



**“Contribution of the Spanish  
Vegetable Genebank BGHZ-  
CITA to crop diversification”**

CENTRO DE INVESTIGACIÓN Y TECNOLOGÍA  
AGROALIMENTARIA DE ARAGÓN

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**CROP DIVERSIFICATION IN A CHANGING WORLD** EUCARPIA

Mobilizing the green gold of plant genetic resources  
Montpellier, France, 08-11 May 2017



# The Spanish Vegetable Genebank BGHZ-CITA

CENTRO DE INVESTIGACIÓN Y TECNOLOGÍA AGROALIMENTARIA DE ARAGÓN

## Collection:

17425 accessions  
Spanish vegetable landraces and crop wild relatives



## Conservation:

Stored as dry seed (silicagel) at -18°C



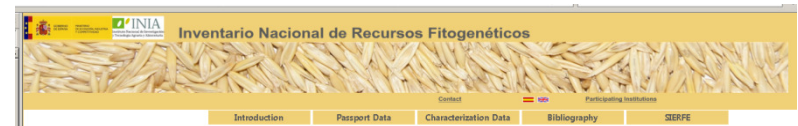
## Information:

**WEB BGHZ**

<http://bghz.cita-aragon.es/>

**Spanish National Inventory**

<http://www.inia.es/inventarionacional/>



**Eurisco Databases**

<http://eurisco.ipk-gatersleben.de>



**FAO Code: ESP027**

**Banco de Germoplasma de Especies Hortícolas**



Código BGHZ	Número de inventario (NC)	Nombre local	Nombre común	Familia	Género	Especie	Nombre común	Nombre local	Localidad	Municipio	Provincia
NC19871				Moraceae		Alnus incana L.	Castaño	Castaño chata	Finca 5, km 14 de Corbisa	Castaño de Reo	Pontevedra



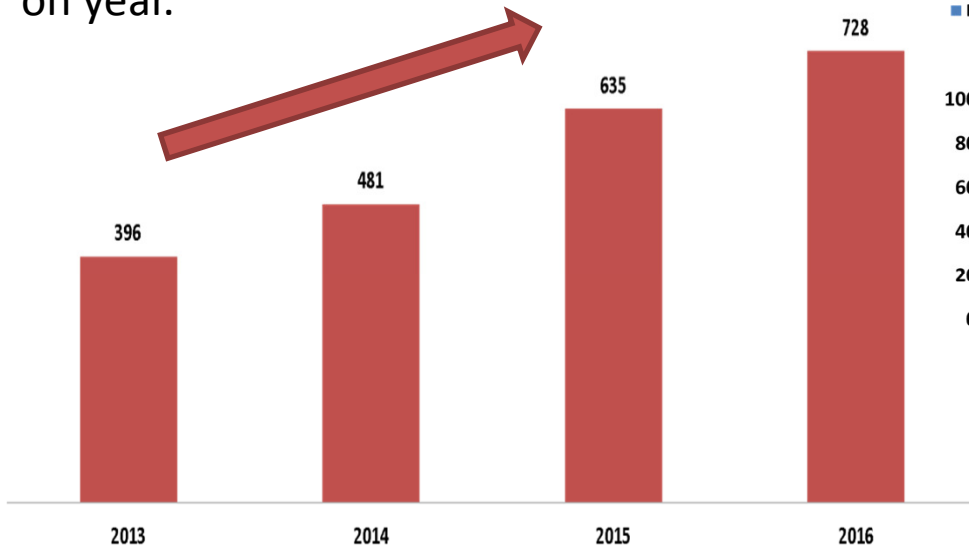
# Contribution to crop diversification: I. Seed distribution

## CENTRO DE INVESTIGACIÓN Y TECNOLOGÍA AGROALIMENTARIA DE ARAGÓN



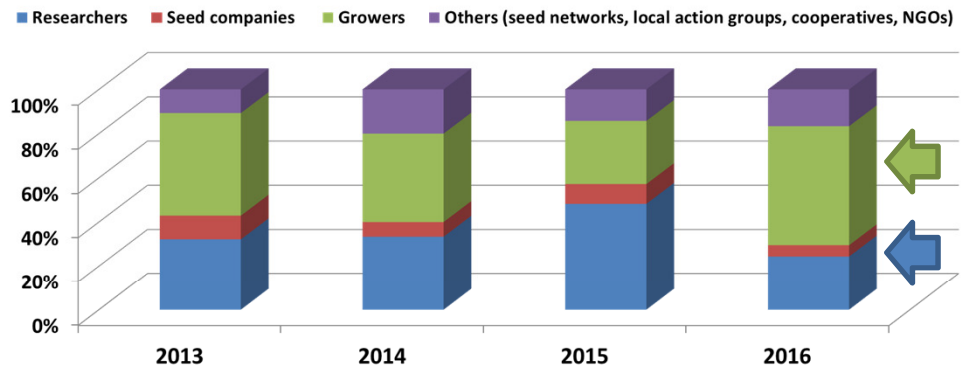
### Seed samples provided:

Request are increasing year on year.



### Germplasm users:

- The genebank provides seeds to researchers, breeders and growers interested in vegetable crops.
- Most of the accessions are used by:
  - Researchers/breeders: to search for valuable traits (quality aspects of disease and pest resistance) ←
  - Farmers: interested in local adaptation and quality. ←



- The requests include different vegetable species and CWR (56 species in 2016)

# Contribution to crop diversification: II. Valorization of landraces

## CENTRO DE INVESTIGACIÓN Y TECNOLOGÍA AGROALIMENTARIA DE ARAGÓN

### PARTICIPATORY VARIETAL SELECTION PROGRAMS

#### Stakeholders

- Farmers
- Seed growers
- Small enterprises
- Agricultural research institutes (Genebank)
- Seed networks
- Local groups
- Cooperatives
- NGOs...

#### 'Tomate Rosa de Barbastro'



#### Remarkable results

- This landrace has been registered as a Conservation Variety.
- Selected seeds are being commercialized by a local cooperative

#### *Solanum lycopersicum L.*



#### 'Cebolla Dulce de Fuentes'



#### Remarkable results

- The studies have contributed to obtain the Protected Designation of Origin (PDO) quality mark.
- Nowadays growers use the seeds from the low pungency breeding program.

#### *Allium cepa L.*



#### 'Judía Caparrona de Monzón'



#### Remarkable results

- A Local Growers Association has been established.
- Growers have access to high quality seeds selected from local populations

#### *Phaseolus vulgaris L.*



#### 'Borraja de Flor Blanca'



#### Remarkable results

- 'Movera', a variety with delayed bolting, has been selected from white-flowered local populations.
- 'Movera' is the most cultivated variety by local growers.

#### *Borago officinalis L.*





**Thank you very much  
for your attention**

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*Other sources of variability are waiting to be explored...*

