



**THE GRAIN LEGUMINOUS COLLECTION  
PRESERVED AT  
PLANT GENETIC RESOURCES BANK  
„MIHAI CRISTEA” SUCEAVA**

Paula-Maria GALAN

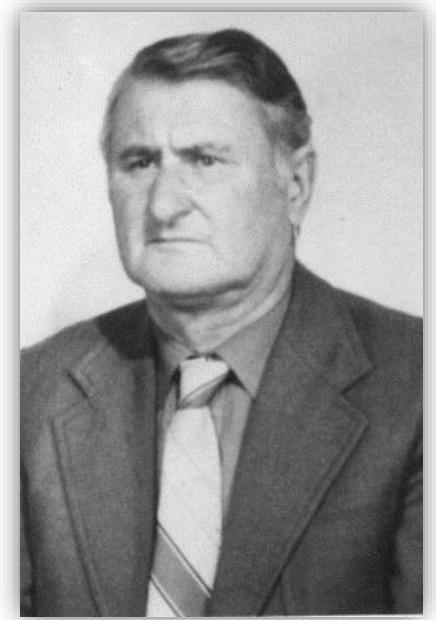
Livia-Ioana LEȚI

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

*10-11 October 2023, Bucharest, Romania*



# BRGV Suceava Presentation of Suceava GeneBank



**Dr. Eng. MIHAI CRISTEA**  
founder of Suceava GeneBank

*Collecting samples*



# BRGV Suceava Presentation of Suceava GeneBank

Viability Laboratory



**BRGV** Suceava **Presentation of Suceava GeneBank**

*Experimental field*





**over 27.000 accessions**

# BRGV Suceava Presentation of Suceava GeneBank

Basic collection (-20°C)



**BRGV** Suceava **Presentation of Suceava GeneBank**

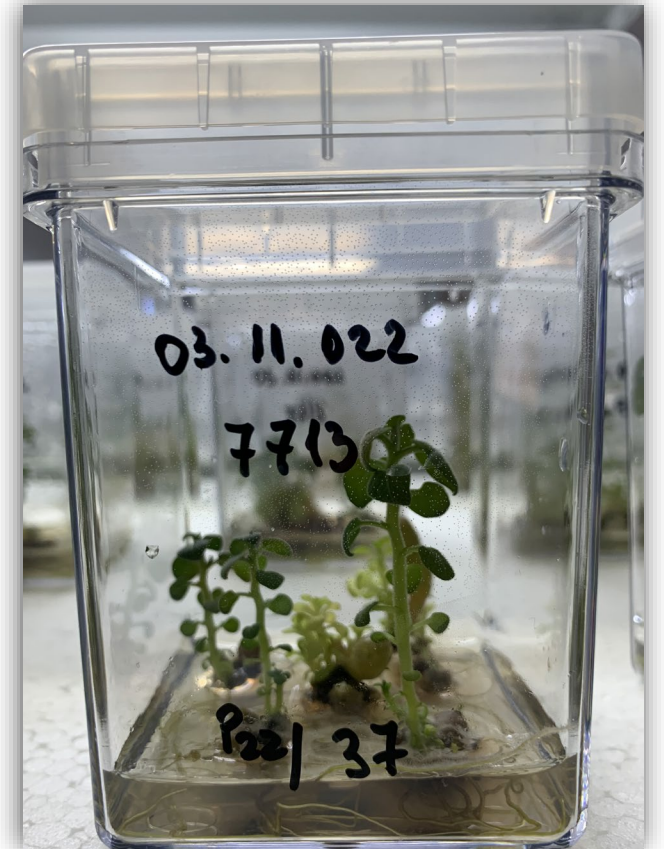
*Active collection (+4°C)*





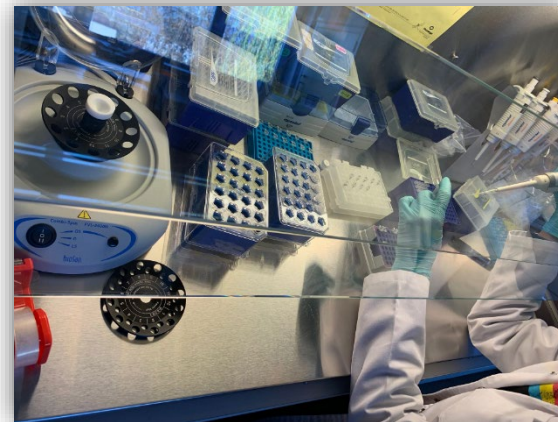
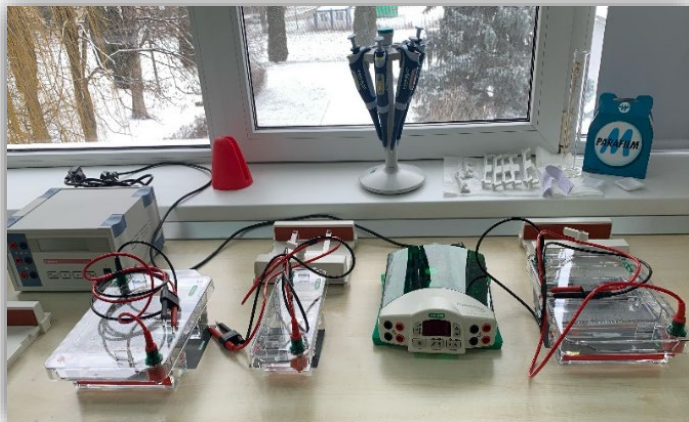
# BRGV Suceava Presentation of Suceava GeneBank

*In vitro* Laboratory



# BRGV Suceava Presentation of Suceava GeneBank

Laboratory of Molecular Biology





# Presentation of Suceava GeneBank

Herbarium



## The most important projects on grain legumes:

- ✓ **Coordinator:** *Regeneration, multiplication and characterization of local legumicol varieties, 2015 – 2018*
- ✓ **Partner:** *Intelligent Collections Of Food Legumes Genetic Resources For European Agrofood Systems, INCREASE, 2020 – 2025*
- ✓ **Partner:** *Research on the collection of germplasm, initiation and development of a field bean breeding program with resistance to water stress, 2023 – 2026*

## The availability of phenotypic and genotypic data:

- ✓ Phenotypic data - Available in Biogen
- ✓ Biochemical data – In progress
- ✓ Genotypic data – In progress

## Seeds availability for sharing based on SMTA:

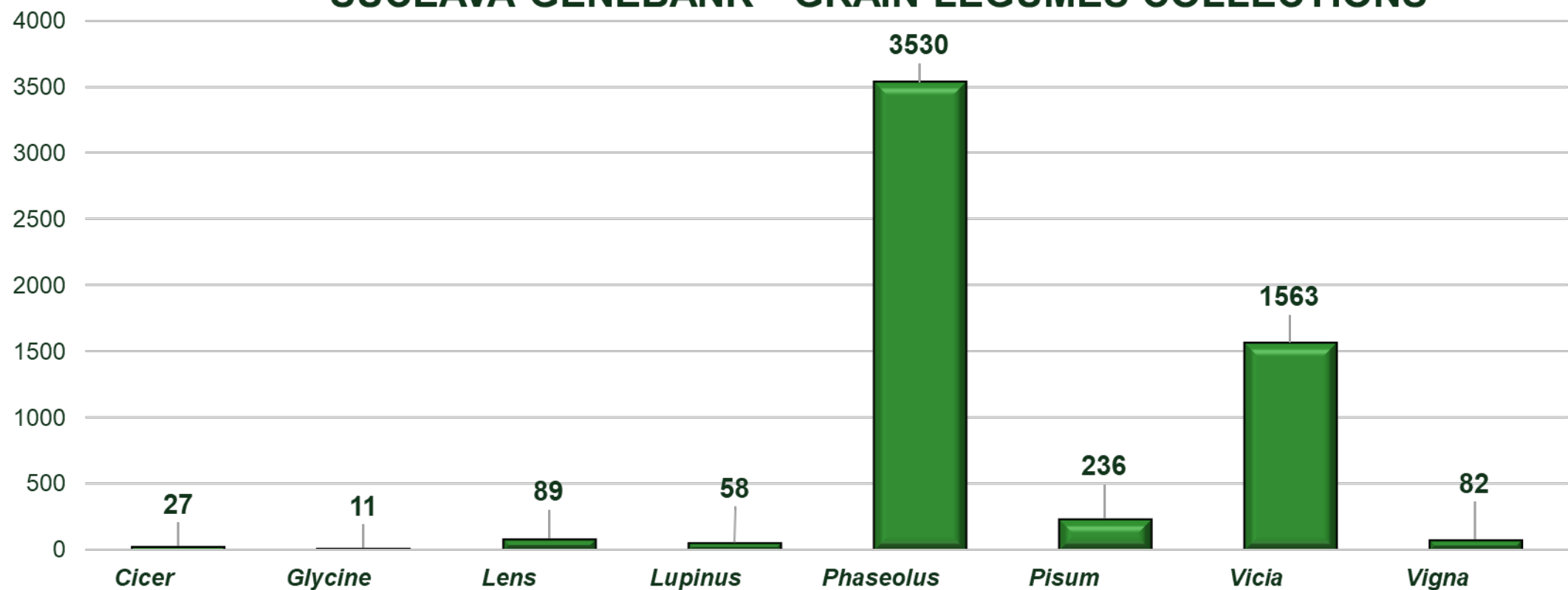
- ✓ Plants for breeding – some restrictions from the stakeholder
- ✓ Plants from GeneBank's collection – restrictions related to germination percentage and seed stock  
*(germination percentage > 85%, stock > 3000 seeds)*

Seed sharing based on **SMTA**

**20.000 accessions**

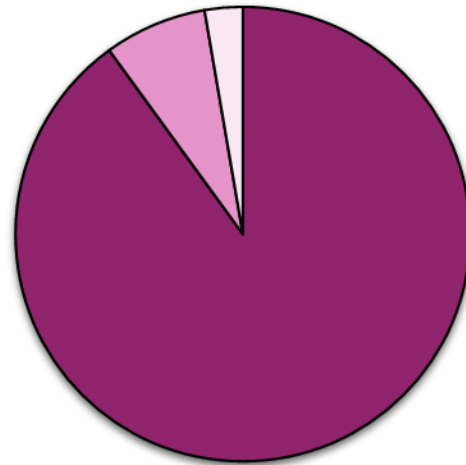
- ✓ 46 families
- ✓ 250 genera
- ✓ 493 species
- ✓ 714 botanical taxa

**SUCEAVA GENE BANK - GRAIN LEGUMES COLLECTIONS**

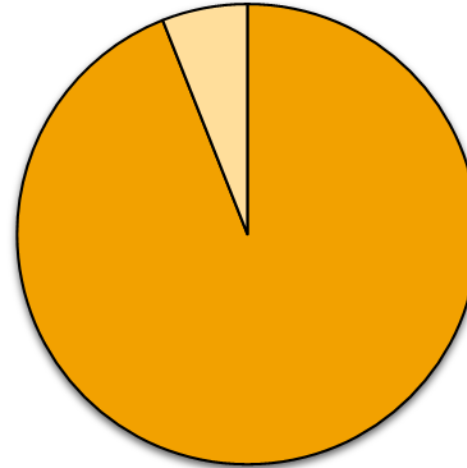




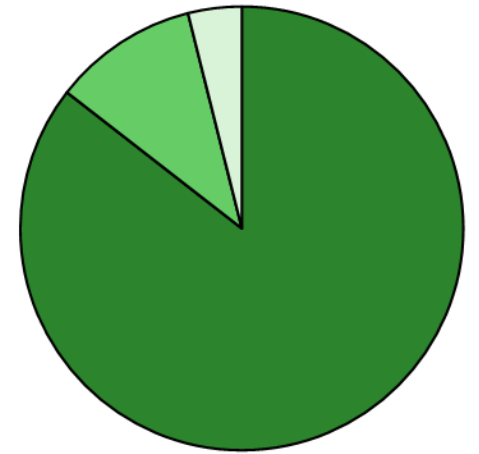
*Phaseolus vulgaris* L.



- Traditional cultivar
- Breeding/Research material
- Advanced/Improved cultivar



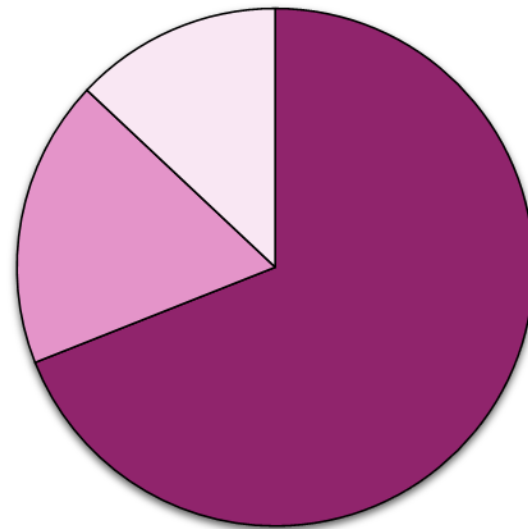
- Romania
- Others



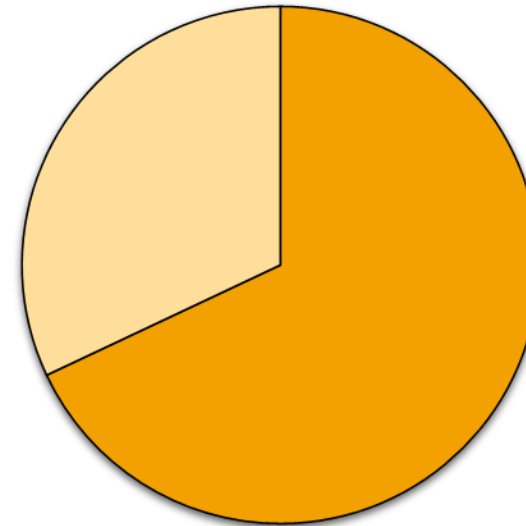
- 1989-2000
- 2001-2010
- 2011-2023



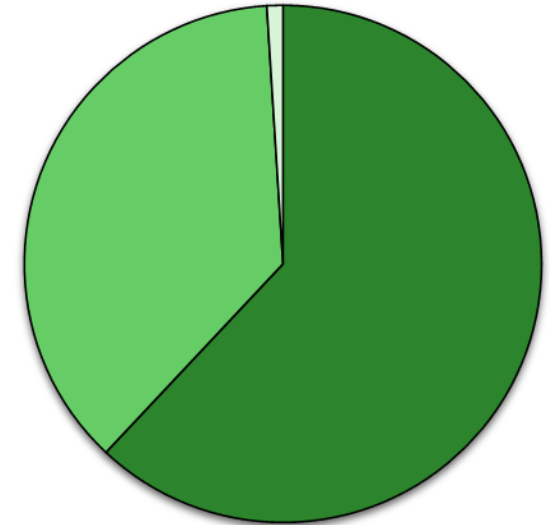
*Vicia faba* L.



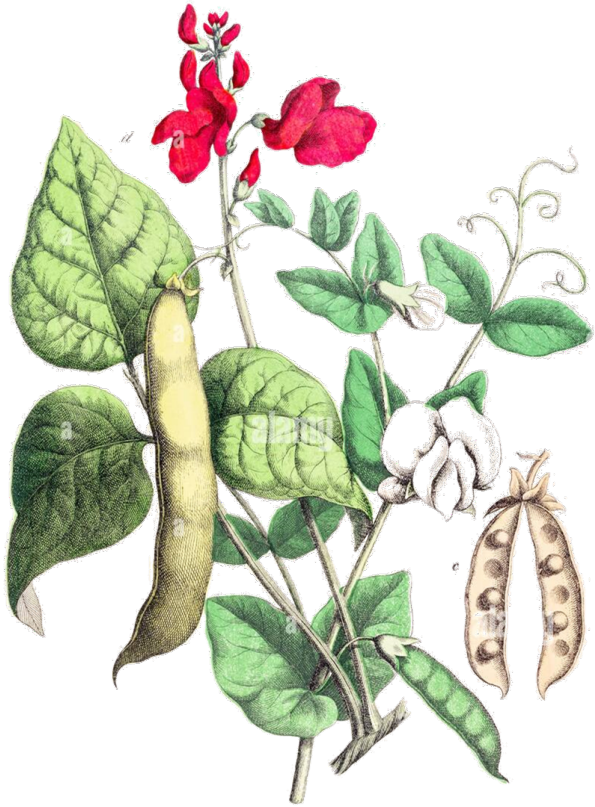
- Traditional cultivar
- Breeding/Research material
- Advanced/Improved cultivar



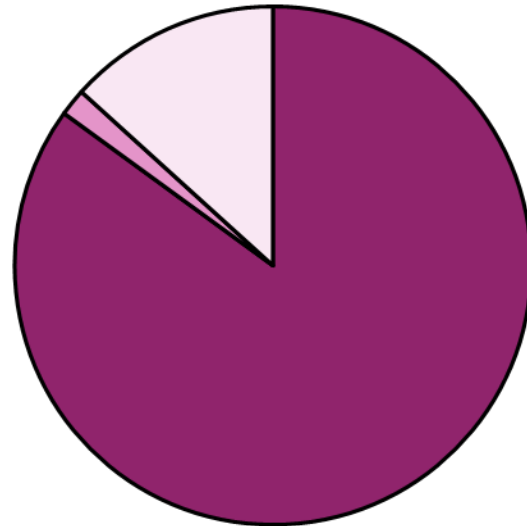
- Romania
- Others



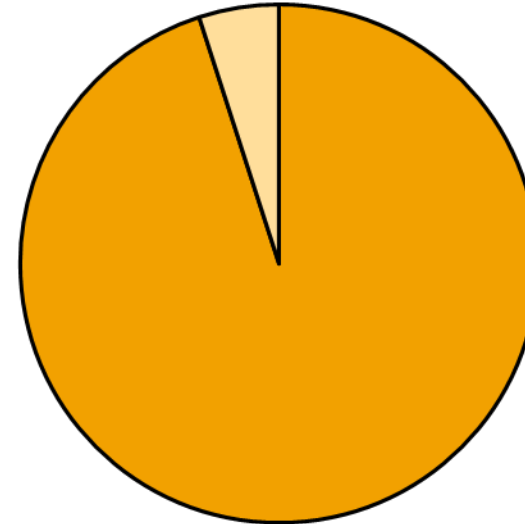
- 1989-2000
- 2001-2010
- 2011-2023



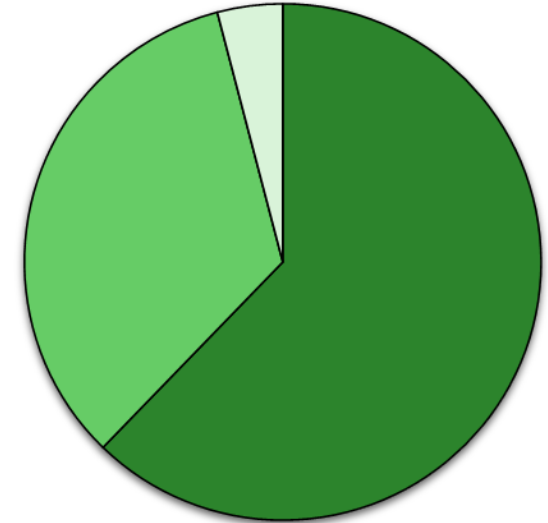
*Pisum sativum* L.



- Traditional cultivar
- Breeding/Research material
- Advanced/Improved cultivar



- Romania
- Others



- 1989-2000
- 2001-2010
- 2011-2023



## Expectations and constraints for an EVA Legumes network from researchers' perspective (material, traits, conditions of operation)

**Expectations:** Collaboration between all the members involved in EVA Legumes

Exchange of genetic material and information

**Constraints:** Lack of human and financial resources regarding the morphological characterization and plant multiplication in the experimental field

## Interest and capacity to be involved in evaluation of different GL species

**Interest:** characterization of the grain legumes varieties found in Genebank's collection

**Capacity:** Morphological (experimental field) and genetic analysis (Laboratory of Molecular Biology)

## Ways to cooperate/experience with PPP

Suceava Genebank collaborates with multiple agricultural institutions through genetic material exchange and partnerships in various scientific projects



**THANK YOU  
FOR  
YOUR ATTENTION!**

