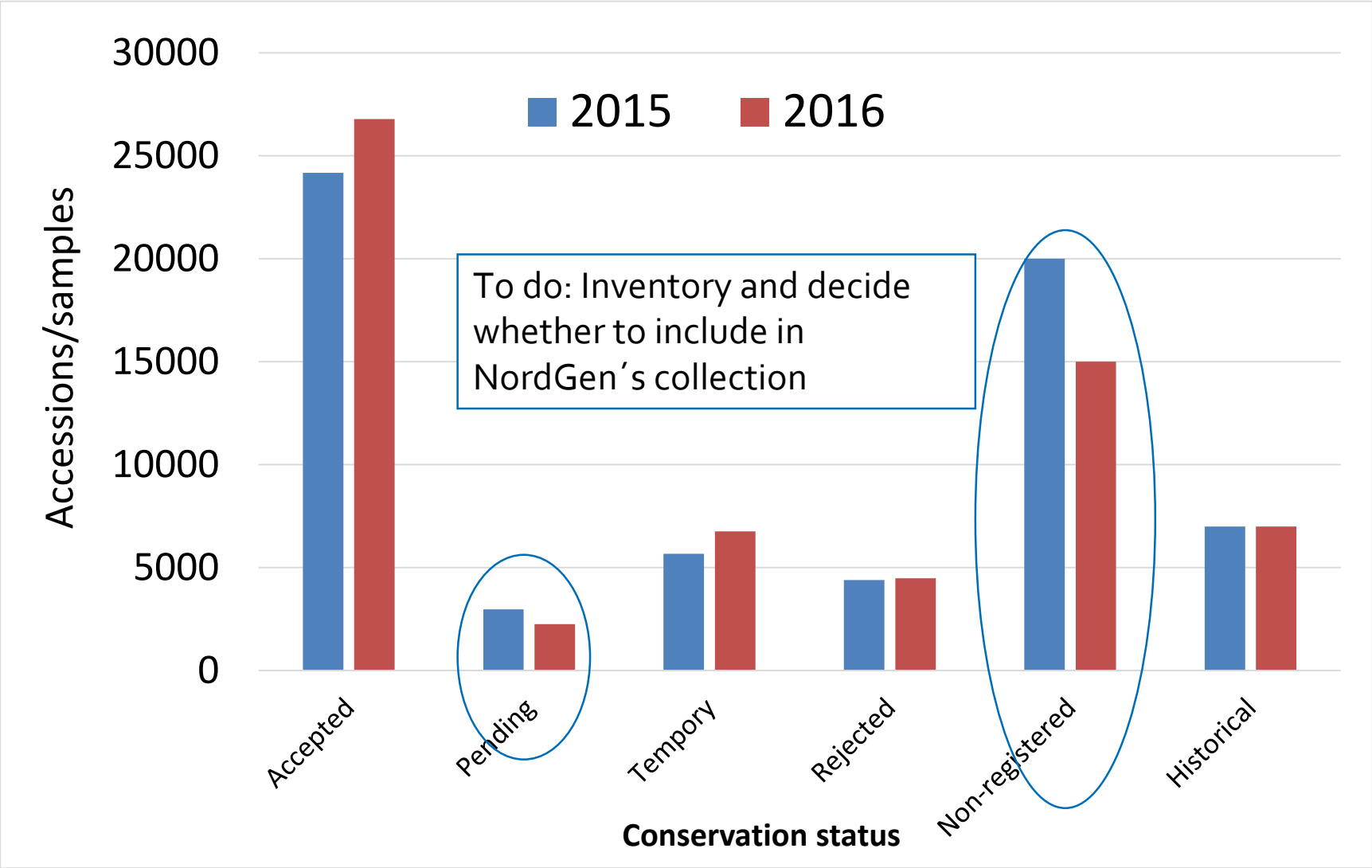


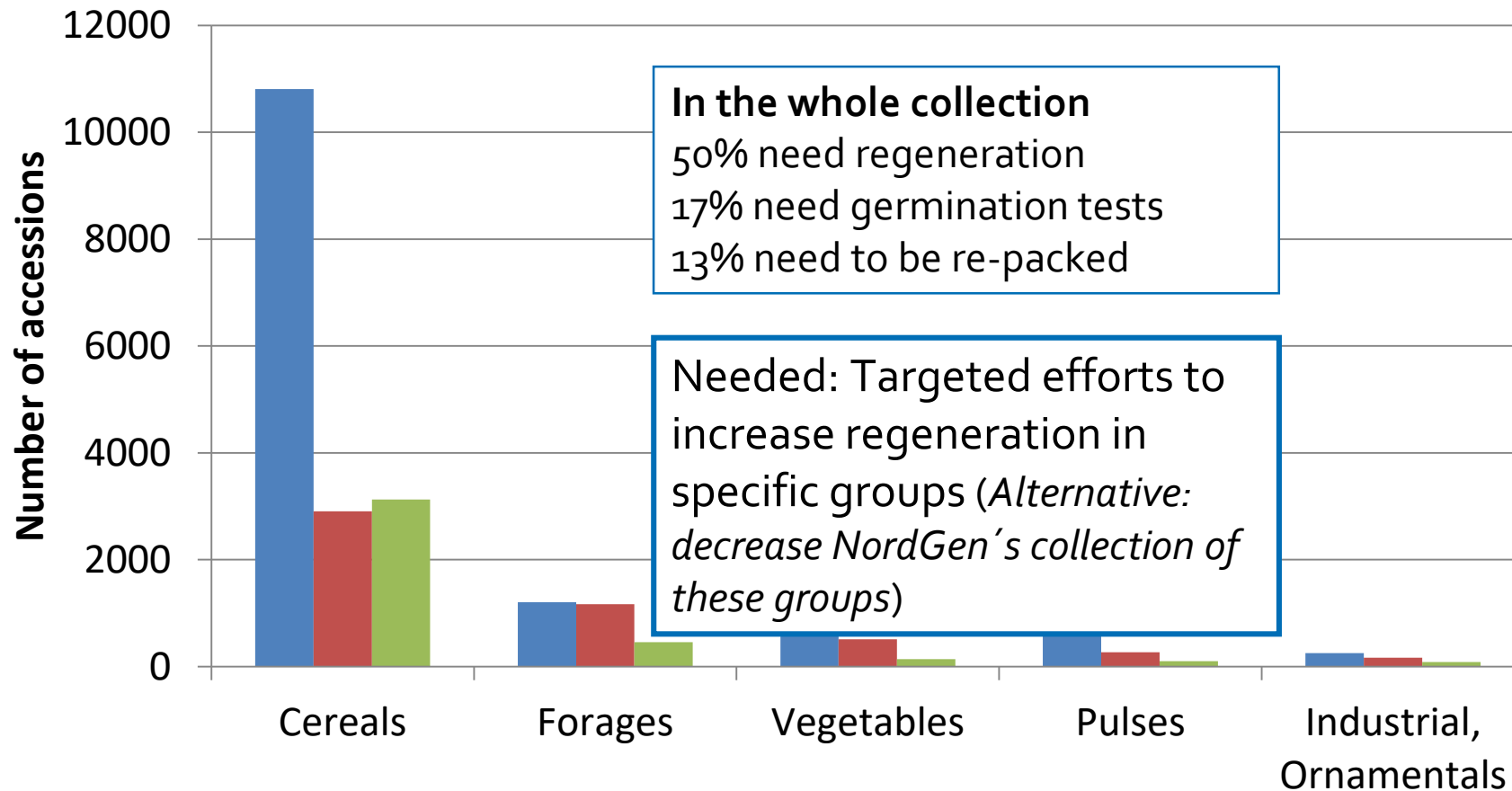
# NordGens status 2021

med fokus på  
kollektionen

# Back-log: Unregistered/pending material



# The number of accessions that need regeneration, germination test or repacking – estimated 2015



# Hvad kræves for at få et NordGen Planter uden back-log?

- Prioritering! (nuværende budget rækker ikke til alt)
  - Inden for den nuværende budgetramme
  - Ansøgninger om ekstern finansiering eller andre midler
- Information om status – medførte mange midler
- Planlægning
  - Vores tilgang var/er: at vigtige aktuelle opgaver løses samtidig med at back-loggen reduceres
  - Investeringer for at øge effektiviteten



# Hvad har vi gjort i de seneste år?

## — Øget fokus på frølaboratoriet og regenerering

- øget regenereringskapaciteten (mere end fordoblet)
  - Personale, uddannelse, drivhusfaciliteter, markareal, isoleringsbure, **extern regenerering**
- øget kapaciteten i frølaboratoriet
  - Personale, uddannelse, udstyr, udvidelse af frølaboratoriet

## — In vitro

- Øget kapacitet og back-up
- Fået midler til virusrensning af flere accessioner

## — Udvikling af kvalitetssikringssystem

## — Ny database

## — + mange andre projekter



# Backlogs 2019 og 2021 – Laboratory tasks



<b>Workpackage 1</b>	ACC + PEN in sept 2019	Status by February 2021
Final decision, PEN (regeneration need)	269	No back log
Cleaning and purity of uncleaned samples *	500	250
Germination tests of the above*	500	250
Re-packing back-log	3896	2730
Final decision on all accepted pea accessions	240	No back log
All accession in need for checking (case 19 and 20 lab tasks only in 2020)	1629	No back log

# Over all status of the collection

3 work packages:

Laboratory tasks  
– mainly

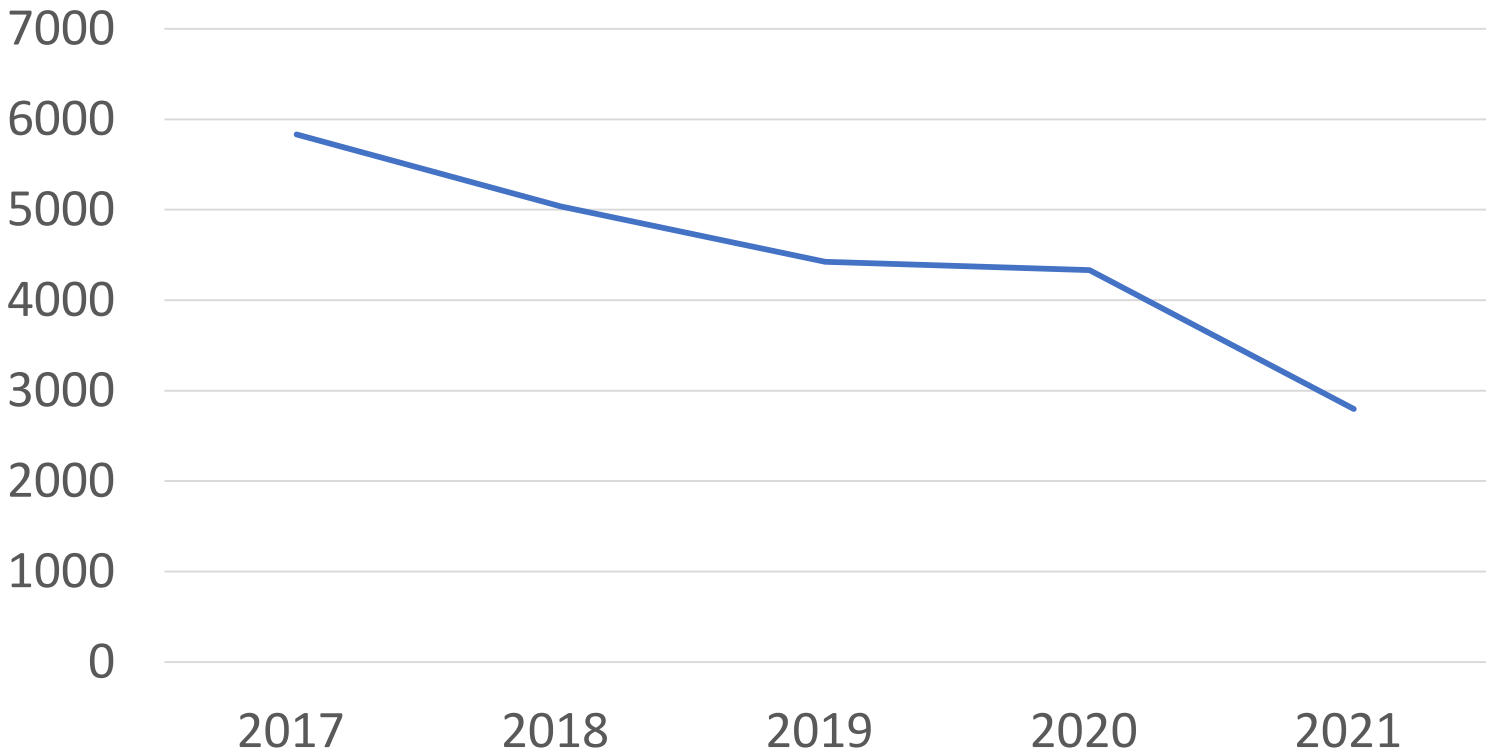
Regeneration –  
backlog

Regeneration of  
material that  
need checking

Reporting progress in 10 mill project	2017	2018	2019	2020	2021
	Dec	Sept	Sept	Feb	Feb
Accessions that need regeneration	5832	5038	4426	4332	2798
Accessions that need germination test	841	1507	777	251	132
Accessions that need packing	5338	4458	4478	3680	2730
Accessions that need further checking to determine status	2528	2066	1620	1567	0
•Accessions with the mandate PEN	2260	1388	1242	1092	632

- Excluding PEN from Greenland – 2021

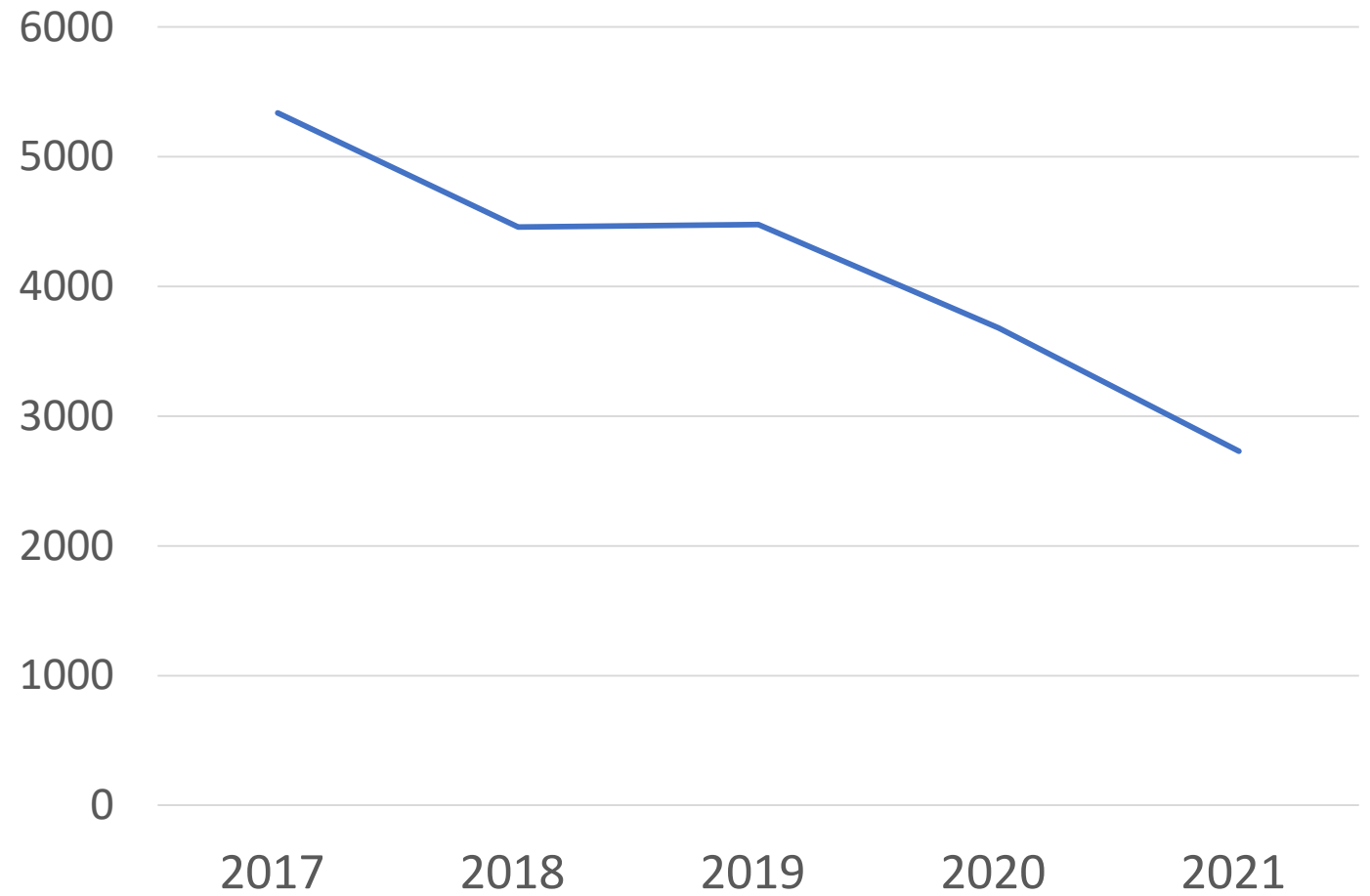
# Number of accessions in need for regeneration





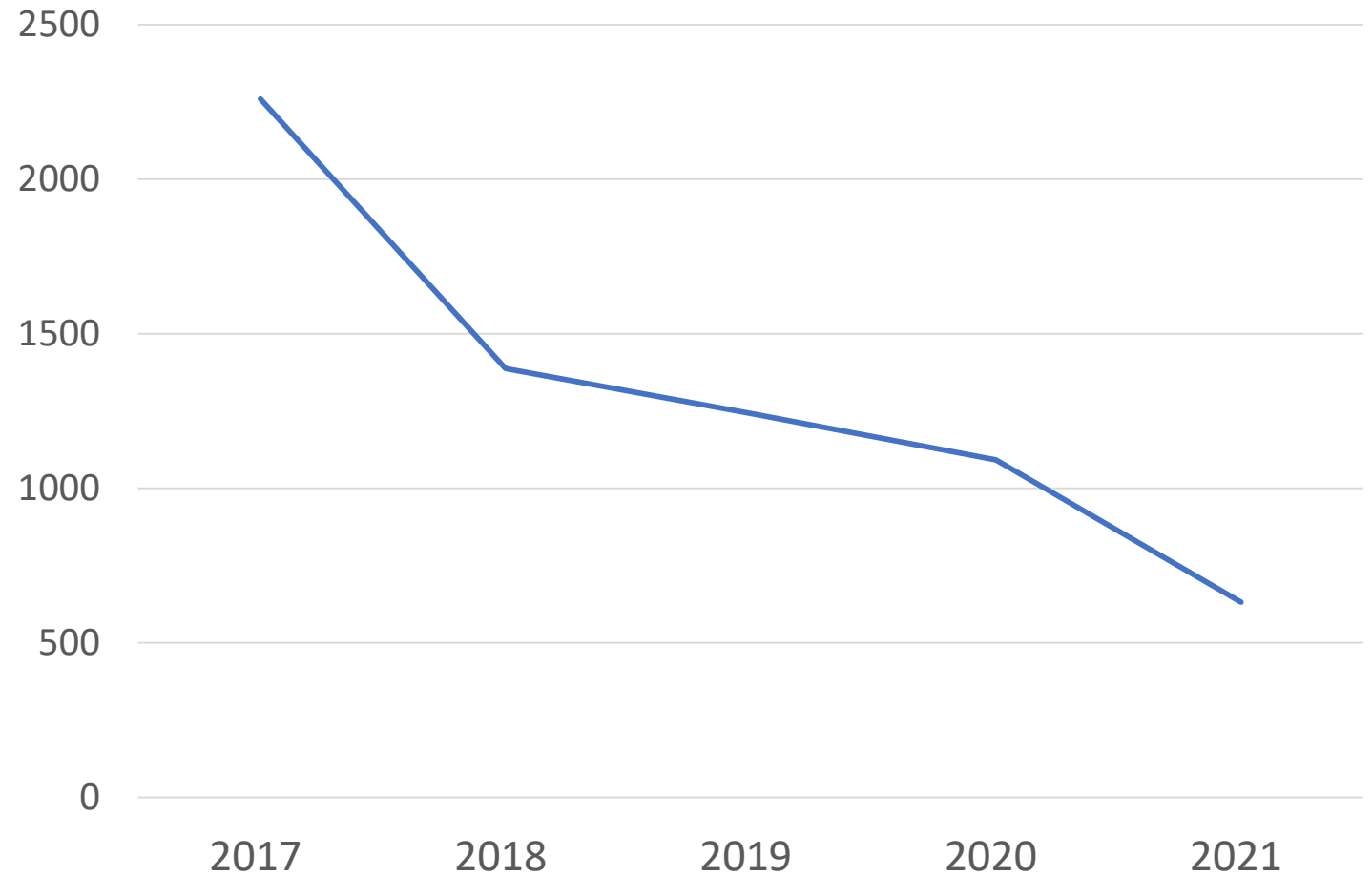
# Accessions that need re-packing

974 accessions to be repacked in 2021



# Number of Pending accessions

251 pending accessions to be decided on in 2021



# NordGen aktive samling

Year	2021
Cereals	21938
Fodder crops	4904
Fruit and berries	18
Potato	128
Rootcrops, industrial	1690
Vegetables	5022
Medicinal and herbs	489
Ornamentals	275
I alt	34464



# Kartofler

sidste pr  
Liste over accessioner, som er virusrenset

NGB number	Acc name	Donor country and Institution/person
NGB20401	Løgumkloster	Denmark (Carl Christian Sjøholm)
NGB31474	Thy	Denmark (Holms Planteskole)
NGB20396	Samsø Sharpes Express	Denmark (Samsø museum)
NGB20404	Reyd Epli	Faroe Islands (Gunnar Bjarnason)
NGB24298	Metsälä	Finland (Anna Ristsatama)
NGB25873	Norjalainen Laivaperuna	Finland (Juha Raistakka, Luke)
	Vaanin herkku	Finland (Veli-Matti Rokka, Luke)
NGB24297	Luröpotatis	Sweden (Åsa Rölin, Bodaholms Gård)
NGB23571	Himalaya	Sweden (Göteborgs Botaniska Trädgård)
NGB24281	Rally	Sweden (Göteborgs Botaniska Trädgård)
NGB31472	Kalmar röd	Sweden (Göteborgs Botaniska Trädgård)
NGB24873	Karatspotatis	Sweden (Göteborgs trädgårdar)
NGB23640	Granuddspotatis	Sweden (Jokkmokks Fjällträdgård)
NGB20395	Lillhärjåbygget	Sweden (Lillhärjåns Jordbruk)
NGB20400	Blå Märta	Sweden (Märta Nordling)



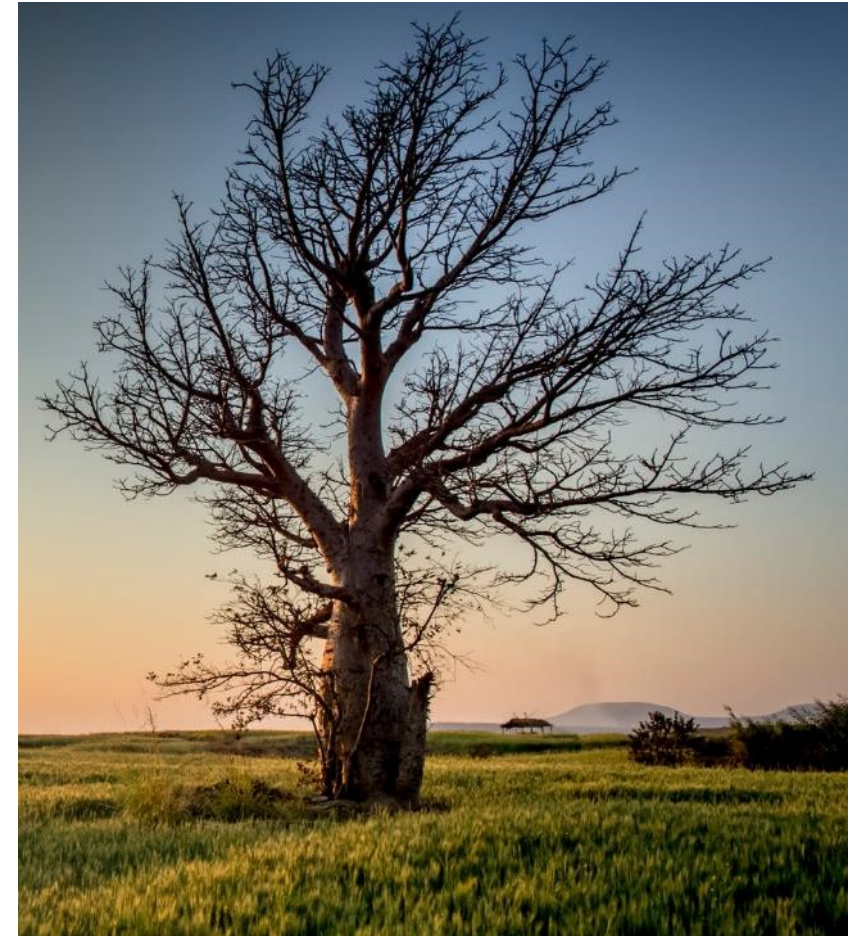
Kartoffel (*Solanum tuberosum*).

# Ny database

# An analogy!



SESTO



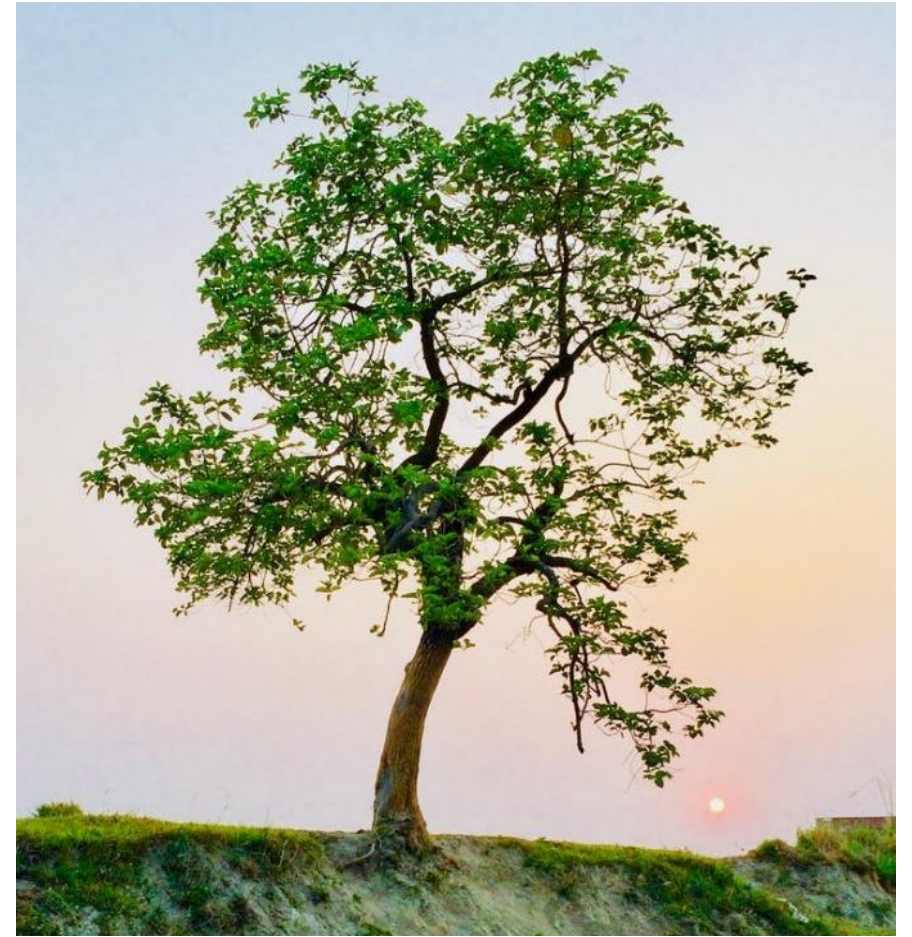
Empty GRIN-Global



The real SESTO



Define structure



Recreated virtual SESTO

# An analogy!



SESTO



Empty GRIN-Global





# GENBIS

The screenshot shows a web-based database interface for GENBIS. At the top, there are navigation tabs: Crop Trait, Crop Trait Observation, Method, Method Map, Crop Trait Code, Accession Inventory Group, and Accession Inventory Attach. Below the tabs is a table with the following columns: Accession Inventory Attach ID, Accession, Inventory, Image Virtual Path, and Thumbnail Virtual Path. The table contains 20 rows of data, with the last row (ID 693) highlighted in blue. At the bottom of the interface, there are navigation controls (back, forward, search, refresh) and a 'Data Editing' section with options like 'Hide Non-Error Rows', 'Hide Copy/Paste Warnings', 'Hide Unchanged Rows', and 'Highlight Changed Data'.

Accession Inventory Attach ID	Accession	Inventory	Image Virtual Path	Thumbnail Virtual Path
8050	NGB 7589	NGB 7589 **	AIA/SWE054/Phleum/38134/NGB_7589__XX_010612.jpg	AIA/SWE054/Ph...
8051	NGB 7589	NGB 7589 **	AIA/SWE054/Phleum/38134/NGB_7589__XX_010613.jpg	AIA/SWE054/Ph...
8268	NGB 7574	NGB 7574 **	AIA/SWE054/Phleum/37902/NGB_7574__XX_010779.jpg	AIA/SWE054/Ph...
8269	NGB 7586	NGB 7586 **	AIA/SWE054/Phleum/37628/NGB_7586__XX_010780.jpg	AIA/SWE054/Ph...
8270	NGB 7586	NGB 7586 **	AIA/SWE054/Phleum/37628/NGB_7586__XX_010781.jpg	AIA/SWE054/Ph...
8067	NGB 8454	NGB 8454 **	AIA/SWE054/Poa/38672/NGB_8454__XX_010637.jpg	AIA/SWE054/Po...
8068	NGB 8454	NGB 8454 **	AIA/SWE054/Poa/38672/NGB_8454__XX_010638.jpg	AIA/SWE054/Po...
8069	NGB 8454	NGB 8454 **	AIA/SWE054/Poa/38672/NGB_8454__XX_010639.jpg	AIA/SWE054/Po...
8070	NGB 8454	NGB 8454 **	AIA/SWE054/Poa/38672/NGB_8454__XX_010642.jpg	AIA/SWE054/Po...
8166	NGB 8454	NGB 8454 **	AIA/SWE054/Poa/38672/NGB_8454__XX_010721.jpg	AIA/SWE054/Po...
8168	NGB 8454	NGB 8454 **	AIA/SWE054/Poa/38672/NGB_8454__XX_010722.jpg	AIA/SWE054/Po...
8170	NGB 8454	NGB 8454 **	AIA/SWE054/Poa/38672/NGB_8454__XX_010723.jpg	AIA/SWE054/Po...
8403	NGB 7613	NGB 7613 **	AIA/SWE054/Dactylis/18007/NGB_7613__XX_010912.jpg	AIA/SWE054/D...
8426	NGB 7613	NGB 7613 **	AIA/SWE054/Dactylis/18007/NGB_7613__XX_010935.jpg	AIA/SWE054/D...
8435	NGB 7613	NGB 7613 **	AIA/SWE054/Dactylis/18007/NGB_7613__XX_010944.jpg	AIA/SWE054/D...
8366	NGB 899	NGB 899 **	AIA/SWE054/Alopecurus/16857/NGB_899__XX_010877...	AIA/SWE054/AI...
8367	NGB 899	NGB 899 **	AIA/SWE054/Alopecurus/16857/NGB_899__XX_010878...	AIA/SWE054/AI...
693				

The screenshot shows the GENBIS website interface. At the top, there is a header with the title 'Nordic Baltic Genebanks Information System (GENBIS)' and a 'Contact Us' link. Below the header is a navigation menu with links: Accessions, Descriptors, Taxonomy, View Cart, Reports, My Profile, About, and Help. The main content area displays details for accession NGB 2408, which is *Solanum lycopersicum L. var. lycopersicum*. The details include: Collected from: Denmark; Maintained by: Nordic Genetic Resource Center; Received: 20-Dec-1982; Backup location: Danmarks JordbrugsForskning; Life form: Cultivar release year: 1971; Cultivar approved year: 1971; Improvement status: Advanced or improved cultivar; Reproductive uniformity: Seed; Form received: Seed. On the right side, there is a status box showing 'Status: Available', 'Amt Distributed: 1 count', and 'Type Distributed: Seed'. Below this are two buttons: 'Add to My Favorites' and 'Add to Order'. At the bottom right, there is a small image of a tomato and a small thumbnail gallery.

**Nordic Baltic Genebanks Information System (GENBIS)** Contact Us

Accessions Descriptors Taxonomy View Cart Reports My Profile About Help

**NGB 2408**

*Solanum lycopersicum L. var. lycopersicum*

Status: Available  
Amt Distributed: 1 count  
Type Distributed: Seed

Add to My Favorites  
Add to Order

Collected from: Denmark  
Maintained by: Nordic Genetic Resource Center  
Received: 20-Dec-1982  
Backup location: Danmarks JordbrugsForskning  
Life form: Cultivar release year: 1971; Cultivar approved year: 1971  
Improvement status: Advanced or improved cultivar  
Reproductive uniformity: Seed  
Form received: Seed

Accession names and identifiers

21. Januar 2021 – slut  
Implementering – fuld fokus  
Aftaler med øvrige brugere, Baltiske lande andre nordiske lande

# Hvor mange accessjoner har Norge?

@accession.accession\_number\_part1 LIKE 'NOR%'

Search Results

Add To Query Clear Query

Accessions	Inventory	Orders	Cooperators	Accession Inventory Name	Accession
				NOR*	
Accession ID	Digital Object Identifier	Accession Prefix	Accession Number	Accession Suffix	Taxon

GRIN-Global Search v1.9.8.30

accession

Matching  
 Any Word  All Words  List of Items

Search Criteria

@accession.accession\_number\_part1 LIKE 'NOR%'

Search Results

Add To Query Clear Query

Accessions Inventory Orders Cooperators Accession

Accession ID	Digital Object Identifier	Accession Prefix	Accession Number	Accession Suffix	Taxon
		NOR*			
49328	54838	NOR	46		Rheum x rhabarb...
49329	54180	NOR	26		Rheum x rhabarb...
49330	54862	NOR	67		Rheum x rhabarb...
49331	54837	NOR	45		Rheum x rhabarb...
49332	54829	NOR	37		Rheum x rhabarb...

Query Results v1.9.8.30

Found at least 152 'possible' matches in the database. Continue to retrieve data?

OK Cancel

# Kvalitetssystem

- 254 godkendte arbejdsinstruktioner
  - mange nyreviderede som følge af GENBIS
- > 50 inden vi er i mål

# Bas-lageret

# Baslageret

*Overfør indhold af 60 kummefrysere til 35m<sup>2</sup> walk-in freezer*



Frysbox – stort sortiment

+ 6 bas freezers in Alnarp

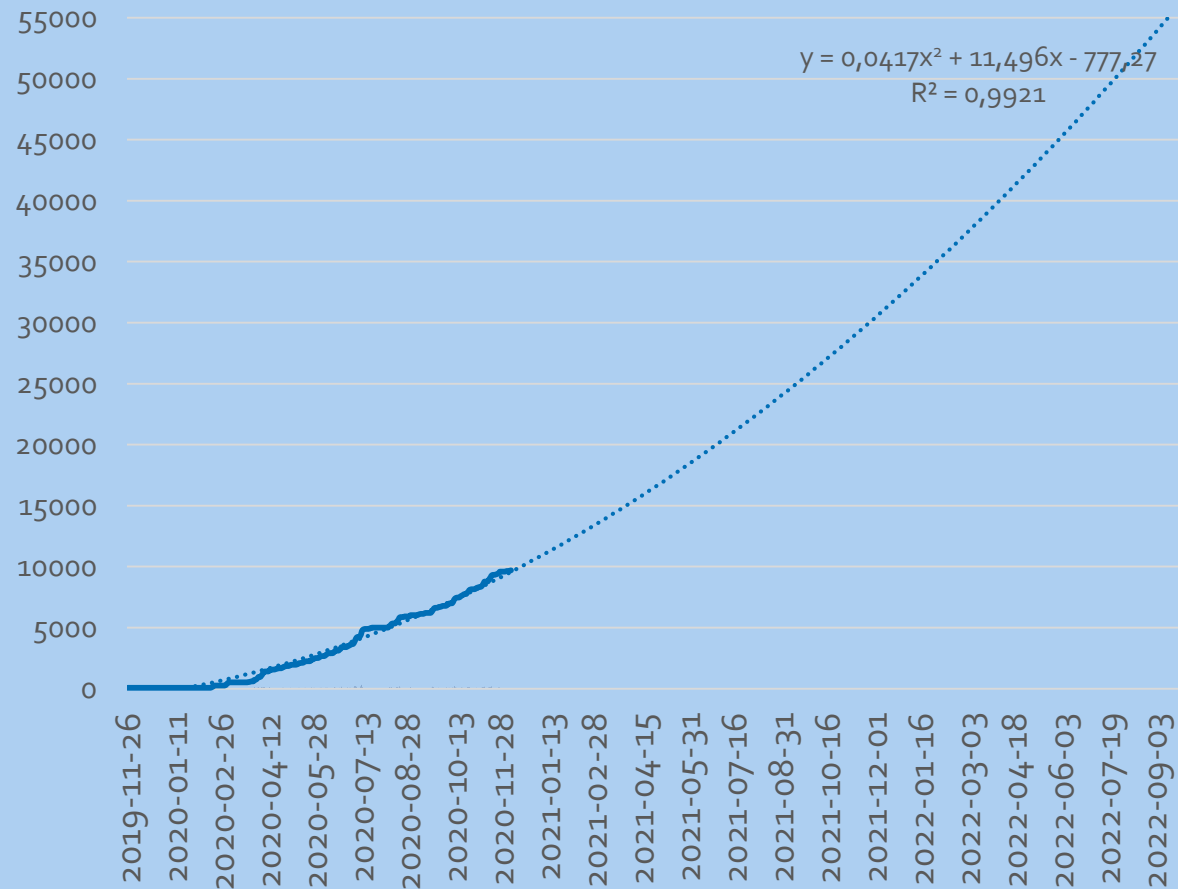


# Flytning af baslageret



May 2020

# 2021 -2023



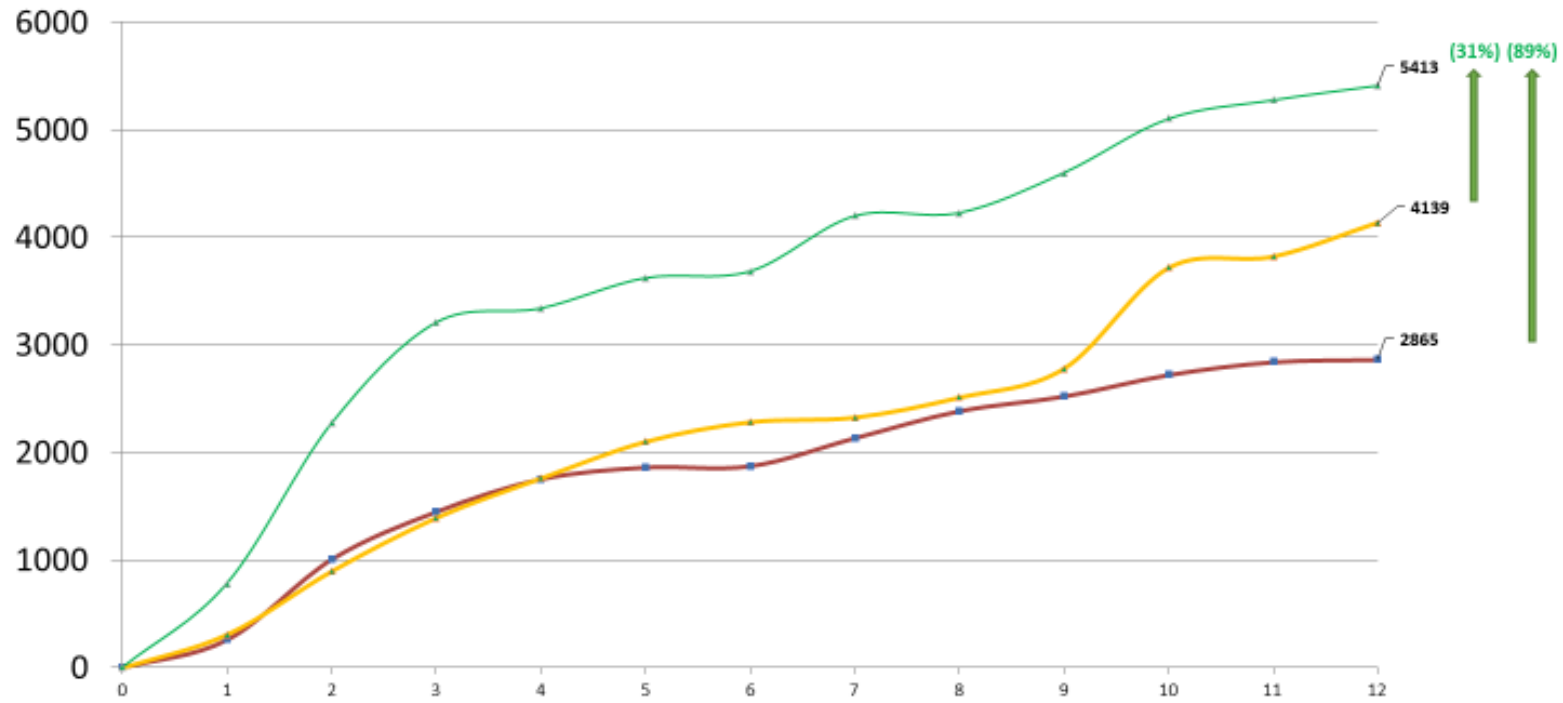
Ca 11 mill DKK fra  
Novo Nordisk fonden  
til infrastruktur

# Andre fokusområder



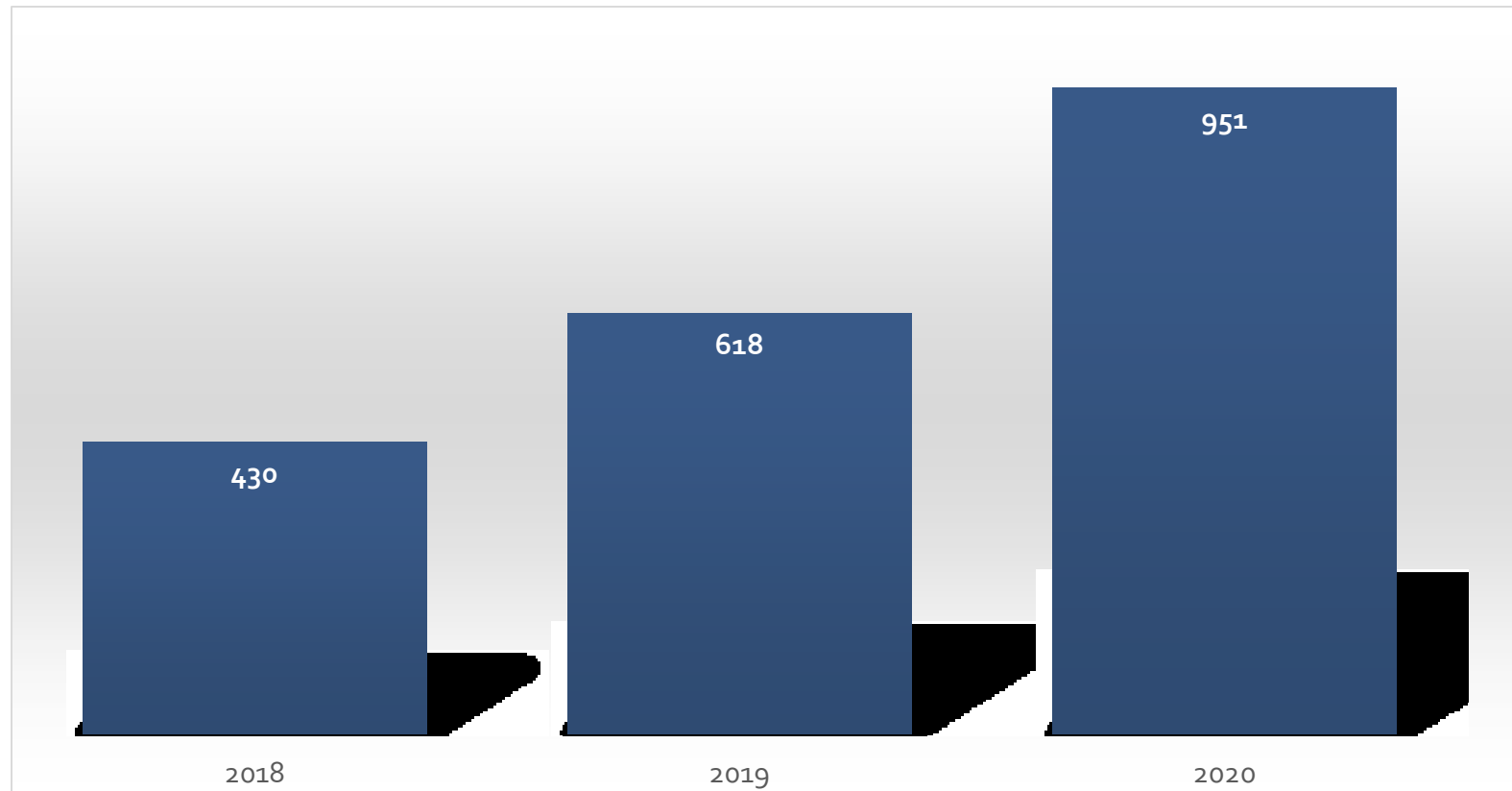
### Samples sent

2018 2019 2020



# Lidt statistik frøsalg

- antal ordrer 2018-2020



2021:  
1080  
ordrer

# 100 year project

## Over all set up

- 13 species, 5 accessions of each – seed vault
- 3 species, 5 accessions of each – coal mine
- Accessions to be cultivated and harvested in three years
- 6 gene banks
  
- Samples to be tested every 10 year for germination, Kimen
- 1 set to IPK for chemical analysis
  
  
  
  
  
  
  
  
  
  
- 4 extra set of samples



# NordGens opgaver i 100 års forsøget

- Dyrke og producere frø i 3 år af 5 timothe accessioner
- Modtage og håndtere alle accessioner fra de andre genbanker
  - Tørre dem ned
  - Dele dem ned til 16 poser
  - Bestemme vandindhold
  - Randomisere
  - Pakke til Svalbard, IPK og Kimen

# Nyt hus



# Ny organisation

