



WAGENINGEN
UNIVERSITY & RESEARCH

Willem van Dooijeweert Centre for Genetic Resources, The Netherlands (CGN)

*EUROPEPLAND– Implementing a trans-EUROpean
PEPper LANDrace collection for resilient agriculture*

30 October 2024, Almeria, Spain



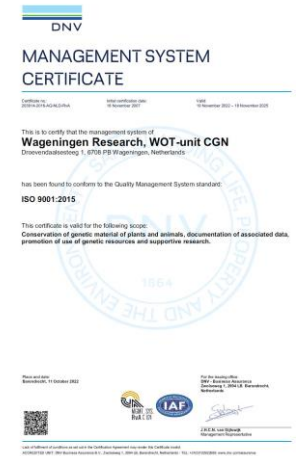
Short presentation CGN

- CGN organisation
 - CGN \subset Wageningen University and Research



Short presentation CGN

- 1985 - founded as a crop genetic resources centre
 - most *ex situ* (seed) collections from Wageningen
- 2003 - CGN-PGR quality management
 - first genebank with ISO-9002 certification
- 2004 - operating under 5-year agreements with Ministry as 'statutory task'
- 2022 - become larger (GeneBank 2.0)
 - value PGR is increasing rapidly
 - Dutch breeding sector is amongst largest in the world
 - size CGN-PGR didn't correspond to importance PGR



Short presentation CGN

■ CGN-PGR activities

- genebank with seed collections
 - focus on vegetables
 - user orientation & quality management
- support on-farm and *in situ* activities in NL
- policy development and advice
 - National Focal Point on Access and Benefit Sharing
- methodological research
 - seed storage behaviour
 - species niche modelling
 - interface genomics – genebank management



Short presentation CGN

■ CGN-PGR collections

- 33 crop collections with 23 530 available accessions
 - originating from > 100 countries
 - focus on vegetables and wild potatoes



- Since 2022, 10 new crops added but not yet available
- 3500 new accessions of all crops

CGN pepper collection

- Total pepper collection available: 1177 accessions
- The Netherlands has no landraces
- Seeds sharing always based on SMTA
- Material can be searched via website CGN
 - www.wur.nl/cgn
- Most accessions have:
 - Characterization data
 - Pictures
 - Some evaluation data



Project activities on pepper

- Capsicum Genome initiative (2018)
 - Sequencing of 100 pepper accessions
 - 3 de novo
 - 10 partners

- G2PSol (2016-2021)
 - Main part of collection (about 700 accessions) genotyped

- CGN accessions used in research of seed requesters
 - Request data back and make available via website

CGN pepper landraces collection

Pepper landraces from Europe

OVERVIEW EUROPEAN LANDRACES CGN						
country	available	region	not yet available	region	2023-2024	data
Spain	85	11	18			morfological, pictures
Hungary	7					morfological, pictures
Russia	1					morfological, pictures
Serbia	1					morfological, pictures
Albania		2	16		24	morfological, pictures
Republic of North Macedonia			110	?	199	morfological, pictures



CGN pepper landraces collection

- Phytosanitary status
 - Tested on ToBRFV and ToMMV
 - Visually checked by National Plant Health Service (NAKtuinbouw)
- Passport data cgngenis.wur.nl
- No evaluation data yet

THANK YOU