



#GrowingTheFuture

# Euroseeds

## The voice of the European seed sector

Supporting biodiversity and innovation through EU research projects

Darya Chernokova & Federico Pisani  
Euroseeds

# About Euroseeds

- SINGLE voice of the **European seed industry**
- Represents the European seed industry towards the **European institutions** and their representatives:
  - European Commission;
  - European Parliament;
  - Council of Ministers;
  - Community Plant Variety Office.



# Euroseeds mission

## MISSION:

Euroseeds' mission is to engage, on behalf of its members, with all relevant European decision makers in order to represent their interests and to contribute to a:

- **fair and proportionate regulation** of the European seed sector;
- **freedom of choice for customers (farmers, growers, industry, consumers)** in supplying seeds as a result of innovative, diverse technologies and production methods;
- **effective protection of intellectual property rights** relating to plants and seeds.

## Euroseeds in a nutshell

Our members are active in research, breeding, production and marketing of seeds of agricultural, vegetable and ornamental plant species.

**30+**  
National member associations

from EU Members States and beyond, which in turn represent many thousand seed businesses across Europe.

**70+**  
Direct individual members

from family businesses to international corporations, seed related industries and from non-European countries.



Euroseeds has members also in other parts of the world e.g. Morocco, South Africa, USA, Canada...



View our  
membership

# Euroseeds' main role

## ● **Inform – Represent - Advocate**

On **all seed related issues**:

- Seed marketing, incl. GM and organic seed
- Plant breeding innovation
- Plant/seed health; seed treatment; environment;
- IPRs; **biodiversity**; access; research

## ● **Help resolving members' concerns related to different crops**





# **Euroseeds & biodiversity**

# Euroseeds Committee Plant Genetic Resources (CPGR)

- The CPGR follows all the developments with international conventions, treaties and European law related to access to genetic resources and benefit-sharing (ABS).
- It develops related **positions**, answers relevant **consultations** and follows and contributes to **key meetings**.
- The Committee also develops a number of tools for Euroseeds members to facilitate their understanding of and compliance with the international and European regulatory framework. Since 2014 also the EU ABS regulation and its implementation in the Member States has been in the focus of the work.
- Advocates on behalf of national seed associations and **companies** representing the European seeds sector to help shape relevant policy and laws.

# SIMPLIFIED BUSINESS STRUCTURE

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[ 1. R&D & Breeding ]

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[ 2. Intellectual Property & Registration ]

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[ 3. Seed Multiplication & Production ]

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[ 4. Processing, Packaging & Quality Control ]

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[ 5. Marketing & Sales ]

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[ 6. Technical Support & Farmer Feedback ]

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↺ (feeds back into R&D)

6

5

4

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1

## **SIMPLIFIED BUSINESS STRUCTURE**

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## 1. R&D & BREEDING

- ❖ Core activity: **Developing new plant varieties** (maize, wheat, sugar beet, sunflower, vegetables, etc.)
- ❖ Long cycles: Breeding takes **7–15 years**.
- ❖ Tools used:
  - Traditional crossbreeding
  - Marker-assisted selection
  - Genomic selection
  - Gene editing (pending regulation)

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## 2. IP & REGISTRATION

- Once a variety shows promise, it undergoes:
  - DUS** (Distinctness, Uniformity, Stability) testing
  - VCU** (Value for Cultivation and Use) trials
- Companies **protect their varieties** via:
  - Plant Breeders' Rights (PBR)/Plant Variety Protection (PVP)
  - Patents (in some jurisdictions)
  - Others

6

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4

### 3. SEED MULTIPLICATION

- Breeder seed → Foundation seed → Registered Seed → Certified seed
- This involves **contracting growers** to multiply seed under strict quality control.
- Crops may require **different generation systems** (e.g. hybrid vs. open-pollinated)

3

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#### 4. PROCESSING & QUALITY CONTROL

- Seeds are cleaned, treated (e.g. with coatings or fungicides), tested for germination and health, and packaged.
- Quality assurance is essential: even minor issues can lead to yield loss.

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3

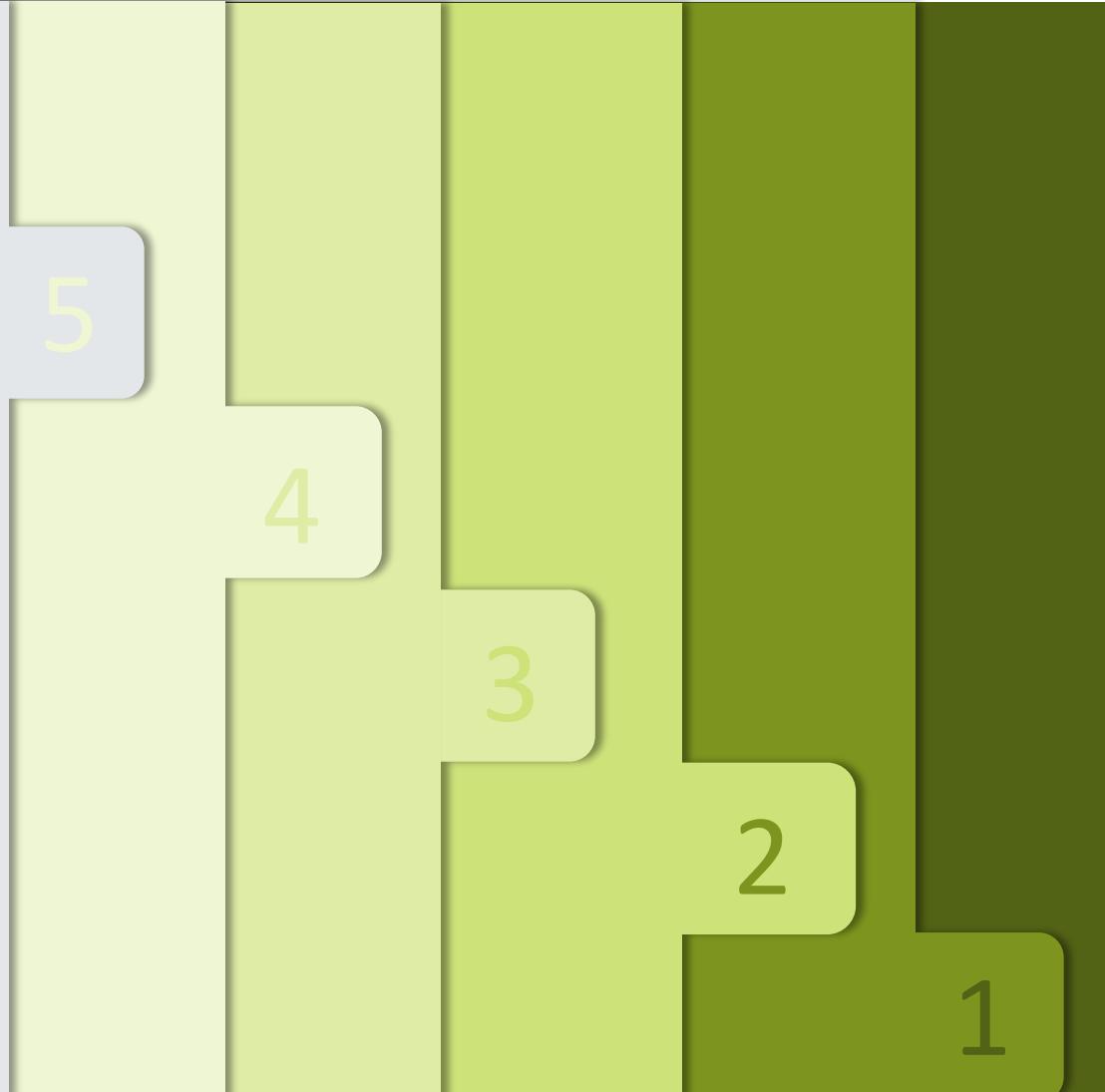
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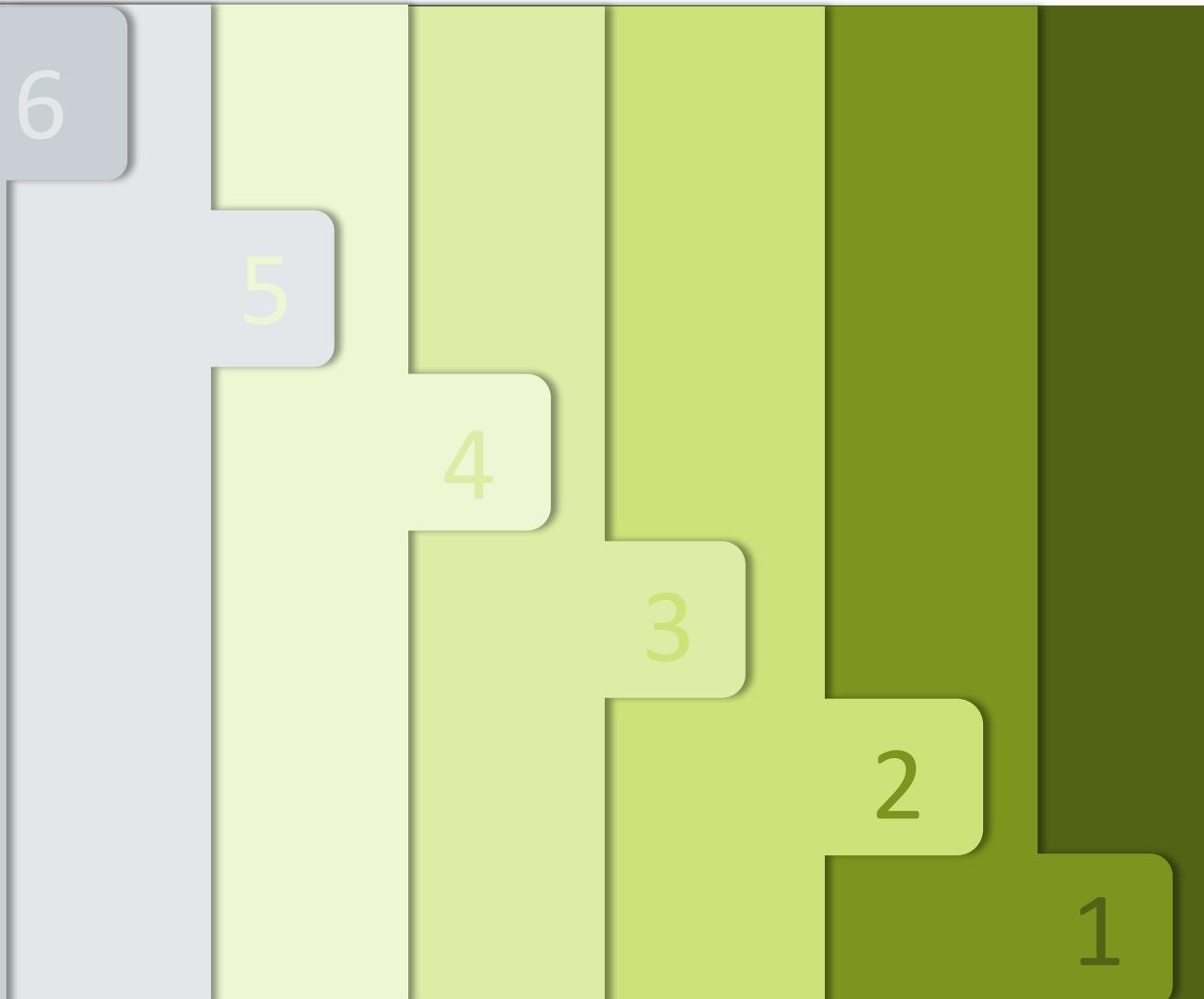
## 5. SALES & MARKETING

- Channels: cooperatives, agridealers, direct-to-farm, digital platforms
- Models:
  - **License-based** (selling rights to other producers)
  - **Own brand** (KWS, LG, etc.)
  - **Joint ventures** (e.g. Genective by Limagrain + KWS for biotech)



## 6. FARMER SUPPORT & FEEDBACK

- Agronomic advice, field demos, and tech support help farmers use seeds effectively.
- Feedback informs future **breeding priorities** (yield, disease resistance, drought tolerance, etc.)



The global commercial seed market reached nearly **US\$44 billion in 2021**. North America held the largest share with 37% of the global market, followed by Asia-Pacific at 26%, **Europe at 19%**, South America at 14%, and the Middle East and Africa at 4%.

According to Eurostat, the total value of seeds and planting stock used in EU agriculture was **€13.3 billion in 2021**. The EU seed industry employs approximately **52,000 people**.

The **value chain** encompasses **breeding companies** that develop new varieties and produce seeds; **contract farmers** who grow the seeds; **specialized companies handling seed processing activities** such as drying, cleaning, and sorting; and **farm dealers and supply stores** responsible for distribution.

In the EU, **around 2 million hectares are dedicated to producing certified seed**, including 0.1 million hectares for seed potatoes. In comparison, vegetable seed production covers about 25,000 hectares.

The European Commission reports that roughly **7,000 companies operate within the EU seed sector**, with some involved in multiple stages of the production process.

## Synergies and contribution

- ⑩ The estimated CAGR of the past 25 years, is approximately 4-5%
  - Very robust growth for a mature and highly regulated sector!
- ⑩ 51,000 Different varieties of agricultural and vegetable species are available to EU farmers today, with about 4 000 new varieties of agricultural and vegetable species coming to the EU market every year.
- ⑩ UP TO 20% annual R&D spending of the companies' turnover
  - Increased need for PGR and to strengthen collaboration/relationships with gene banks and PGRs providers.
  - 1,6% annual yield growth having a significant impact on EU's crop yield performance for the last 20 years.

How come the seed sector manages to outperform the broader agricultural sector?



**INNOVATION**



## **Euroseeds & research projects**

# Euroseeds involvement in research projects

The European seed sector is involved in a number of research projects that address current and future challenges regarding plant breeding, food and nutrition security, and sustainable agricultural practices.



# Euroseeds involvement in research projects

## WHY?

- **To strengthen competitiveness of the European seed sector** by being active in the latest research developments and policy frameworks.
- **To enable collaboration** between public research bodies, breeders, seed producers, regulators and other stakeholders so innovation can move from lab to market.
- **To address sectoral challenges:** improving sustainability, adapting to climate change, boosting biodiversity, ensuring seed quality / diversity, organic breeding, etc.
- **To influence and help shape EU research & innovation policy** that affect the seed / plant breeding sector.



# Euroseeds involvement in research projects

## HOW?

- **By aligning project involvement with their strategic priorities.** The internal Euroseeds Committee Research + a dedicated Committee dealing with a specific topic of a given project evaluates whether that project fits with Euroseeds' priorities.
- **By participating as WP or task leader** in EU-funded research & innovation projects (Horizon Europe / Horizon 2020 etc.).
- **By contributing specific expertise** as well as training and knowledge exchange: plant breeding, plant variety testing and marketing, biodiversity, IP, communication & dissemination, policy recommendations, etc.
- **By bridging the gap between research community and plant breeders**, giving access to our network of membership who can provide their feedback and input.

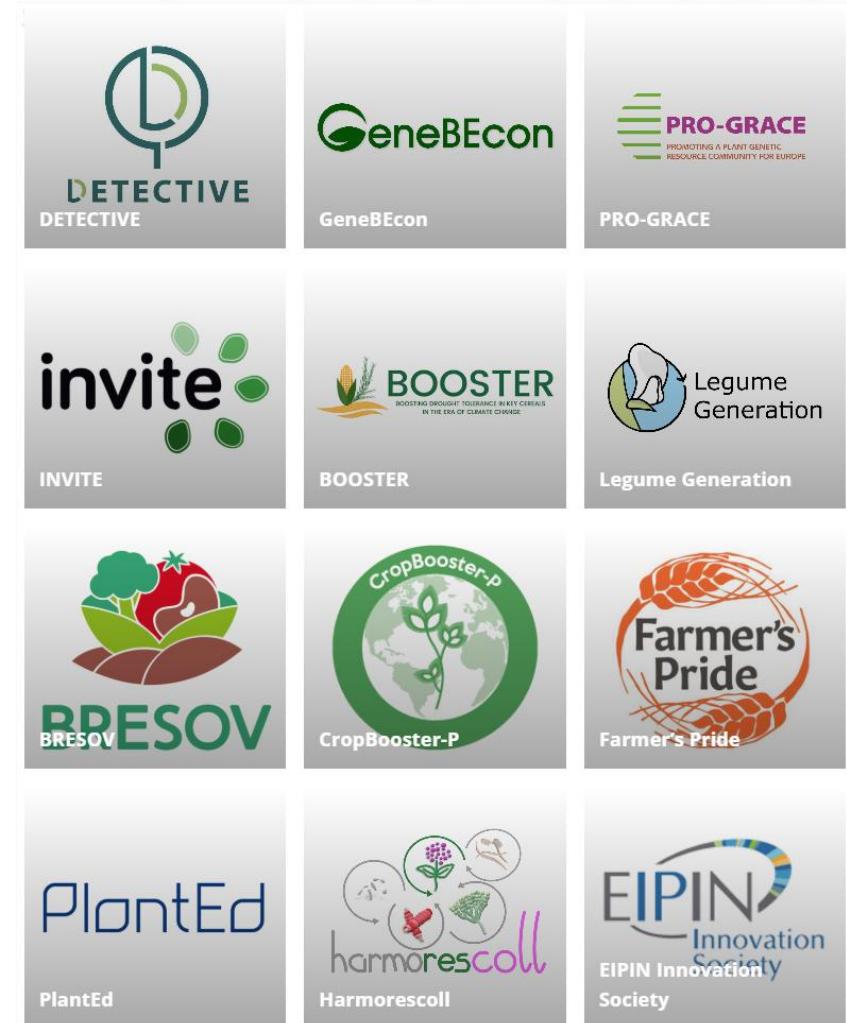


# Euroseeds involvement in research projects

## Projects we have been part of:

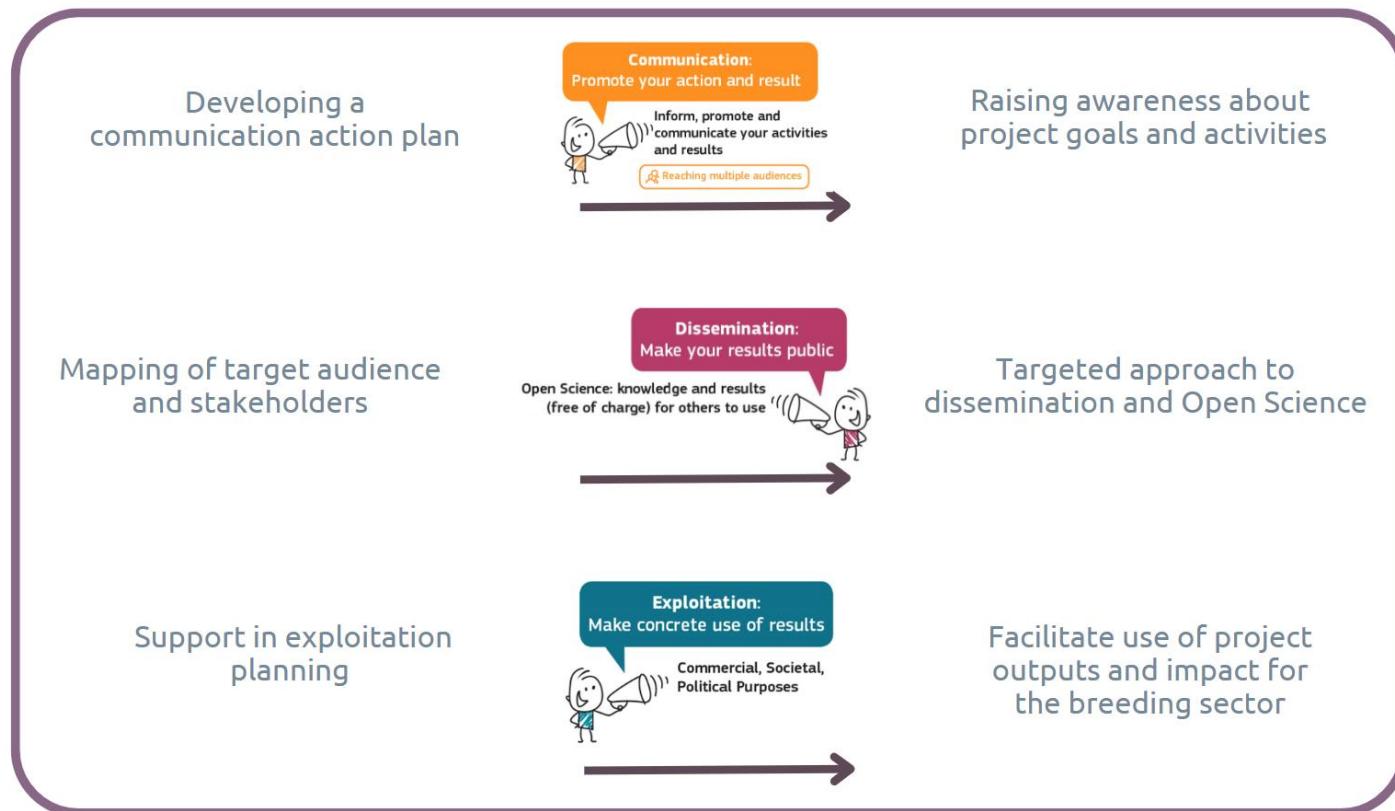
### 10+ projects in our portfolio

- Providing **technical expertise and the seed sector perspective**:
  - Concept for a Research Infrastructure dedicated to plant genetic resources (PRO-GRACE)
  - Detection and traceability of NGT products (DETECTIVE)
  - Boosting the breeding of legume crops (Legume Generation)
  - Capturing the potential of gene editing for sustainable bioeconomy (GeneBEcon)
  - Innovations in plant variety testing (INVITE)
  - Breeding for resilient, efficient and sustainable organic vegetable production (BRESOV)
  - Boosting global crop yield for food and nutrition security and fuelling a bioeconomy (CropBooster-P)
  - Networking, partnerships and tools to enhance in situ conservation of European plant genetic resources (Farmer's Pride)
  - Genome editing in plants to foster the introduction of new varieties better adapted to varying biotic and abiotic conditions and to more sustainable crop management practices (PlantEd)
- Providing **feedback as part of the Stakeholder Advisory Board**
  - Boosting drought tolerance in key cereals in the era of climate change (BOOSTER)



# Euroseeds involvement in research projects

## Communication, Dissemination and Exploitation





## **Euroseeds in PRO-GRACE**

# Euroseeds role in PRO-GRACE

**Euroseeds is a consortium member of the project, involved in a number of tasks, incl.:**

- Blueprint for a Genebank Quality Certification System
- Identification of the scientific services, stakeholders, promoters, and utilizers of the proposed RI
- Communication, dissemination and exploitation of project results
- **Providing seed sector perspective**



## PRO-GRACE Research Infrastructure

with followers

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Despite over 2 million plant genetic resource (PGR) accessions stored across European genebanks, many challenges remain: fragmented data, inconsistent quality standards, limited access to advanced technologies, and a lack of integration between in situ and ex situ conservation.

To address this, **PRO-GRACE has identified:**

key stakeholder groups - from genebanks, farmers, and researchers to seed companies, NGOs, and policymakers  
priority service areas - including quality certification, data interoperability, genotyping, phytosanitary services, and regulatory guidance

At the heart of it all is the proposed **GRACE RI: a pan European Research Infrastructure** designed to ensure plant genetic resources are conserved and used effectively to build more resilient, sustainable food systems.

It's a step toward stronger collaboration, better tools, and smarter conservation!

Learn more in this report: [https://lnkd.in/eD44\\_Wp7](https://lnkd.in/eD44_Wp7)

ECPPR - European Cooperative Programme for Plant Genetic Resources

CREA Ricerca

Università degli Studi di Torino

German Federal Office for Agriculture and Food

Consiglio Nazionale delle Ricerche

NordGen

ProSpecieRara

University of Birmingham

Kmetijski Institut Slovenija

Institute of Experimental Botany of the Czech Academy of Sciences

IPK Leibniz-Institut

INRAE

Roto Semli Rurali ETS

Wageningen University & Research Centre for Genetic Resources, the Netherlands (CGN)

ENEA

ESFRI - European Strategy Forum on Research Infrastructures  
EU Science, Research and Innovation

#plantgeneticresources #cropbiodiversity #researchinfrastructure  
#sustainableagriculture #HorizonEurope



Avenue des Arts 52  
1000 Brussels

[www.euroseeds.eu](http://www.euroseeds.eu)



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