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

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

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

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Spanish Legumes Association

[https://releg.csic.es/](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

NO DATA: 1706
IMPROVED CULTIVARS: 509
BREEDING MATERIAL: 540
WEEDY: 85
WILD: 1754
LANDRACE: 11587

Source: Spanish NI
Date: Sept 2023

Grouped by country of origin

PRT; 1104
GBR; 227
GRC; 232
IND; 233
USA; 168
ARG; 131
TUR; 126
IRN; 114
POL; 45
ETH; 44
DEU; 58
MEX; 74
AFG; 61
SUN; 89
SYR; 110
BOL; CHN; 22
JOR; 22
UKR; 22
EGY; 42
MAR; 39
RUS; 26
IRQ; 23
HUN; 26
BGR; 42
ITA; 30

Spanish GL collections

Grouped by species

Source: Spanish NI
Date: Sept 2023
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
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!