	ESP027	BGHZ0128		ESP026	BGV010166
NC018449	1	ESP004	BGE007201	198312--	ESP027	BGHZ0130		ESP026	BGV010167

Taxonomic data

GENERO	ESPECI	SPECI AUTO	SUBTAX	SUBTAX AUTOR	NOMCOM	NOMLOC
Cucumis	melo	L.			Melon	Melon piel de sapo
Cucumis	melo	L.			Melon	Melon piel de sapo oscuro
Cucumis	melo	L.			Melon	Melon figura

Collection data

INSREC	CODREC	NUMREC	FECREC	PAIORI	ESTREG	PROVIN	MUNICI
ESP027	C004	CN82	198209--	ESP	Valencia	Valencia	Massamagrell
ESP027	C004	2042	198207--	ESP	Andalucia	Malaga	Cartama
ESP027	C004	CH82	198209--	ESP	Valencia	Valencia	Cullera

LATITU	LONGIT	ALTITU	TIPMAT
393417N	0001946W	14	300
364241N	0043749W	109	300
390959N	0001512W	8	300

Intercomunication between PGRFA DB: a common structure

Main key

	NUMCAT	NOMBAN	NUMBAN	FECADQ	GENERO	ESPECI	NOMLOC	FECREC	PROVIN	MUNICI	
+	NC011925	ESP004	BGE003055	198111--	Triticum	aestivum (L.	Serodio	19810715	Lugo	Friol	Nodar
+	NC011926	ESP004	BGE003056	198111--	Triticum	aestivum (L.	Trigo	19810721	La Coruña	Monfero	Vite, Queixeiro
+	NC011970	ESP004	BGE003102	198111--	Triticum	aestivum (L.	Roxo	19810721	La Coruña	Monfero	Xestoso, San P
+	NC011980	ESP004	BGE003115	198111--	Triticum	aestivum (L.	Grandal	19810714	Lugo	Baleira	Corneas
+	NC012010	ESP004	BGE003146	198111--	Triticum	aestivum (L.	Trigo	19810713	Lugo	Cervantes	Vilarello
+	NC012011	ESP004	BGE003147	198111--	Triticum	aestivum (L.	Trigo do rego	19810717	La Coruña	Toques	Montelen, Para
+	NC012012	ESP004	BGE003148	198111--	Triticum	aestivum (L.	Serodio	19810716	Lugo	Antas de Ulla	Peibas
+	NC012013	ESP004	BGE003149	198111--	Triticum	aestivum (L.	Trigo parron	19810728	Asturias	Cangas del Narcea	Limes
+	NC012020	ESP004	BGE003156	198111--	Triticum	aestivum (L.	Serodio tremesino	19810717	La Coruña	Toques	Moruxousa, A C
+	NC012098	ESP004	BGE003236	198111--	Triticum	aestivum (L.		19800708	Pontevedra	A Estrada	Santeles
+	NC012099	ESP004	BGE003237	198111--	Triticum	aestivum (L.	Trigo	19810722	La Coruña	Mañon	Rosario, As Gra
+	NC012100	ESP004	BGE003238	198111--	Triticum	aestivum (L.	Trigo de santos	19810720	La Coruña	Mazaricos	Vioxo, Chacin
+	NC012101	ESP004	BGE003239	198111--	Triticum	aestivum (L.	Serodio	19810714	Lugo	Castroverde	Riomol
+	NC012564	ESP004	BGE003538	198203--	Triticum	aestivum (L.		19810922	La Coruña	Camariñas	Brea, Xaviña
+	NC012565	ESP004	BGE003539	198203--	Triticum	aestivum (L.		19810923	La Coruña	Ponteceso	Campara, Cores
+	NC012566	ESP004	BGE003540	198203--	Triticum	aestivum (L.	Trigo de campo del pais	19810925	Lugo	Vilalba	Noche, Rabilon
+	NC012567	ESP004	BGE003541	198203--	Triticum	aestivum (L.	Trigo	19810925	Lugo	Vilalba	Mourence
+	NC012568	ESP004	BGE003542	198203--	Triticum	aestivum (L.	Trigo de Agra	19810923	La Coruña	Coristanco	Arixon, Seavia
+	NC012569	ESP004	BGE003543	198203--	Triticum	aestivum (L.	Trigo de campo	19810925	Lugo	Mondoñedo	Aspera, O Carr
+	NC012570	ESP004	BGE003544	198203--	Triticum	aestivum (L.	Trigo del pais	19810922	La Coruña	Zas	Andragalla, Lar
+	NC012571	ESP004	BGE003545	198203--	Triticum	aestivum (L.	Trigo do campo	19810925	Lugo	Cospeito	Rioaveso, Arque
+	NC012572	ESP004	BGE003546	198203--	Triticum	aestivum (L.	Trigo de monte	19810923	La Coruña	Coristanco	Arixon, Seavia
+	NC012614	ESP004	BGE003589	198203--	Triticum	aestivum (L.	Escanda	19810930	Asturias	Quiros	Villamarcel
+	NC012615	ESP004	BGE003590	198203--	Triticum	aestivum (L.	Trigo	19810928	Asturias	Illano	El Pato
+	NC012616	ESP004	BGE003591	198203--	Triticum	aestivum (L.	Trigo	19810928	Asturias	Illano	Cimadevilla
+	NC012617	ESP004	BGE003592	198203--	Triticum	turgidum L.	Trigo	19810929	Asturias	Somiedo	La Peral
+	NC012632	ESP004	BGE003607	198203--	Triticum	aestivum (L.	Trigo	19810929	Asturias	Belmonte de Miranda	Buenamadre
+	NC012633	ESP004	BGE003608	198203--	Triticum	aestivum (L.	Trigo de monte	19811004	Lugo	Monterroso	Salgueiros
+	NC012634	ESP004	BGE003609	198203--	Triticum	aestivum (L.	Trigo Grandal	19811002	Lugo	Navia de Suarna	Rao
+	NC012635	ESP004	BGE003610	198203--	Triticum	aestivum (L.	Serodio	19811002	Lugo	Negueira de Muñiz	Vilaseca
+	NC012636	ESP004	BGE003611	198203--	Triticum	aestivum (L.	Trigo Grandal	19811005	Lugo	Sarria	Reboredo, Sete
+	NC012637	ESP004	BGE003612	198203--	Triticum	aestivum (L.	Trigo tremesino	19811004	Lugo	Outeiro de Rei	Matela
+	NC012638	ESP004	BGE003613	198203--	Triticum	aestivum (L.	Trigo	19811003	Lugo	O Corgo	San Estevo, Fol
+	NC012639	ESP004	BGE003614	198203--	Triticum	aestivum (L.	Trigo Grandal	19811004	Lugo	Outeiro de Rei	Matela
+	NC012640	ESP004	BGE003615	198203--	Triticum	aestivum (L.	Marciño	19811004	Lugo	Monterroso	Salgueiros

Registro: 1 de 3326 (Filtrado)

MINISTERIO DE ECONOMÍA Y COMPETITIVIDAD

INIA Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria

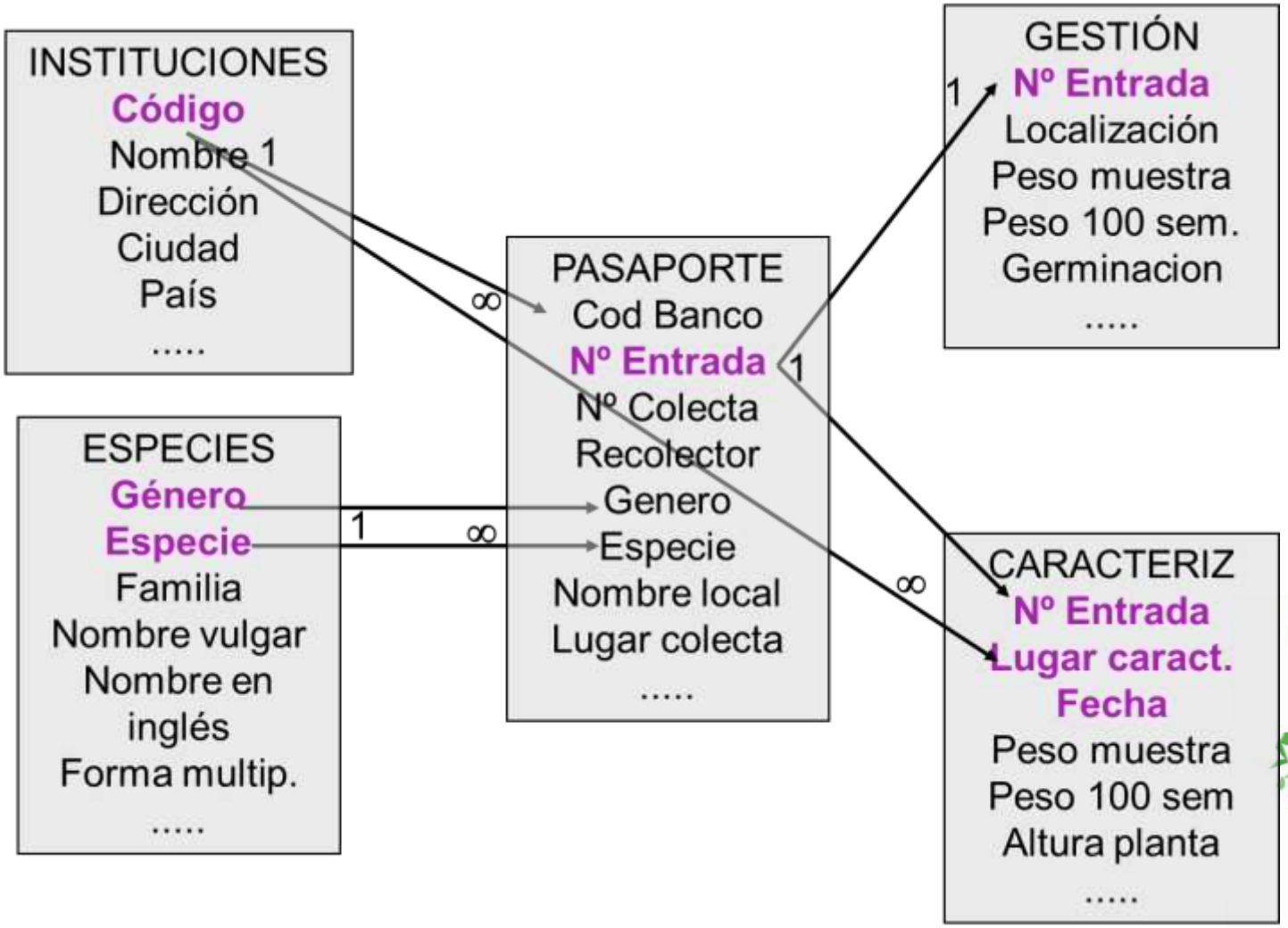
Intercomunication between PGRFA DB: a common structure

Repeated information?

PASAPORTE										
NUMCAT	ESTADO	NOMBAN	NUMBAN	FECADQ	NOMBA1	NUMBA1	FECAD1	NOMBA2	NUMBA2	FECAD2
NC020020	C	ESP004	BGE046958	20140603						
NC020021	C	ESP004	BGE013228	199001--						
NC020022	C	ESP004	BGE022345	1993----	ESP027	BGHZ2878				
NC020023	C	ESP004	BGE031910	2000----	ESP027	BGHZ2476		ESP026	BGV010334	
NC020024	C	ESP004	BGE045762	20130529	ESP027	BGHZ5577				
NC020025	C	ESP004	BGE014476	199009--	ESP026	BGV010335				
NC020026	C	ESP004	BGE021314	1993----	ESP027	BGHZ0983		ESP026	BGV010336	
NC020027	C	ESP004	BGE022173	1993----						
NC020028	C	ESP004	BGE013276	199001--	ESP027	BGHZ0389		ESP026	BGV010337	
NC020029	E									
NC020030	C	ESP004	BGE014430	199009--	ESP026	BGV010338				
NC020031	C	ESP004	BGE014426	199009--	ESP027	BGHZ0966		ESP026	BGV010339	
NC020032	E									
NC020033	C	ESP004	BGE044563	20120326	ESP027	BGHZ5143				
NC020034	C	ESP004	BGE014448	199009--	ESP026	BGV010340				
NC020035	C	ESP004	BGE013383	199002--	ESP026	BGV008691		ESP027	D-000474	
NC020036	C	ESP004	BGE015441	199012--	ESP026	BGV010341				
NC020037	C	ESP004	BGE020783	1992----						

Passport Data

CRF has developed a Relational Database Management System using Access



Publication online is responsibility of INIA's informatics services

Informatics' technologies.

- Data bases **SQL Server 2005**,
- Web development standards **.NET, .ASP**
- Outbound mail gateway **JavaBeans.**
- Metadata for search engine indexing **Schema.org.**
- Genebank map **API Google Maps .**
- Web hosted at **INIA’**s servers**.**
- Internet connection using **RedIris.**

By Jorge García

http://wwwx.inia.es/inventarionacional/

http://wwwx.inia.es/inventarionacional/Introduccioneng.asp

Inventario Nacional de Recursos Fitogenéticos

Contact | Participating Institutions

Introduction | Passport Data | Characterization Data | Bibliography | SIERFE

The rational conservation of plant genetic resources starts with the study of the existing diversity and the consistent arrangement of the associated data. The availability and dissemination of germplasm-related information facilitates the access, management and use of plant genetic resources. These aspects are fully reflected in the FAO's Second Global Plan of Action for plant genetic resources for food and agriculture, of which one priority activity area calls for the *Construction and strengthening of comprehensive information systems for plant genetic resources for food and agriculture.*

In Spain, the National Program for the Conservation and Use of Plant Genetic Resources, established through a Ministerial Order on 23 April 1993 (Official State Bulletin 7 May), as well as the Action Plans approved to date, include among their priority areas the development of an Inventory of the *ex situ* collections of the National Network.

Since 1994, the National Plant Genetic Resource Center (CRF), as part of its work as documentation hub of the plant genetic resources conserved in the National Network, develops, publishes and keeps updated the National Inventory of the collections participating in the Program.

In this website you can search through the passport data of all materials conserved in the Network of collections and find the contact information of the responsible institutions.

Stop Slides

Updated February 2015 27126

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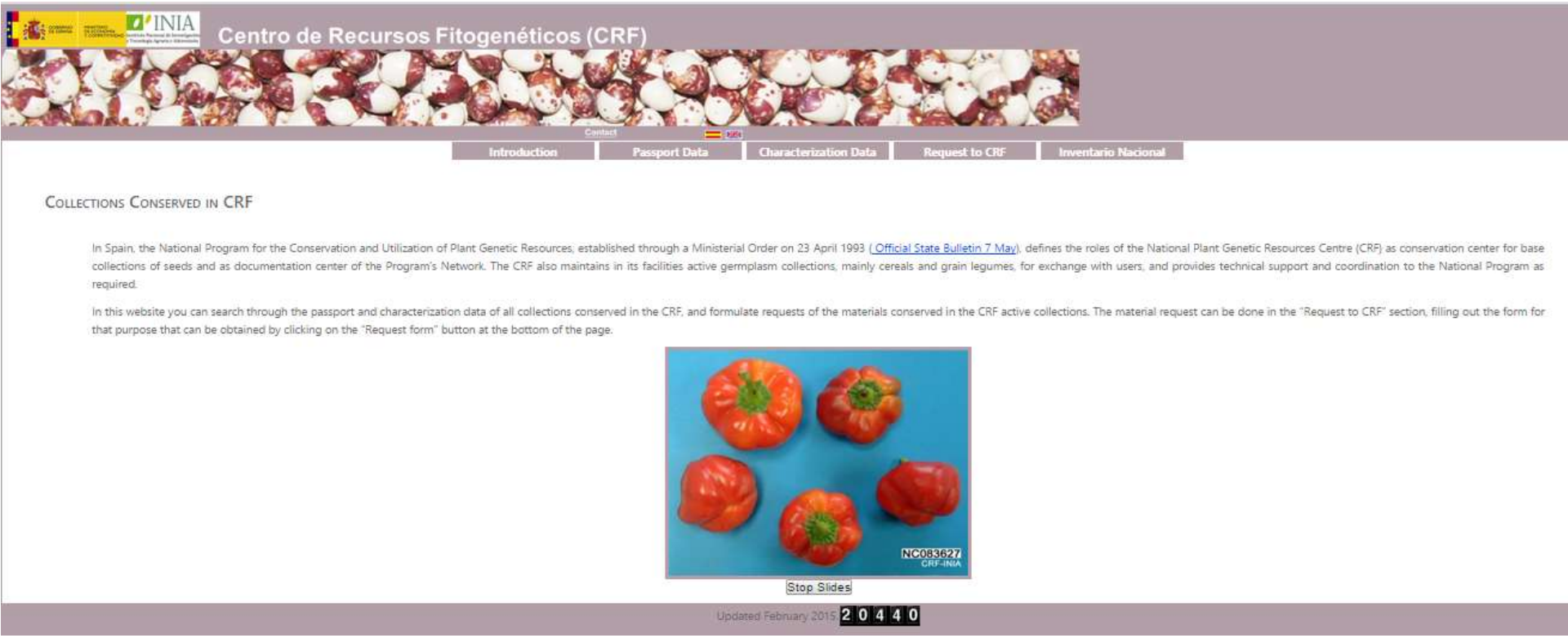
http://wwwx.inia.es/coleccionesCRF/

http://wwwx.inia.es/coleccionescrf/BancoCRFeng.asp



Others database on line: *Hordeum* core colection,

Phaseolus vulgaris core colection

Splikes collection

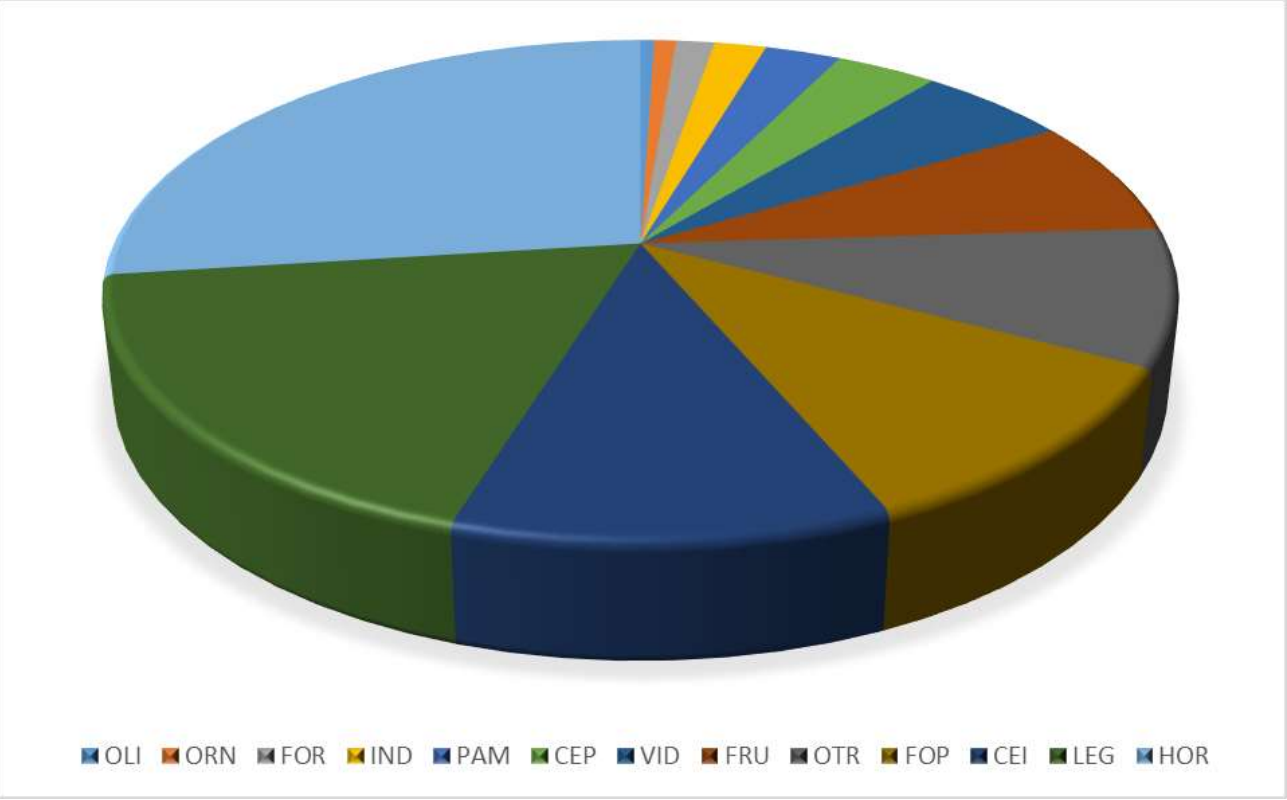
By Jorge García

The Spanish National Inventory in numbers

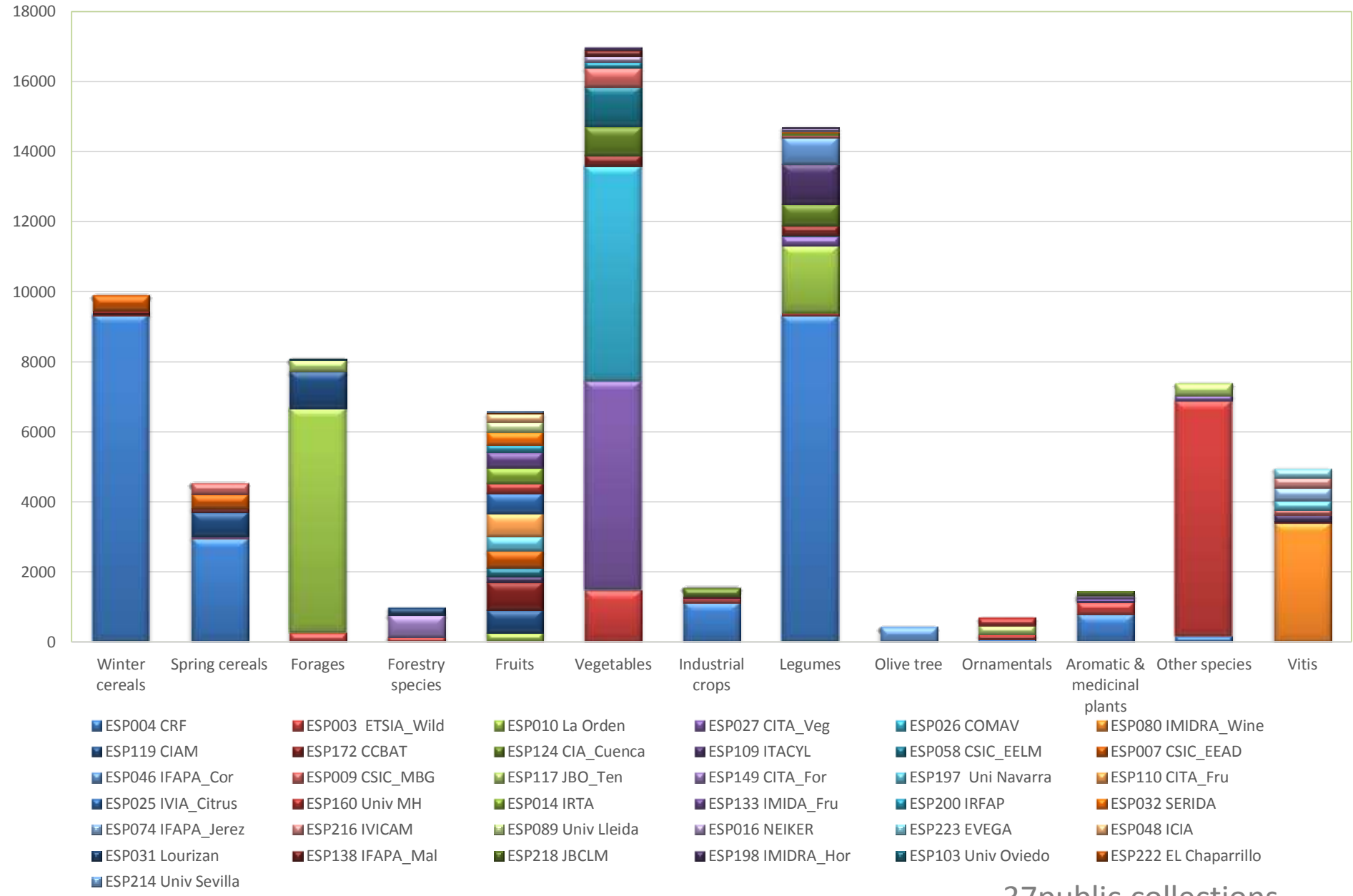
Total Accessions number		87487	100%
Conserved material	Seeds	74466	85%
	Field collection / *in vitro*	13021	15%
Taxonomy	Number of genus	1029	
	Number of species	4025	
	20 first species	42745	
	100 first species	69435	
N. CWR	Crop wild relatives	14272	16,30%
N. Countries of origen		141	
Country of origen Spain		63631	72,70%
Spanish landraces		39675	45,30%

The Spanish National Inventory in numbers

Group	N. access	%
OLI	432	0,49%
ORN	692	0,79%
FOR	1215	1,40%
IND	1640	1,88%
PAM	2400	2,75%
CEP	3210	3,67%
VID	4773	5,46%
FRU	6601	7,65%
OTR	7698	8,71%
FOP	9406	10,70%
CEI	9786	11,20%
LEG	15904	18,20%
HOR	23584	27%



The Spanish National Inventory in numbers



37public collections

C&E data

Few information on line

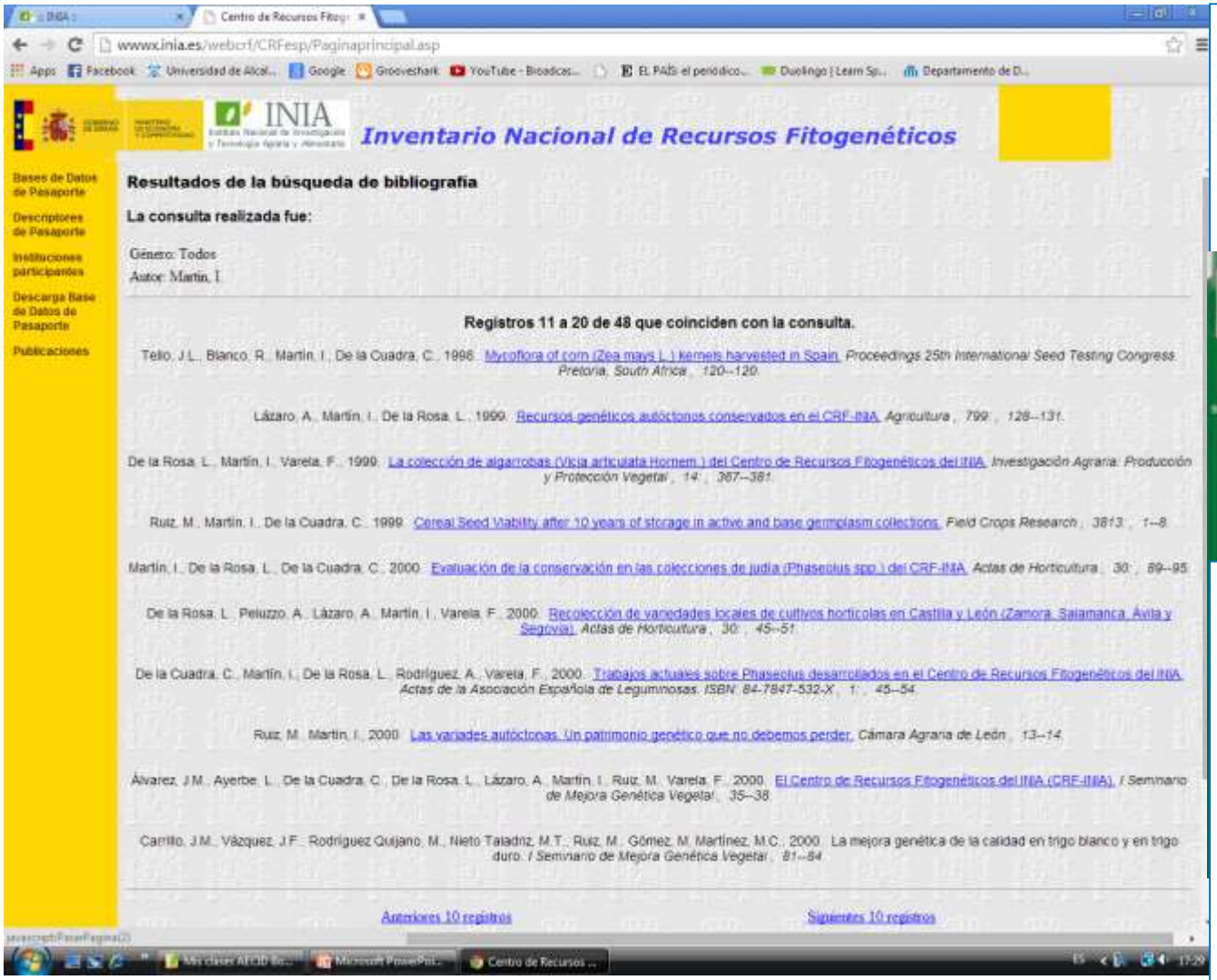
Species or species group	N of characterized accesions	N of descriptors used
Avena spp.	527	17
Hordeum vulgare	461	19
Triticum sps.	1.987	13
Lathyrus cicera	186	22
Lathyrus sativus	120	18
Lens culinaris	230	16
Phaseolus vulgaris - CN	202	26
Phaseolus vulgaris - Seed	2.832	15
Pisum sativum	277	22
Pisum sativum	130	6
Vicia articulata	78	13
Vicia ervilia	213	24
Vicia sativa	494	41

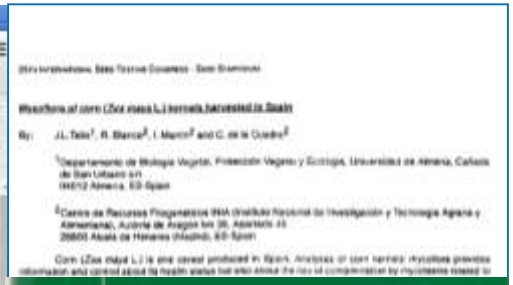
The biggest problema: the availability of data (or their lack)

C&E data


www.comav.upv.es/index.php/es/introbanco-es
Instituto de Conservación y Mejora de la Agrodiversidad Valenciana (COMAV)
Usuario
sites.cita-aragon.es/BGHZ/
Banco de Germoplasma de Especies Hortícolas de Zaragoza
iMiDRA
Instituto Madrileño de Investigación y Desarrollo Rural, Agrario y Alimentario
La Suma de Todos
Comunidad de Madrid
www.madrid.org
Inicio
La ColecciÃ³n
Historia
Equipo
Base de Datos
Martes, 30 Septiembre 2014
buscar...
Advanced Search
Colección de Variedades de Vid

C&E data


www.inia.es/webcrf/CRFesp/Paginaprincipal.asp
Inventario Nacional de Recursos Fitogenéticos
Bases de Datos de Pasaporte
Descriptores de Pasaporte
Instituciones participantes
Descarga Base de Datos de Pasaporte
Publicaciones
Resultados de la búsqueda de bibliografía
La consulta realizada fue:
Género: Todos
Autor: Martín, I.
Registros 11 a 20 de 48 que coinciden con la consulta.
Tello, J.L., Blanco, R., Martín, I., De la Cuadra, C., 1998. Mycoflora of corn (Zea mays L.) kernels harvested in Spain. Proceedings 25th International Seed Testing Congress. Pretoria, South Africa, 120--120.
Lázaro, A., Martín, I., De la Rosa, L., 1999. Recursos genéticos autóctonos conservados en el CRF-INIA. Agricultura, 799, 128--131.
De la Rosa, L., Martín, I., Varela, F., 1999. La colección de algarrobas (Vicia articulata Hornem.) del Centro de Recursos Fitogenéticos del INIA. Investigación Agraria: Producción y Protección Vegetal, 14, 367--381.
Ruiz, M., Martín, I., De la Cuadra, C., 1999. Cereal Seed Viability after 10 years of storage in active and base germplasm collections. Field Crops Research, 3813, 1--8.
Martín, I., De la Rosa, L., De la Cuadra, C., 2000. Evaluación de la conservación en las colecciones de judía (Phaseolus spp.) del CRF-INIA. Actas de Horticultura, 30, 89--95.
De la Rosa, L., Peluzzo, A., Lázaro, A., Martín, I., Varela, F., 2000. Recolección de variedades locales de cultivos hortícolas en Castilla y León (Zamora, Salamanca, Ávila y Segovia). Actas de Horticultura, 30, 45--51.
De la Cuadra, C., Martín, I., De la Rosa, L., Rodríguez, A., Varela, F., 2000. Trabajos actuales sobre Phaseolus desarrollados en el Centro de Recursos Fitogenéticos del INIA. Actas de la Asociación Española de Leguminosas. ISBN: 84-7847-532-X, 1, 45--54.
Ruiz, M., Martín, I., 2000. Las variedades autóctonas. Un patrimonio genético que no debemos perder. Cámara Agraria de León, 13--14.
Álvarez, J.M., Ayerbe, L., De la Cuadra, C., De la Rosa, L., Lázaro, A., Martín, I., Ruiz, M., Varela, F., 2000. El Centro de Recursos Fitogenéticos del INIA (CRF-INIA). I Seminario de Mejora Genética Vegetal, 35--38.
Carrillo, J.M., Vázquez, J.F., Rodríguez Quijano, M., Nieto Taladriz, M.T., Ruiz, M., Gómez, M., Martínez, M.C., 2000. La mejora genética de la calidad en trigo blanco y en trigo duro. I Seminario de Mejora Genética Vegetal, 81--84.
Anteriores 10 registros
Siguientes 10 registros


Mycoflora of corn (Zea mays L.) kernels harvested in Spain


30
ACTAS DE HORTICULTURA
Comunicaciones Técnicas
Sociedad Española de Ciencias Hortícolas
XII JORNADAS DE SELECCIÓN Y MEJORA


FIELD CROPS RESEARCH
Cereal seed viability after 10 years of storage in active and base germplasm collections

CHALLENGERS

To keep the passport information updated

To continue improving the data quality

To make available C&E data from other instutions, not only those of CRF