



**Saja-aastane, kes hüppas  
aknast välja ja kadus**

Jonas Jonasson



**100 years . . . .**

**Congratulations !**

**Allan Karlsson had an eventful past – and many  
new adventures starting with his 100th birthday !**



Euroopa Maaelu Arengu  
Põllumajandusfond:  
Euroopa investeeringud  
maapiirkondadesse

# Trends in breeding and seeds in Europe

Estonia, 29.10.2020

Dr. Niels Louwaars, Director

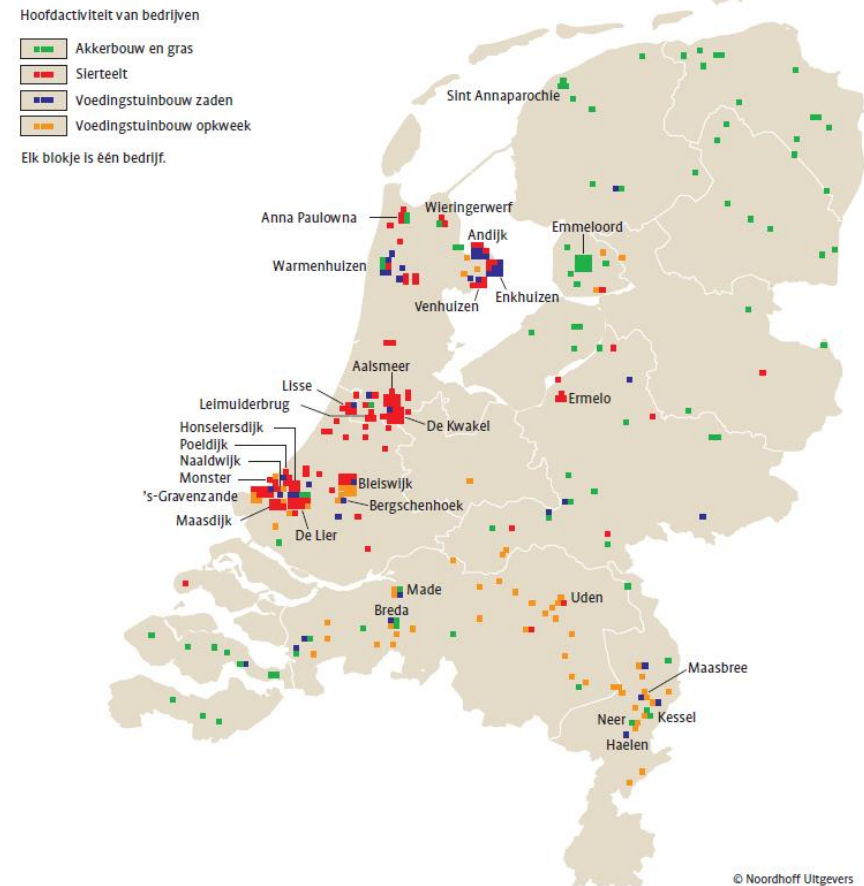


# Dutch sector

- 300 companies
- 1200 jobs
- 3 billion € export

## Success factors:

- 200 years of entrepreneurship
- Knowledge infrastructure
- Effective policy institutions
  - Phytosanitary controls
  - Quality control
  - Breeder's Rights

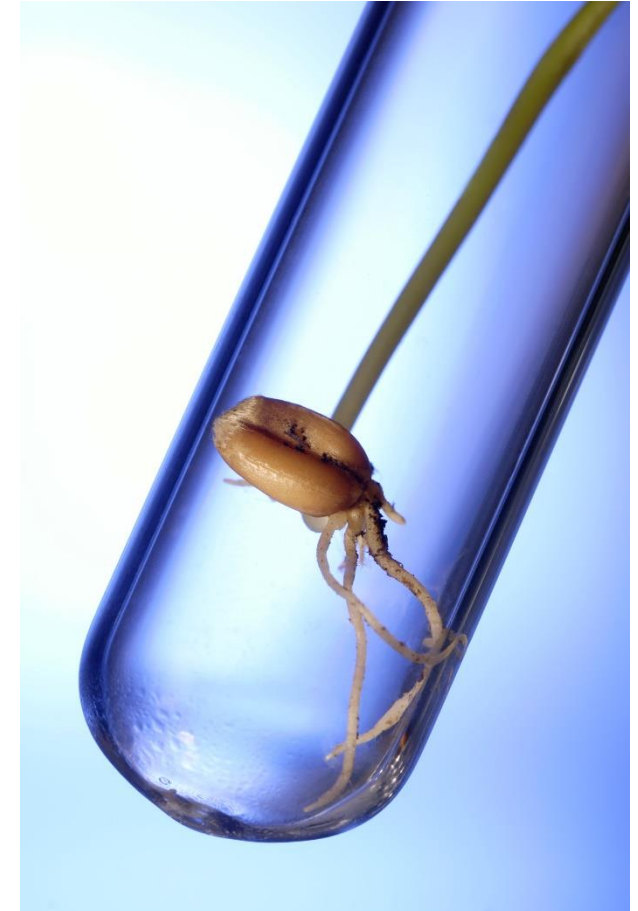




# Seeds: basis for the green economy



- Plantum focuses on key criteria
  - Policies that support innovation
  - Market access: Phyto/seed legislation
  - Sustainability: Crop protection, Social Responsibility, employment conditions
  - Visibility of the sector: in support of policy work and also job market/education



# Important new trends in Europe



## European Green Deal

- Become climate neutral
- Cut pollution
- Clean products/technologies
- Just and inclusive transition



# For agriculture . . . . Breeding!!!



- Adaptation to climate change
  - Tolerance to drought, salt, temperature and water stress
  - Resistance to new diseases and pests (eg mild winters)
- Cut back on chemicals (including organics)
  - disease resistance is key
  - guaranteed healthy seed becomes even more important

# Opportunities but also challenges



- Plant breeding is at the top of the agenda of agricultural transitions

BUT:

- Breeding takes ( a lot of) time
- Producing disease free seed often requires (seed treatment) chemicals

SO:

- Breeders are a main source of the required innovation – and need to innovate themselves as well.

# Innovation – opportunities



- Research:
  - horizon Europe
  - national funding
  - public-private partnerships
  
- attracting bright people to the sector
- creating crossovers
- creating partnerships





# Innovation bottlenecks

- Research collaborations: Horizon Europe / National funding / public-private partnerships / attracting bright people to the sector
- Access to Genetic Resources – Nagoya Protocol: genebanks!



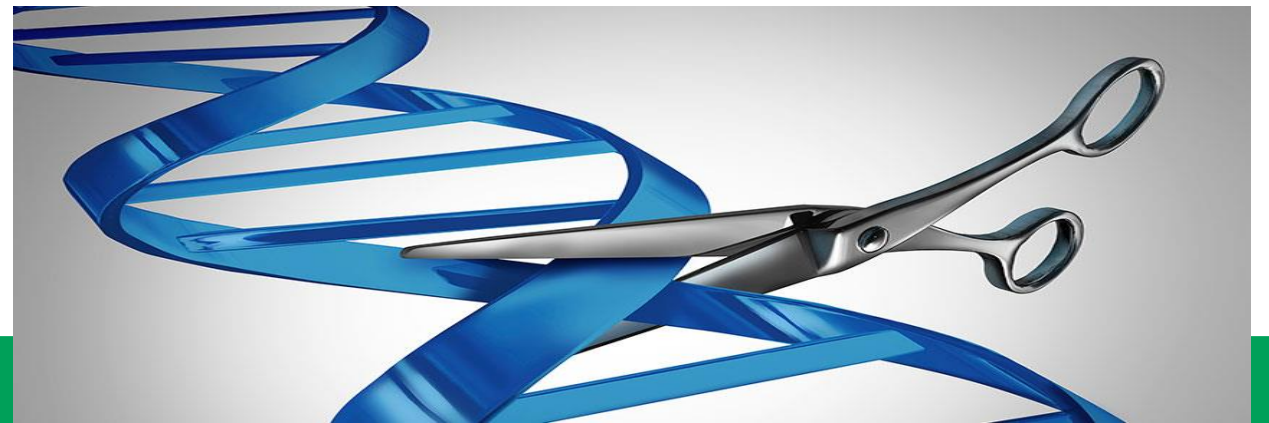
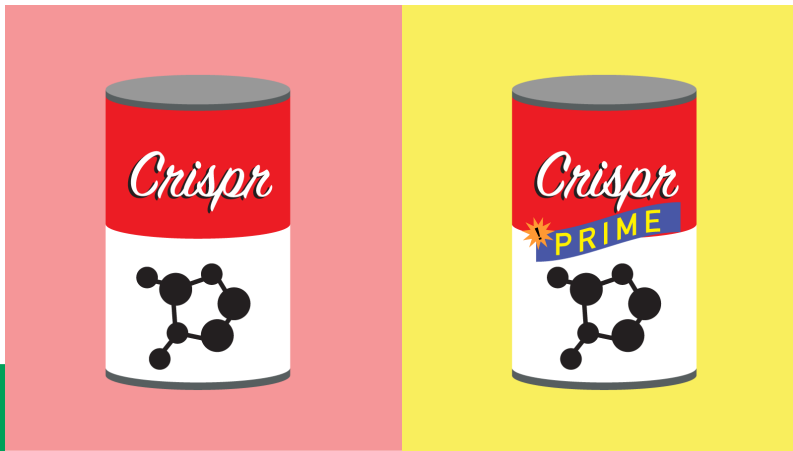
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- Modern breeding methods (gene editing) – EU-regulations / licenses





# Supporting the sector



- Research infrastructure and education of plant scientists
  - ETP plants for the Future
- DUS-facilities for registration and breeder's rights
- Quality control institutions
- Phytosanitary authorities
- Seed Association Plantum
  - Euroseeds
  - International Seed Federation



# Sector organisations



- Provide a platform for discussion
- Represent the sector towards government, politics and society
  - Regulations
  - Implementation of regulations
  - Support (eg in international market access)
- Provide services to the members





RAHVUSVAHELINE BESTSELLER NÜÜD SUUREL EKRAANIL



NICE FLX PICTURES & STUDIOCANAL ESITLEVAD

# SAJA-AASTANE, KES HÜPPAS AKNAST VÄLJA JA KADUS

FELIX HERNGRENI FILM



KINODES 12. DETSEMBRIST



“On, nagu on, ja tuleb, mis tuleb”

**I wish the institute and all of  
you an adventurous future !!**

**Congratulations!**

