

# Safeguarding and availability of plant genetic diversity: Centre for Genetic Resources, The Netherlands (CGN)

## Mission

CGN's mission is to contribute to the conservation and use of plant genetic diversity on a world scale. We guarantee availability of viable, healthy seeds for professional users. CGN holds about 23.000 accessions of 30 crops, focussing on vegetables. We aim to obtain as much information on our samples as possible to assist users in their search for material. We distribute seed to users all over the world.



Regeneration of potato and faba beans in an isolation plot. During regeneration of cross pollinators it is important to keep the diversity within an accession and to exclude contamination.

## Approach

- Monitor viability by germination tests
- Regenerate samples (if viability drops or seed quantities become insufficient)
- Describe our material during regenerations
- Improve our collections by adding diversity (collecting missions)
- Participate in projects/experiments generating information on our accessions



Monitoring viability during a germination test in soil at Nergena. The germination thresholds we use are 80% for cultivated and 60% for wild material. Genebank management procedures can be found on our website and are documented in a quality manual under ISO 9001.



Collection mission for melon landraces in Uzbekistan 2017. Collection missions are carried out in cooperation with breeding companies. They partially finance the missions and help with multiplying the collected material. After an embargo period of five years, the material is included in the CGN collection.



Growing lettuce for TKI project 'International Lactuca Genomics Consortium'. For this project a cross section of the lettuce gene pool, comprising nearly 500 accessions, was selected for DNA resequencing purposes resulting in single seed descent lines with genomics and metabolomics data.



Diversity in CGN's pepper collection. Our collections are as diverse as possible. They include different types, originate from different countries and include also wild relatives of the crops.

Centre for Genetic Resources (CGN), the Netherlands  
[www.wur.nl/cgn](http://www.wur.nl/cgn)