



# CRF GRAIN LEGUMES COLLECTION FOR EVA

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*ForEVA – Fostering the need of implementation of the ECPGR's European Evaluation Network (EVA) on Grain legumes*

*10-11 October 2023, Bucharest, Romania*



# The Spanish National Plant Genetic Resources Center

*The National Institute for Agricultural and Food Research and Technology (INIA)*  
*The Spanish National Research Council (CSIC)*



Alcalá de Henares, Madrid (Central Spain)

## Objectives:

- Conservation of seed base collection of the National PGRFA Network. (article 50, Law 30/2006)
- Management and publication of the National Inventory of the National Network (article 50, Law 30/2006)
- Coordination of the National Network and International activities (European Cooperative Programme for Plant Genetic Resources....)
- Support and Assessment of National Action Plans for PGRFA
- Conservation and characterization of active collections: cereals, **grain legumes** and industrial crops



# The Spanish National Plant Genetic Resources Center



**INCREASE:** Intelligent collections of Food Legumes Genetic Resources for European Agrofood Systems



**GREVISA:** Genetic Resources of *Vicia sativa* for a Sustainable Agriculture



**INTERNAL PROJECT**  
Conservation and documentation activities of germplasm collections



**RESUENA:** Using sensors to support the introduction of legumes for improving the sustainability of Spanish rotation by enhancing efficiency of nitrogen and water use



Spanish Legumes Association



<https://releg.csic.es/>  
[@RELEG\\_2023](#)

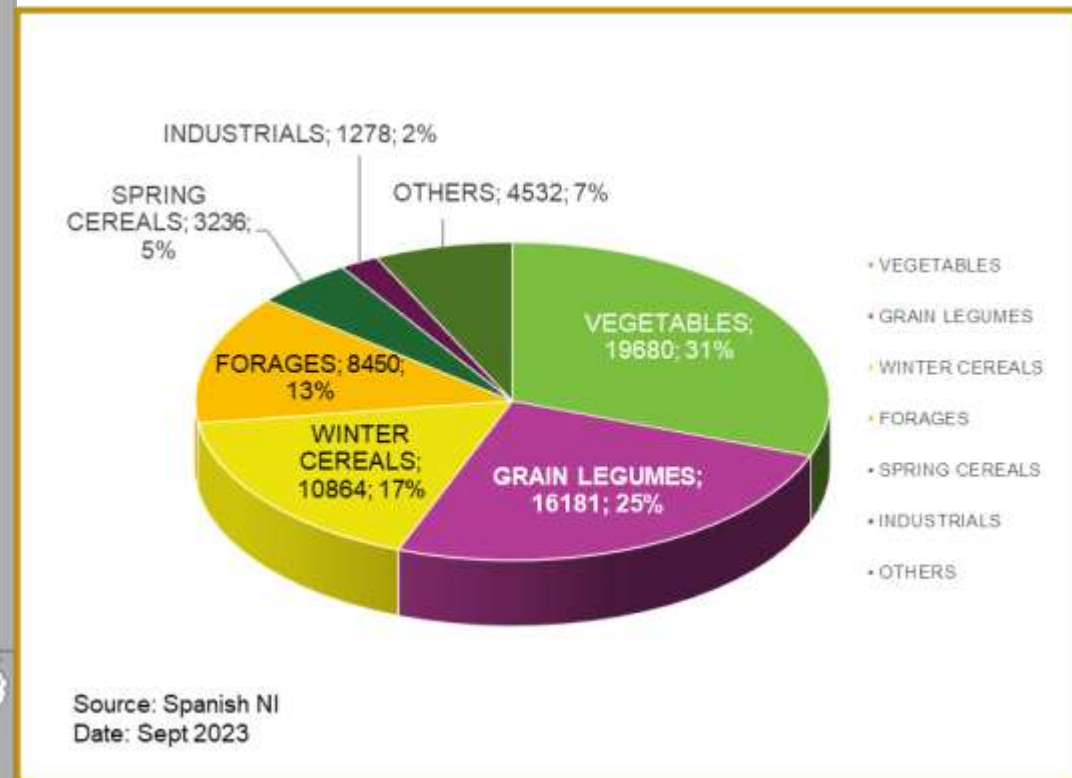
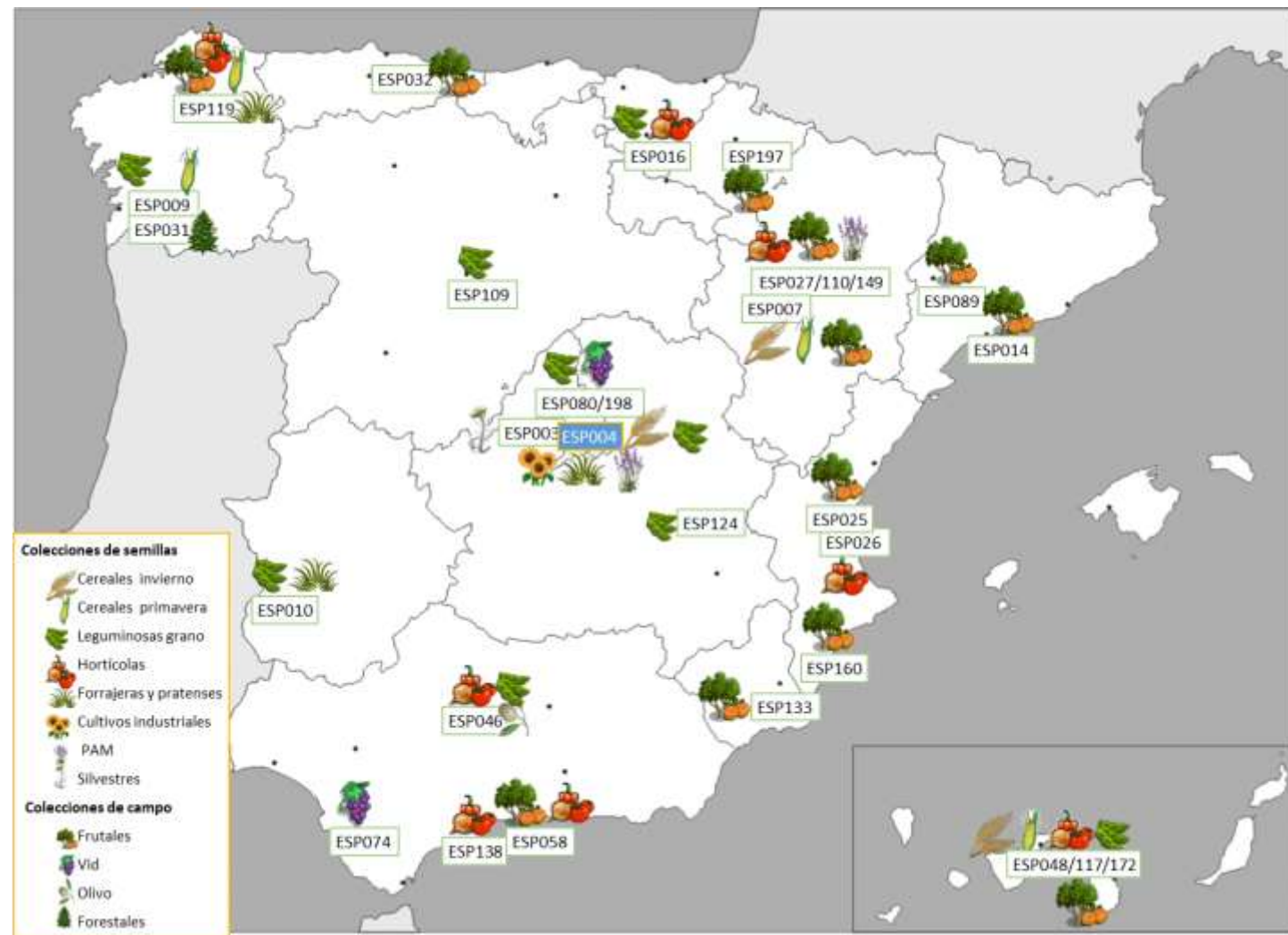


# Spanish PGR collections



CRF Passport data: 101127 acc  
 EURISCO: 79949 acc

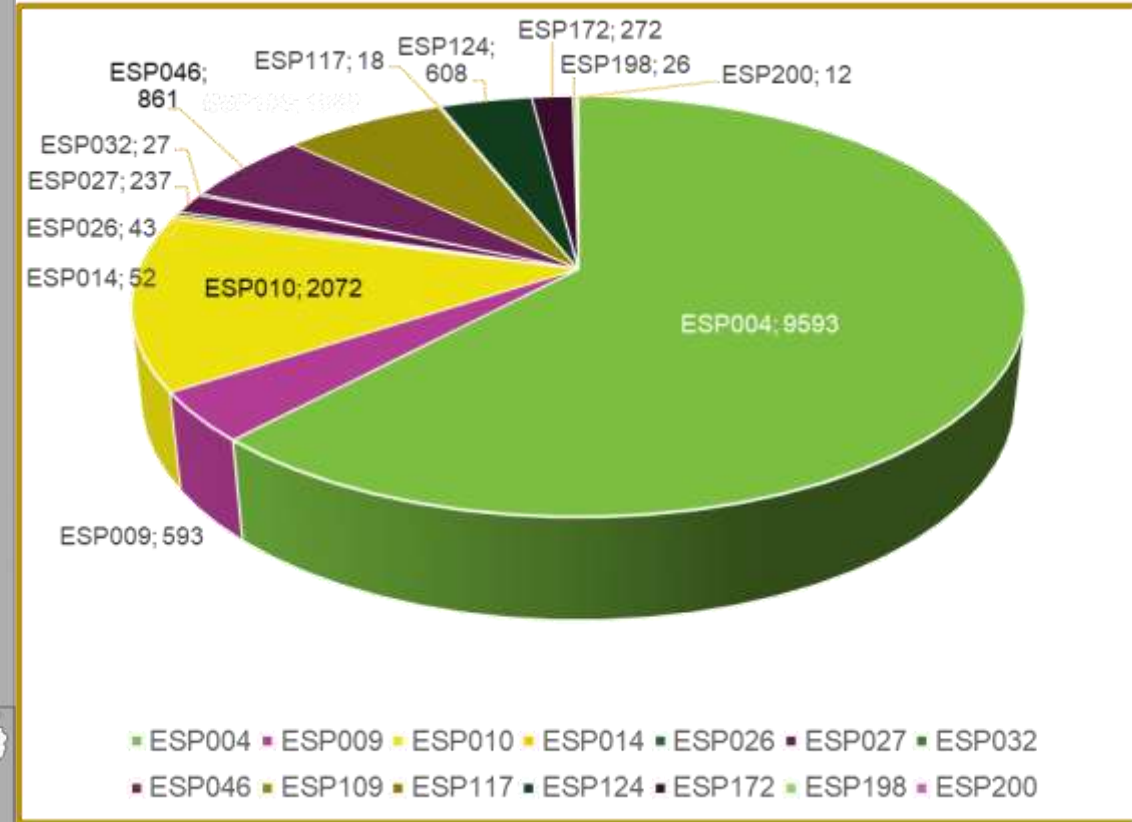
Grouped by crops



# Spanish GL collections

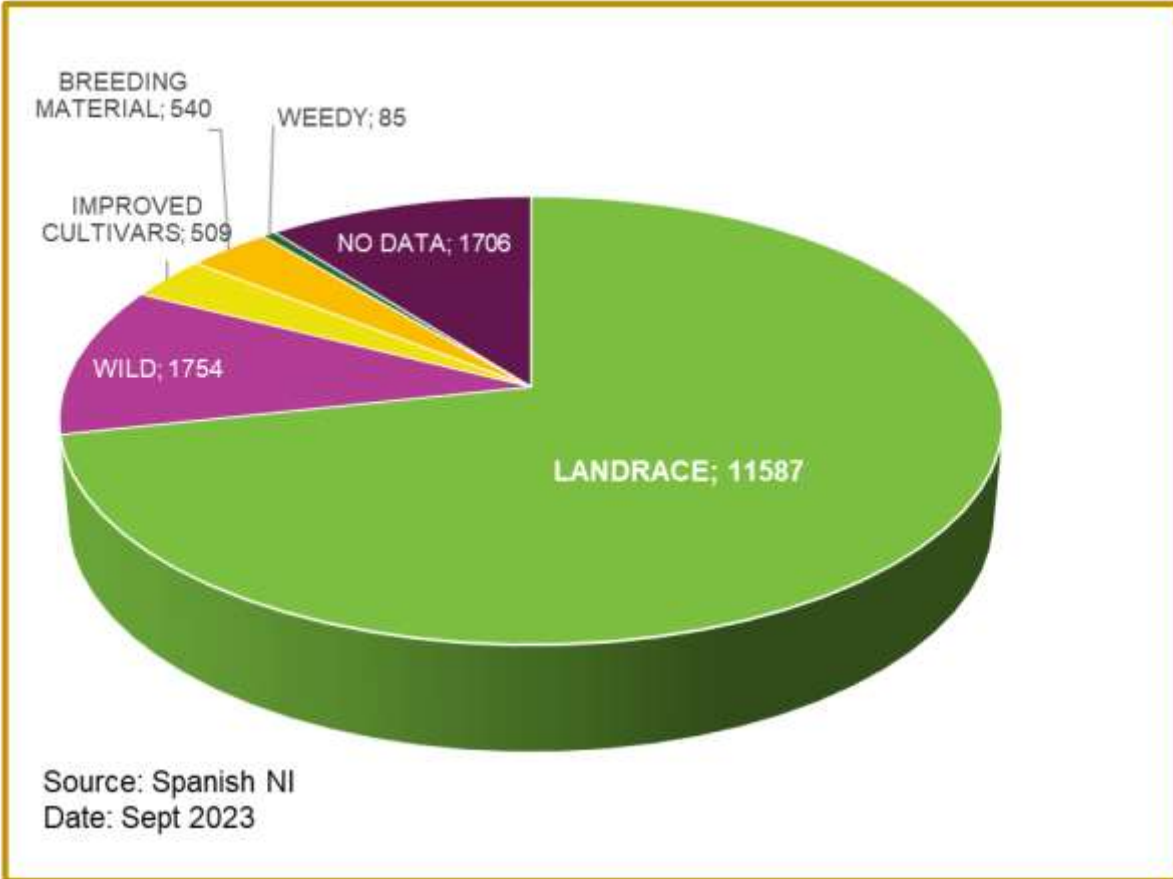


Grouped by holding institutions

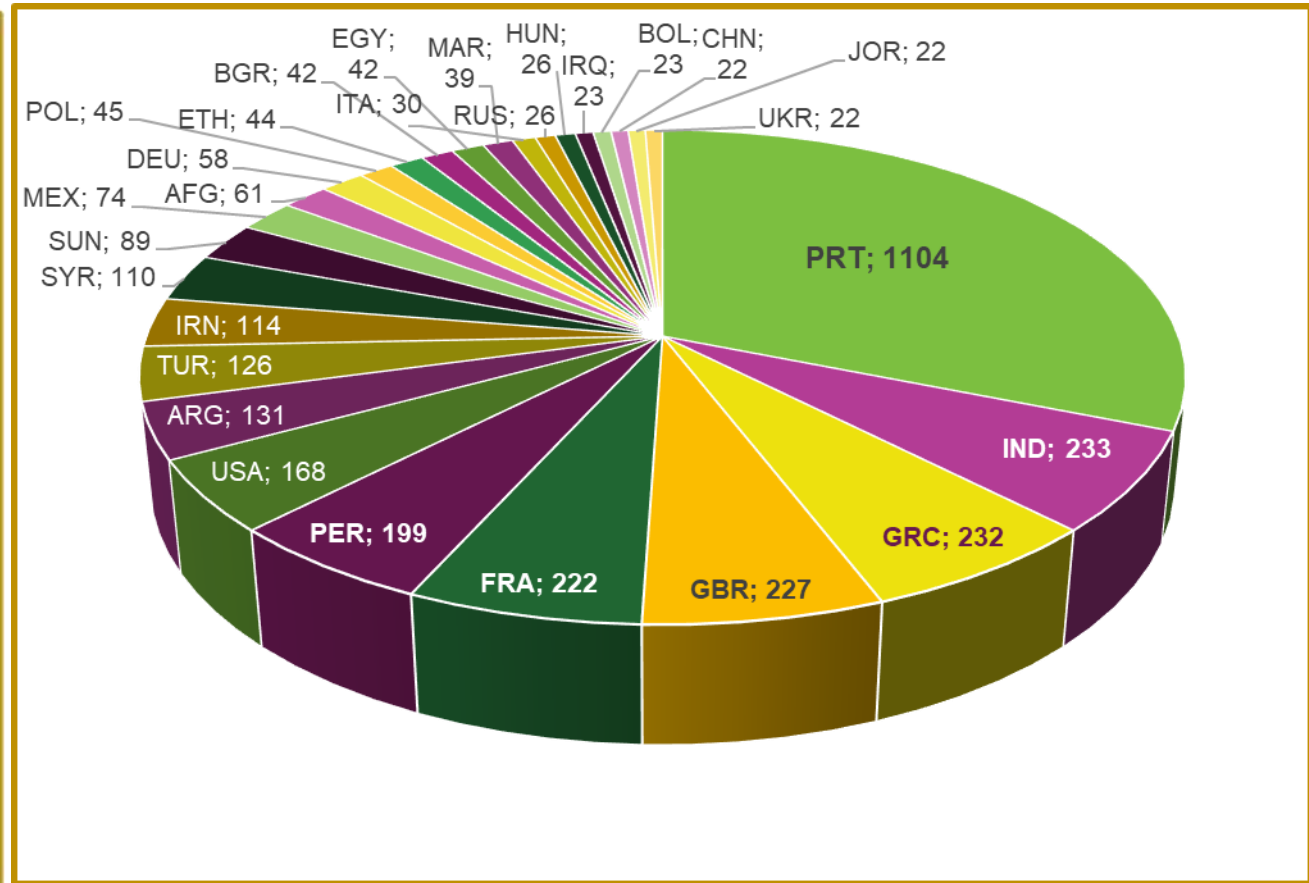


# Spanish GL collections

Grouped by biological status

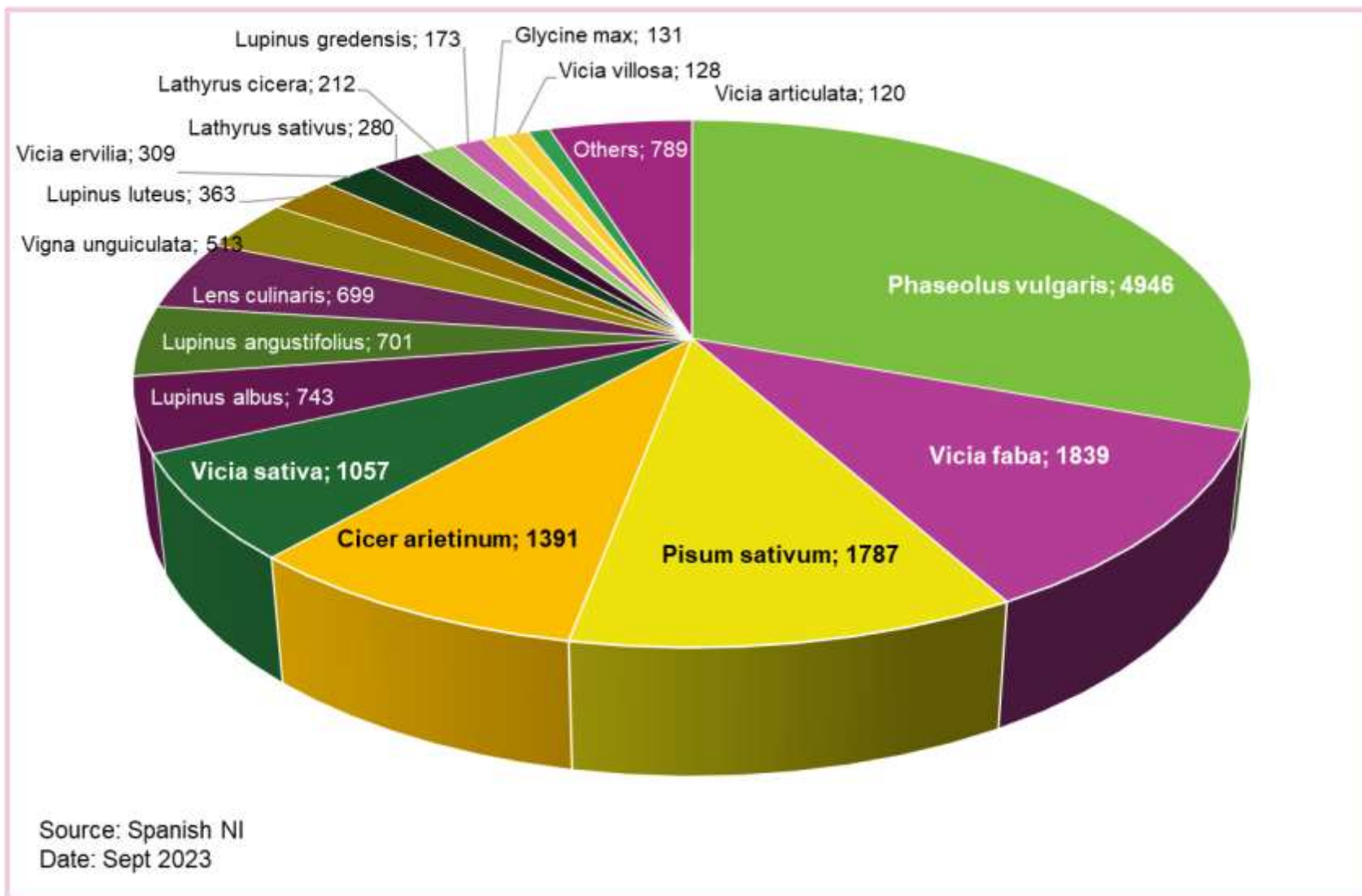


Grouped by country of origin



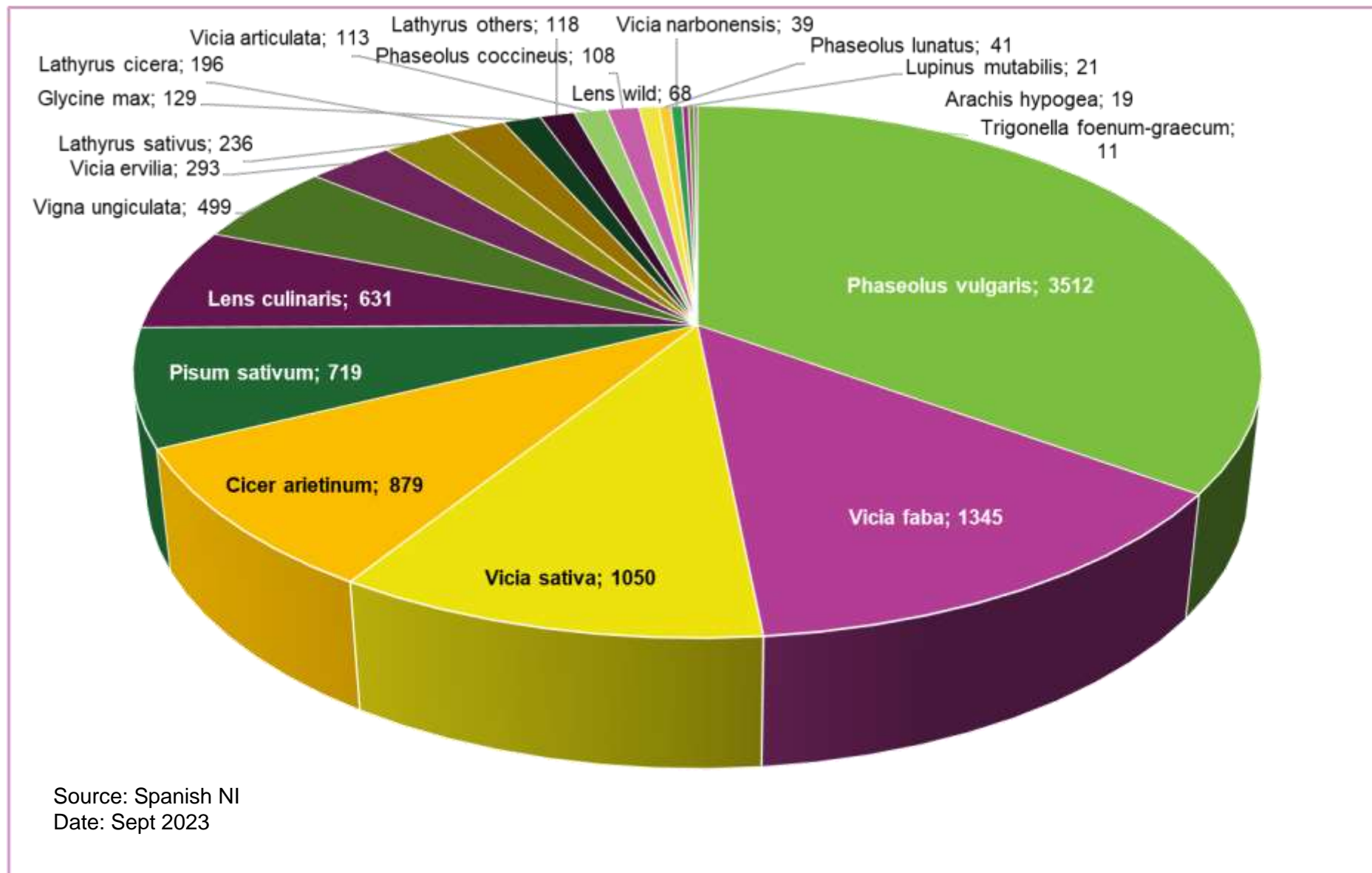
# Spanish GL collections

Grouped by species



# CRF GL collections

Grouped by species



Source: Spanish NI  
Date: Sept 2023





# CRF GL collections

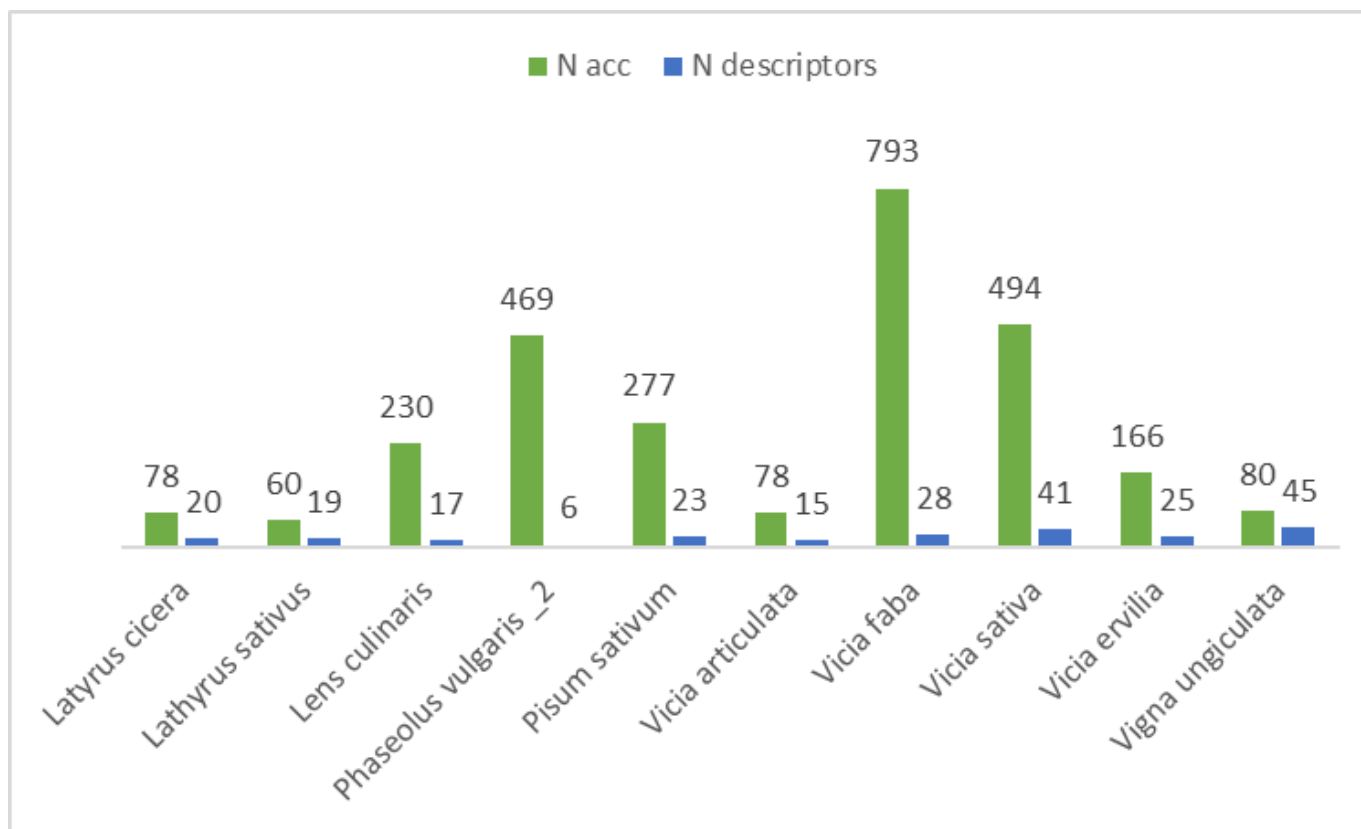
- CRF current activities includes regeneration and C&E of GL
- Traditionally, we have carried out the phenotyping of this material following international descriptor lists
- *Vicia sativa*, molecular markers (SSR, SNP), reserve proteins, root architecture and phenotyping with traits related with drought tolerance
- *Vicia ervilia*, *V articulata*, *V monantha*: molecular data
- *Lens culinaris* and *Cicer arietinum*, INCREASE' Multilocation field trials
- Interesting collections of Lupins sps available in the Spanish PGR Network
- Availability of SSD lines for some species
- Spain do not have a central repository with PGR information but it is possible to get it the former web site an in the scientific literature

**Materials are available under the Multilateral Systems with the SMTA.**





[https://webx.inia.es/web\\_coleccionescrf/CaracterizacionCRFeng.asp](https://webx.inia.es/web_coleccionescrf/CaracterizacionCRFeng.asp)



# Expectations from EVA legumes



## Expectations

- To have access to a big amount of GL diversity and the possibility to compare its behaviour with local material.
- Interest focused on GL for dry lands (AGROSA: *Crotalaria juncea*, *Onobrychis viciifolia*, *Pisum sativum*, *V. ervilia*)
- **Constraints**
  - Quantity of material needed for easy (mechanized) trials
  - Lack of specialized staff
- **Ways to cooperate/experience with PPP**
  - AGROSA SL, SECEBALSA, and other seeds companies
  - PGRFA users



Thank you!

