

Current status of evaluations of CGN lettuce accessions

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EVA Lettuce, teams meeting, 30 March 2020



Composition CGN lettuce collection

<i>Lactuca</i>	Accessions
<i>L. sativa</i>	1471
<i>L. serriola</i>	801
<i>L. saligna</i>	72
<i>L. virosa</i>	72
Others	119
Total	2535



Crop types	Accessions
Butterhead	697
Crisphead	264
Cos	215
Cutting	197
Latin	57
Stalk	31
Oilseed	10



Distribution CGN lettuce collection

- Total collection available for utilization
 - Periodical germination testing
 - Annual regeneration programme
 - Low seed viability
 - Insufficient seed stock



- No regeneration backlogs
- High viability



Centre for Genetic Resources, the Netherlands

Characterization CGN lettuce collection

- Carried out by CGN in field trials
 - Morphological description
 - Mostly UPOV characters
 - Identity verification
- Majority CGN accessions done
- Current trial with ~160 recently acquired materials
- Data publically available
 - CGN website
 - EURISCO



Evaluation CGN lettuce collection

- Collaborative screening programs with breeding industry
 - Seven involved companies
 - Mostly Bremia resistance screening
 - Data publically available after embargo
 - CGN website
 - EURISCO
 - Currently 42666 observations on 2102 accessions
 - Embargo on BI:29-31 (745 accessions) ends in 2020
- Current screening program
 - 833 CGN accessions
 - BI:32, BI:33, BI:34, BI:35, US9



Omics data CGN lettuce collection

■ DNA sequencing

- Cooperation with BGI (China)
- Entire collection
- Data for 445 accessions
 - Cross section collection
 - Data available by the of 2020



■ Metabolomics

- Cooperation with WUR-Bioscience
- 150 accessions
- Vitamin C and untargeted approach
- Data publically available

