



# THE PLANT GENETIC RESOURCES STRATEGY FOR EUROPE

Presented by Theo van Hintum, Centre for Genetic Resources, The Netherlands (CGN)  
on behalf of ECPGR

*ECPGR Steering Committee meeting, June 7<sup>th</sup> 2022, Malmö, Sweden*

# The need for urgent action

- Plant genetic resources (PGR) are the foundation of our food supply and bioeconomy
  - Access is essential for sustainable agricultural and adaptation to climate change
- PGR are in danger of getting lost and hardly accessible
  - Crop wild relatives (CWR) and landrace populations are disappearing
  - Many genebanks function inadequately
  - Access to PGR is poor – both material and information

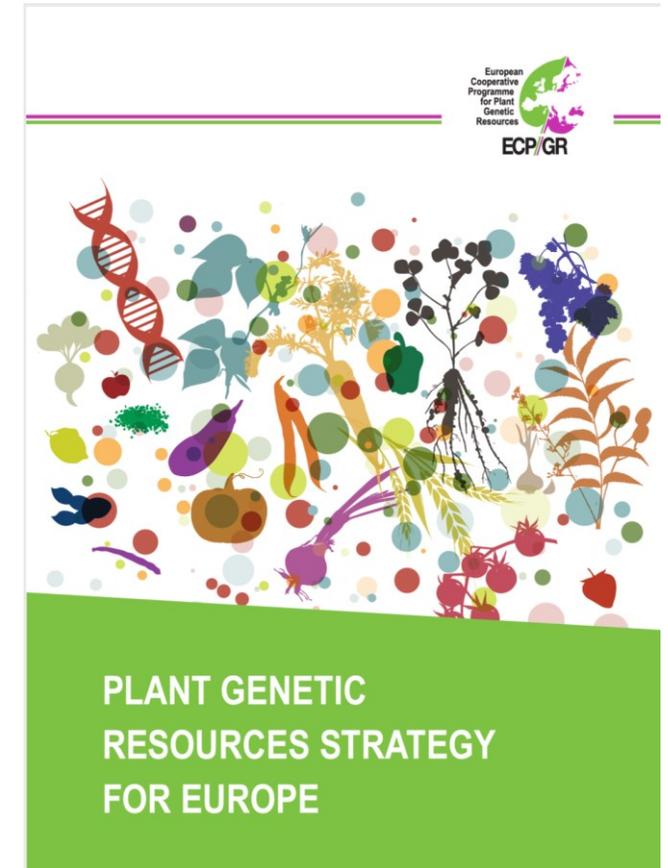
**AN URGENT POLITICAL COMMITMENT IN EUROPE IS NEEDED!**



Image: Pixabay / Sven Hilker

# The Writing of a PGR Strategy for Europe

- EU-H2020 Project GenRes Bridge aimed at formulating a European GR Strategy
- Writing process PGR Strategy started during an ECPGR Steering Committee meeting Nov 2020
- Next drafts were prepared by a Drafting Team (ECPGR ExCo + some NC's)
  - Külli Annamaa, Frank Begemann, Theo van Hintum, Vojtech Holubec, Marc Lateur, Marianne Lefort, Lorenzo Maggioni, Benvindo Maças, Dainis Ruņģis, Beate Schierscher, Imke Thormann, Jens Weibull.
- Two versions were circulated amongst stakeholders and their feedback was processed
- Process was supported professionally by ECPGR Secretarial Staff and Science Writer



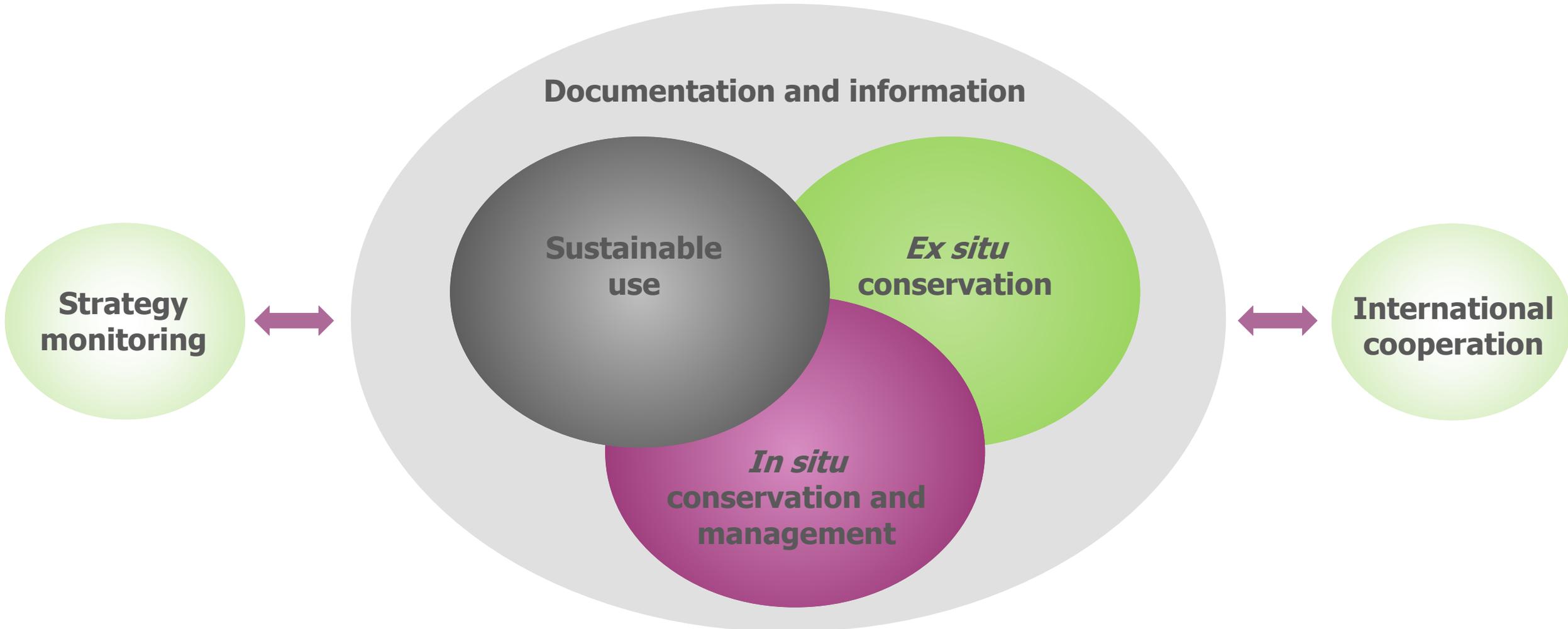
# The Writing of a PGR Strategy for Europe

- European PGR Strategy was presented during the 'Launch of the Genetic Resources Strategies for Europe' event 30 November 2021 in Brussels

The screenshot shows the GenRes Bridge website. The header includes the logo and navigation links: HOME PAGE, ABOUT US, RESOURCES, and GENETIC RESOURCES STRATEGY FOR EUROPE. The main content area features a video player titled "Recording of the launch event" with a breadcrumb trail: Home / Genetic Resources Strategy for Europe / Recording of the launch event. Below the video player, there is a section titled "Launch of the Genetic Resources Strategy for Europe" with a brief description and a video thumbnail for "Opening and Introduction: Genetic Resources Strategies for Europe". A sidebar on the right lists additional resources: Downloadable version, Press release, Recording of the launch event (highlighted), Programme, and Webinar "Preview of the Genetic Resources Strategy for Europe".

The cover of the report features the ECP/GR logo at the top right. The central graphic is a vibrant collage of various plants, fruits, and a DNA double helix, symbolizing genetic diversity. At the bottom, a green banner contains the title "PLANT GENETIC RESOURCES STRATEGY FOR EUROPE" in white capital letters.

# A new PGR Strategy for Europe



# Expanding *in situ* conservation of crop wild relatives (CWR) and wild food plants (WFP)

Despite their potential, CWR and WFP have been neglected and are threatened in Europe

**By 2030**

-  Comprehensive inventories
-  National conservation strategies including *ex situ* back-ups
-  A European *in situ* network of priority populations



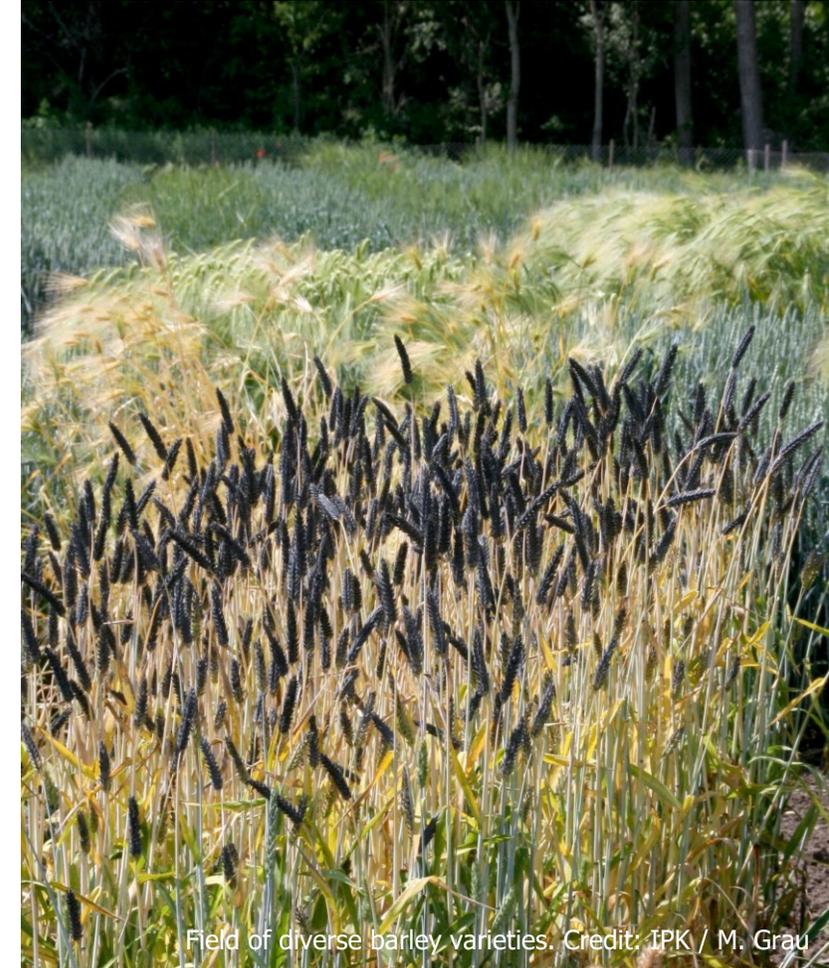
Onion crop wild relative, Italy.  
Credit: Bioversity International / A. Lane

# Promoting on-farm PGR conservation and management

Despite their benefits for conservation of crop and landscape diversity, on-farm 'landraces' remain at risk

**By 2030**

- 🎯 European inventory of on-farm 'landraces'
- 🎯 Landrace diversity is conserved on-farm with *ex situ* back-ups



Field of diverse barley varieties. Credit: IPK / M. Grau

# Consolidating and sustaining *ex situ* conservation

The variability of quality and efficiency of *ex situ* conservation weakens the overall European infrastructure

**By 2030**



PGR diversity in European genebanks is conserved reliably and made accessible for sustainable use

Introduce a certification system for genebanks



Coverage of European diversity in genebanks is enhanced



Maize conserved at the Portuguese genebank.  
Credit: L. Maggioni

# Promoting the sustainable use of PGR

The potential value of PGR European diversity to face agricultural challenges is under-exploited!

**By 2030**

- 🎯 Access to well-documented genetic diversity
- 🎯 Dynamic crop portals for European crops
- 🎯 Wide phenotypic and genotypic PGR characterization
- 🎯 Systematic use of CWR in research and crop improvement
- 🎯 Farmers and civil society participation to breeding
- 🎯 Regulatory framework to promote diversification



Cucurbits. Credit: L. Maggioni

# Strengthening a comprehensive information system for PGRFA

Despite a lot of progress in the last decade, EURISCO needs continuous support and improvements

**By 2030**

-  Documentation National Focal Points supported and trained
-  National phenotypic data provided to EURISCO via standardized methods
-  FAIR principles applied to PGR data management



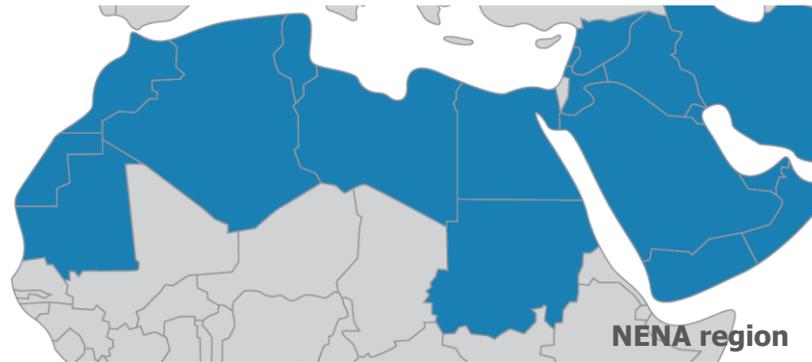
EURISCO is a trusted European and global open-access database repository

# International Cooperation

## EU and the European region



## Europe and other regions

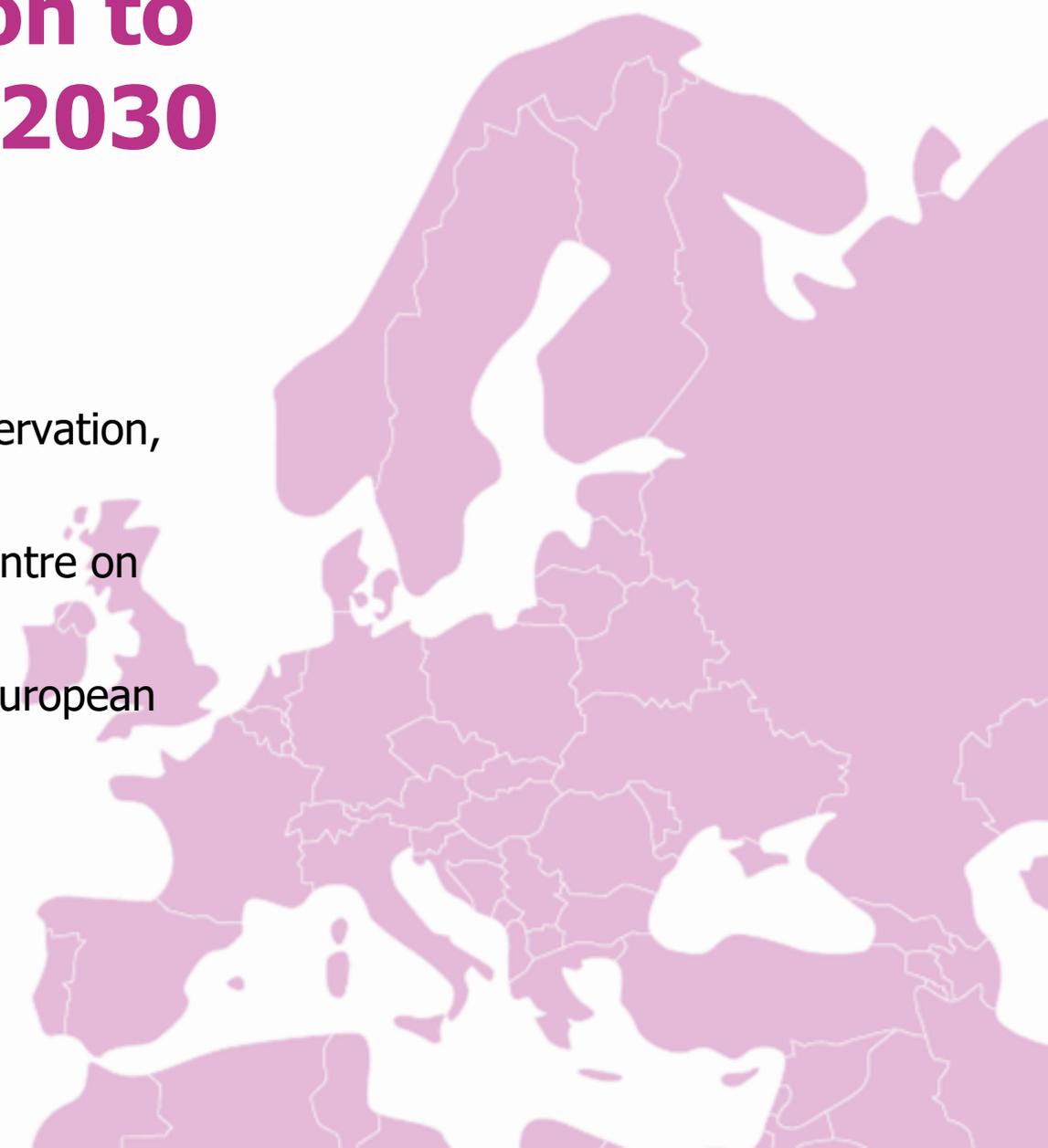


## Europe and Global Cooperation



# Enabling the transition to achieve the goals by 2030

- A coherent European policy framework
- An efficient long-term infrastructure for conservation, documentation and sustainable use
- A European Coordination and Information Centre on Agricultural Genetic Resources
- A sustained financial basis for collaborative European and national programmes



# Conclusion

- PGR are essential for our food security
- Europe's PGR are in danger
- We now have a strategy, developed with many experts and stakeholders, to protect PGR and make it available for use
- Implementation is subject to firm political will in the context of the Green Deal
- Implementation will foster and emphasize Europe's position as a key player in the global arena.

**The PGR community is eager to start!**



European  
Cooperative  
Programme  
for Plant  
Genetic  
Resources



**ECP/GR**

**Many thanks to all those  
who have contributed to  
the preparation of an  
ambitious**

**PGR Strategy for Europe**