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

Cristina Mallor, Ángeles Vela, Aurora Díaz

Centro de Investigación y Tecnología Agroalimentaria de Aragón (CITA). Instituto Agroalimentario de Aragón (IA2) (CITA - Universidad de Zaragoza). Avda. Montañana 930. 50059 Zaragoza. Spain

### CROP DIVERSIFICATION IN A CHANGING WORLD EUCARPIA Mobilizing the green gold of plant genetic resources

Montpellier, France, 08-11 May 2017







 ${f T}$ he Spanish genebank BGHZ was founded in 1981 and holds a collection of 17425 accessions belonging to more than 300 vegetable species, mainly of Spanish landraces/farmers' varieties, but also crop wild relatives and neglected and underutilized species. Information about stored accessions is available in the Spanish National Inventory and EURISCO databases (FAO code: ESP027).







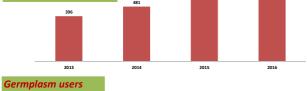


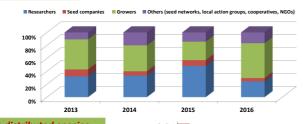
## **Plant Genetic Resources Use System**

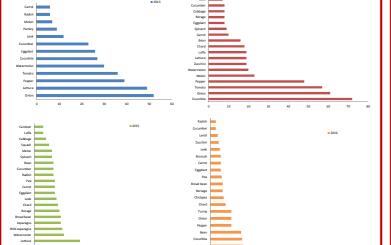
The BGHZ is an active bank that contributes to crop diversification by attending to genetic resources requests from researches, plant breeders and farmers, as well as carrying out specific projects for studying and promoting the use of interesting landraces.

## Seed distribution

# The BGHZ provides seeds to researchers, breeders and growers interested in vegetable crops Seed samples provided







The requests are increasing year on year and include a great number of important vegetable species, but also minor crops. Most of these accessions are used by breeders and researchers to search for valuable traits related to quality aspects or disease and pest resistance. Farmers are also interested in growing these varieties due to their quality and local adaptation, associated in some cases with traditional farming systems'

# Valorization of landraces

Participatory varietal selection programs have been carried out with tomato, borage, bean and onion landraces among others. In all these programs the needs of farmers are identified by discovering what crops and varieties they grow and/or are conserved in the BGHZ seed bank, and what traits they consider important to be improved.

The characterization and selection activities have been carried out involving different groups of stakeholders including farmers, seed growers, small enterprises, agricultural research institutes, including the staff of the genebank, and other entities (seed networks, local action groups, cooperatives, NGOs, etc.)



registered as a nservation Variety Selected seeds are being rcialized by a lo



## delayed bolting, has been

selected from white ariety by local growers



### The studies have contributed t obtain the Protected

breeding program.

Designation of Origin (PDO) qualitym ark . Nowadays growers use the seeds from the low pungency



## A Local Growers Growers have access to









### **ACKNOWLEDGMENTS**







