

The Boreal logo consists of the word "BOREAL" in a bold, blue, sans-serif font. The letter "O" is replaced by a stylized circular icon containing a white crescent shape, resembling a sun or a leaf. The background of the slide is a close-up photograph of green wheat stalks with a bright sun in the background, creating a lens flare effect.

**BOREAL**

# Boreal Plant Breeding Ltd.

Presentation 4.3.2025  
Nordic Field Trial Network  
Juha-Pekka Mikkola



# Boreal Plant Breeding Ltd.

- Established 1994, located in Jokioinen, Finland
- The history of Finnish plant breeding since 1904
- Staff of ~ 60 people
- Turnover: ~ 8,7 M€ (2024)
- Own seed centre for basic seed production
- Market share in Finland of all species is over 50 %
- Business model:
  - Main income from royalty market
  - Partnerships with seed production and sales companies are important



# Boreal shareholders

- State of Finland 65 %
- Hankkija Ltd 14 %
- Raisio Group (res.foundation) 7 %
- Tilasiemen Ltd 7 %
- MTK 6,5 %
- SLC 0,5 %



# Boreal breeding programmes

cover all main species cultivated in Finland



## Cereals

Barley, Oat, Spring/Winter-wheat, Winter-rye



## Oil crops

Spring turnip rape



## Grasses

Timothy, Tall fescue, Meadow fescue, Red clover

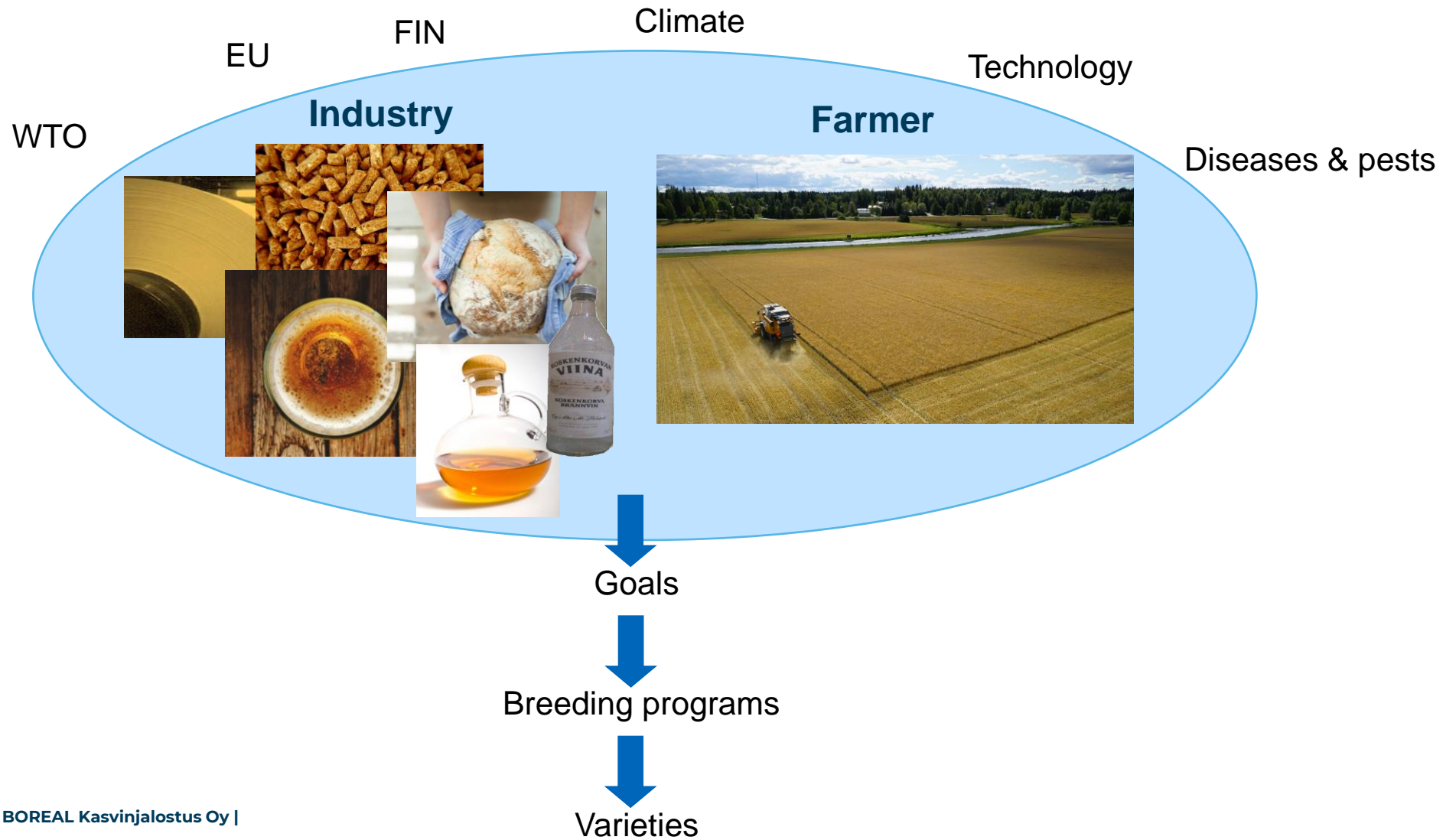


## Other crops

Pea, Fababean



# Customer oriented breeding programmes



# Key traits

- Yield
- Wide adaptation
- Winter hardiness
- Various quality traits
- Resistance traits



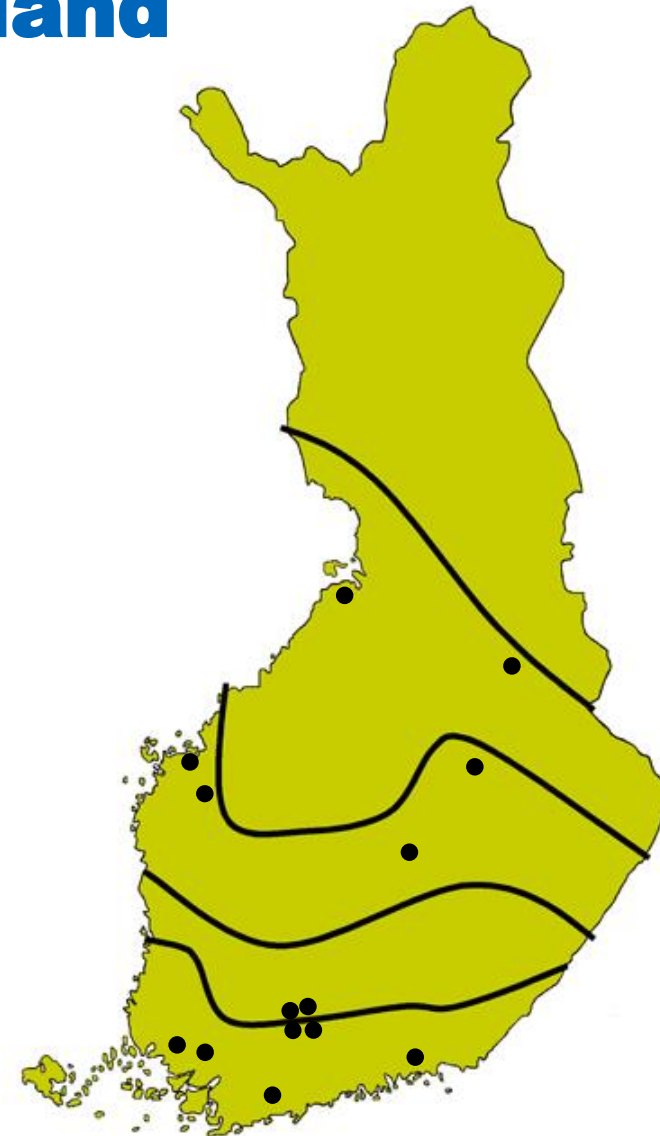
## Boreal operational frame field trials, multiplication of varieties and basic seed production

- Own fields in Jokioinen and nearby areas, 175 hectares, rented 105 hectares
- For field trial activities alone, we rent 55 hectares annually across Finland
- Testing network in Finland is 14 different locations
- We also test abroad in 8 different countries (12 places)
- In 2024 Boreal had 30 contract farmers
- They produced on 900 hectares a yield for 1,7 million kilograms certifications



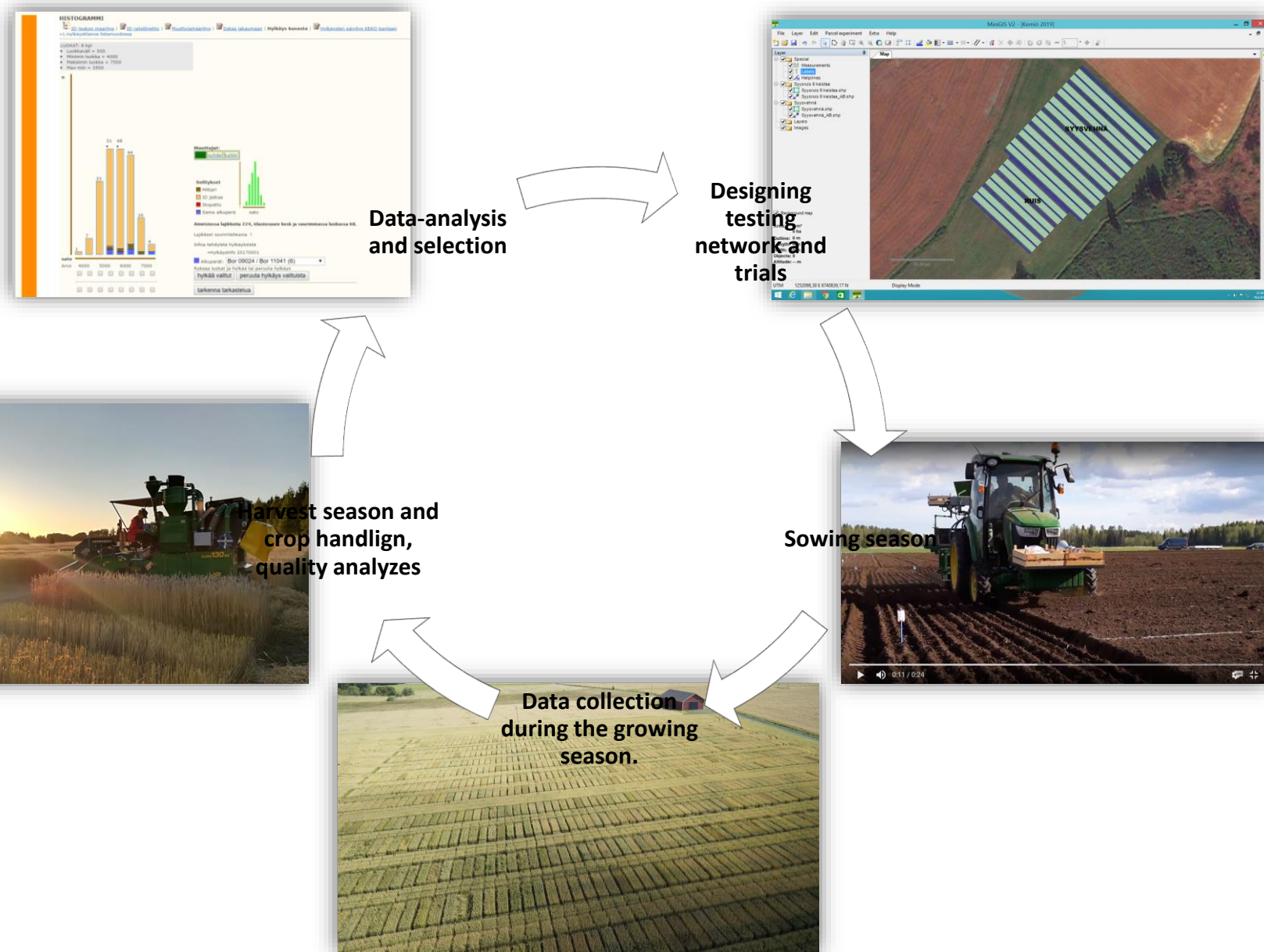
# Boreal testing network in Finland

	<b>Trial plots (2024)</b>
Barley	7 811
Oat	7 214
Spring wheat	5 546
Winter wheat	3 076
Rye	1 799
Pea	2 795
Faba bean	1 163
Oils seed	1 318
Grasses	5 116
<b>TOTAL</b>	<b>35 838</b>

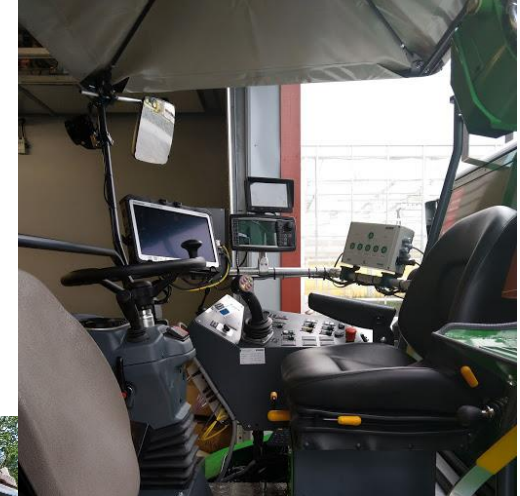




# Annual schedule of field trials



# New technology in trial fields

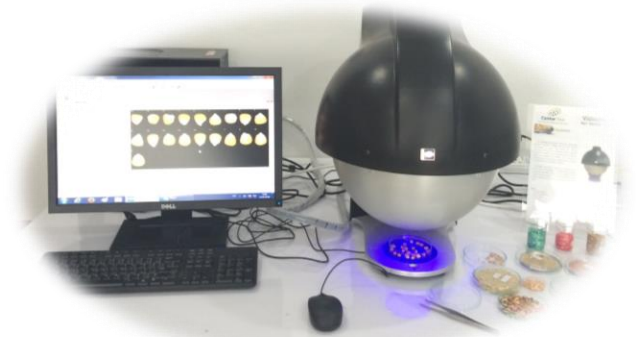
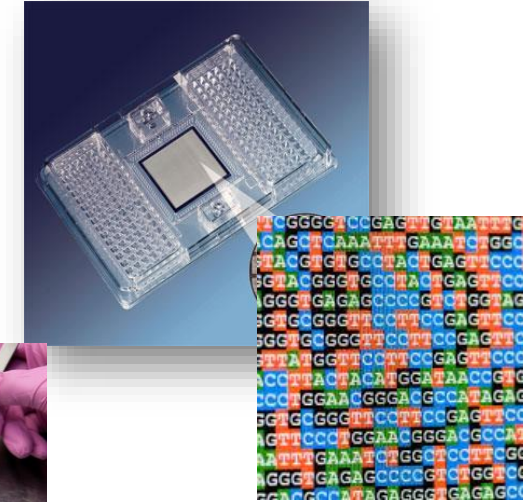
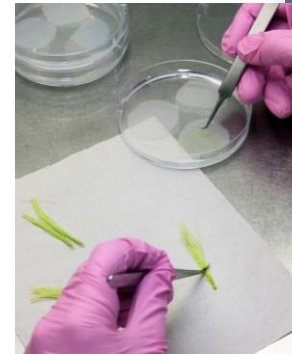




# We develop our breeding work

With new technologies we get

- timelines
- better quality
- efficiency
- new varieties faster for marketing

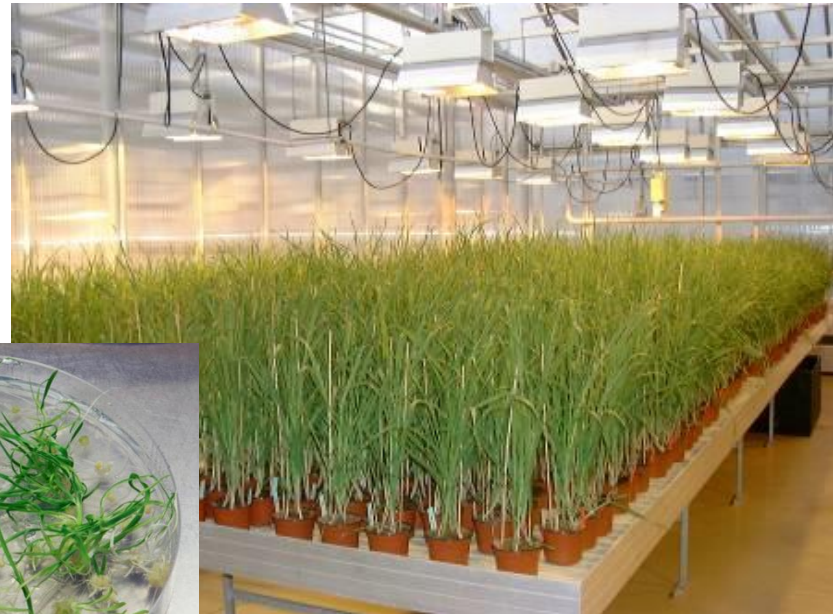




# Rapid breeding programmes



Genomic Selection models adaptation underway for all spring cereals



With tissue culture (DH) the breeding programmes are speeded up by 4-5 years

**B**  **OREAL**

[www.boreal.fi](http://www.boreal.fi)