



# Variety trials in Denmark

Nordic Field Trial Network

February 8th 2023

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Innovation**

# Cooperation between TystofteFonden and SEGES Innovation



- Non-governmental institution
- Official testing on behalf of the Ministry of Food, Agriculture and Fisheries
- National listing of varieties (A-varieties)
  - DUS (Different, Uniform, Stable)
  - VCU (Value of Cultivation and Use)
  - Identity (control plots)
  - Baking test
  - Malting test

## Cooperation

- Protocols
- A- and B-varieties in the same trials
- Identity
- Revision of trial results, also with TI

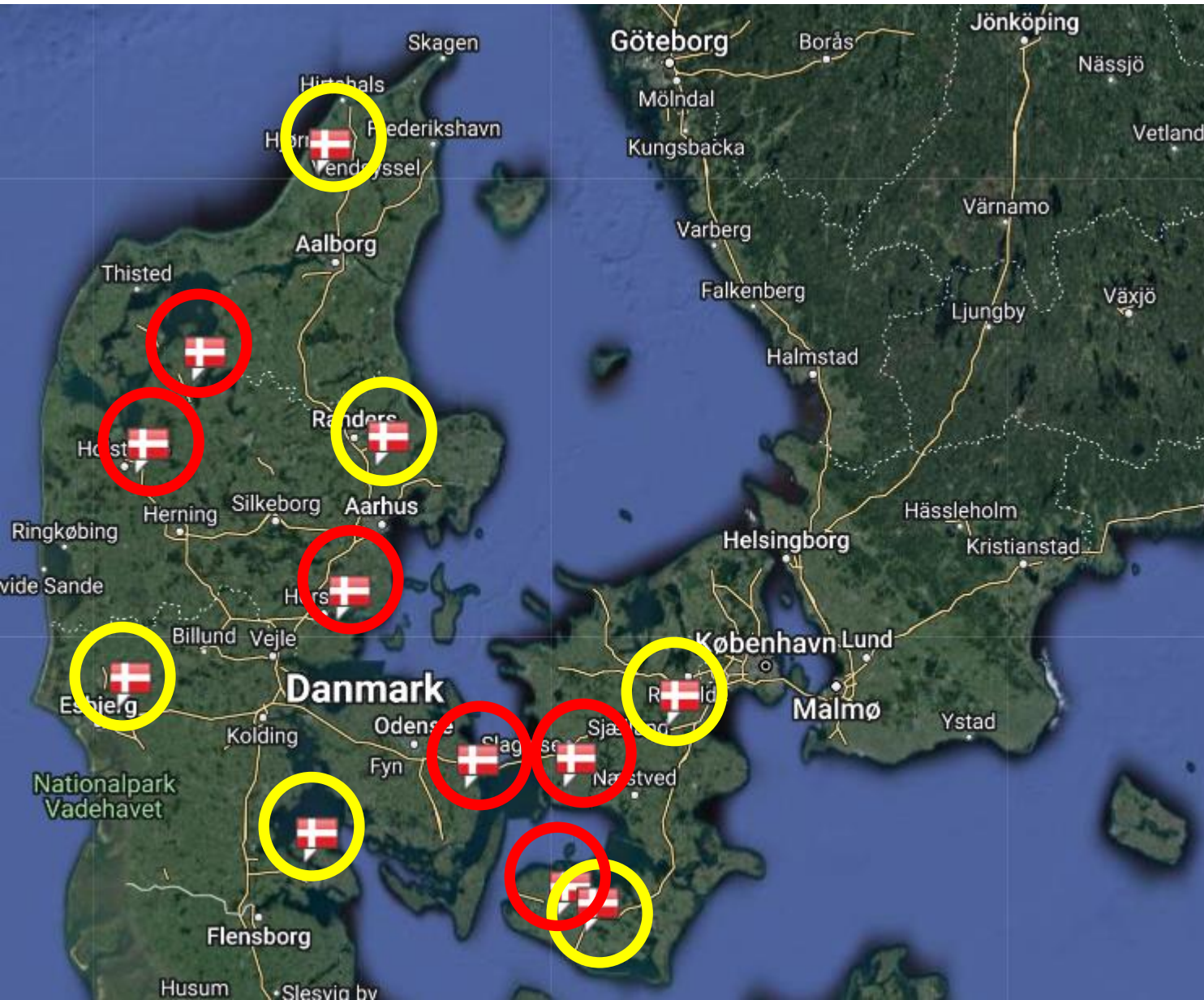


- Independent research and development organization
- 'National variety trials' for companies that want to market varieties (B-varieties) in Denmark
  - Yield trials
    - With and without fungicide treatment (cereals)
  - Quality analysis
  - Registration of diseases, lodging etc.

**All testing and all trials are financed by breeders and representatives**



# Variety trials in winter wheat 2023



- Two trial series
  - Varieties under test for National Listing registration
    - A- and B-varieties
    - TystofteFoundation
  - Varieties in National field trials
    - A+- and B-varieties
    - SEGES Innovation

A+ is additional VCU-testing with and without fungicide treatment



# Publication



The image shows a screenshot of the SortInfo website. The background is a photograph of a green field transitioning into a golden-brown field. The SortInfo logo, featuring a stylized leaf icon, is positioned above the text 'SortInfo'. Below the logo is a white rectangular button with the text 'Select crop' and a small downward-pointing arrow. At the bottom of the page, there is a dark teal footer containing contact information for SortInfo partners, other sites, and SEGES Innovation.

**SortInfo**

Select crop ▾

**SortInfo partners**

AARHUS UNIVERSITET

TystofteFonden

**Other sites**

Sortsvlg majs  
SEGES.dk  
LandbrugsInfo.dk  
Landmand.dk  
Svineproduktion.dk

**SEGES INNOVATION**

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The image shows the cover of the 'LANDSFORSØGENE 2022' publication. The background is an aerial photograph of a green field with a white irrigation system. A green tractor is visible in the middle of the field. The text 'LANDSFORSØGENE 2022' is written in white at the top. At the bottom, there are logos for the Innovationscenter for Økologisk Landbrug and SEGES INNOVATION.
























**LANDSFORSØGENE 2022**

Innovationscenter for Økologisk Landbrug

**SEGES INNOVATION**

- All results are published at SortInfo just after harvest and revision
- In December results are also published in Landsforsøgene

Winter wheat ▼ | National trials ▼ | Latest year ▼

	Yield				Diseases (Observation Plots)			Cultivation (Observation Plots)			IPM Score
	Grain yield index (index) ↓ 	Grain yield, hkg per ha (hkg/ha) ↑ 	Specific weight, (kg/hl) ↑ 	Crude protein in dry matter (%) ↑ 	Mildew coverage (%) ↑ 	Septoria coverage (%) ↑ 	Yellow rust coverage (%) ↑ 	Ripening date ↑ 	Straw length (cm) ↑ 	Lodging (score 0 - 10) ↑ 	IPM total Score (score 0 - 19) ↑ 
Showing 49 of 49 rows											
Year	2022	2022	2022	2022	2022	2022	2022	2022	2022	2021	2021
LSD	2.0	3.00	1.00	-	-	-	-	-	-	-	-
<input type="checkbox"/> NOS 514218.07 	106 (10)	126.5 (10)	76.5 (10)	9.0 (10)	1.2 (6)	7 (12)	0.00 (5)	05/08 (6)	89 (5)	-	-
<input type="checkbox"/> Guinness 	105 (10)	125.2 (10)	78.6 (10)	9.5 (10)	2.9 (6)	8 (12)	0.02 (5)	04/08 (6)	94 (5)	-	-
<input type="checkbox"/> Champion 	103 (10)	123.1 (10)	76.9 (10)	9.3 (10)	14 (6)	13 (12)	0.04 (5)	03/08 (6)	81 (5)	0.0 (4)	10
<input type="checkbox"/> HK-hvedeMIX 2022 	103 (10)	122.5 (10)	78.7 (10)	9.2 (10)	0.15 (6)	5 (12)	0.00 (5)	05/08 (6)	82 (5)	-	-
<input type="checkbox"/> DLG Wheat Mix Star 	102 (10)	121.8 (10)	78.3 (10)	9.3 (10)	1.0 (6)	4.1 (12)	1.6 (5)	05/08 (6)	87 (5)	-	-
<input type="checkbox"/> Pondus 	102 (10)	121.8 (10)	78.0 (10)	9.4 (10)	2.2 (6)	3.0 (12)	0.00 (5)	06/08 (6)	86 (5)	0.0 (4)	8
<input type="checkbox"/> KW 2528-20 	102 (10)	121.4 (10)	81.0 (10)	9.7 (10)	2.2 (6)	4.7 (12)	0.00 (5)	03/08 (6)	88 (5)	-	-
<input type="checkbox"/> KWS W434 	102 (10)	121.3 (10)	78.3 (10)	9.4 (10)	2.4 (6)	14 (12)	0.00 (5)	07/08 (6)	82 (5)	-	-
<input type="checkbox"/> NOS Hvede Mix 2220 	101 (10)	120.6 (10)	78.3 (10)	9.4 (10)	0.56 (6)	4.9 (12)	0.02 (5)	03/08 (6)	89 (5)	-	-
<input type="checkbox"/> SU Willem 	101 (10)	120.5 (10)	80.5 (10)	9.9 (10)	1.8 (6)	8 (12)	12 (5)	03/08 (6)	97 (5)	-	-
<input type="checkbox"/> RGT Stokes 	101 (10)	120.2 (10)	77.9 (10)	9.2 (10)	2.1 (6)	5 (12)	3.3 (5)	06/08 (6)	83 (5)	0.0 (4)	8
<input type="checkbox"/> SY Revolution 	101 (10)	120.0 (10)	80.7 (10)	9.6 (10)	0.52 (6)	6 (11)	0.00 (5)	03/08 (6)	87 (4)	-	-

# Choose the information You want

SortInfo



← BACK

Setup of information shown in SortInfo

Winter wheat

LOAD DEFAULT SETTINGS

Select property for Winter wheat

## Yield

- Grain yield index
- Grain yield, hkg per ha
- Surplus yield for funguscontrol
- Grain yield without funguscontrol
- Feed units for pigs per hkg, 15 % moisture
- Feed units for sows per hkg, 15 % moisture
- Crude ash, % in grain with 15 % moisture
- Crude fat, % in grain with 15 % moisture
- Starch, % of dry matter
- Specific weight, Tested variety
- Crude protein in dry matter, Tested variety
- Gluten14 Tested variety
- Falling number
- Sedimentation

Cancel

Save settings

## Agronomic data (Yield trials)

- Tendency to lodging, score 0-10
- Score, feed value, pigs

## Diseases (Observation Plots)

- Mildew coverage
- Septoria coverage
- Yellow rust coverage
- Brown rust coverage
- Coverage of ear diseases
- Tan Spot (Yellow Leaf Spot)
- Septoria in the ear, coverage
- Midew in the Ear coverage
- Fusarium in ears, % coverage

## Artificial infection

- Yellow rust, patotype: VYr 1,2,3,9,15,17
- Yellow rust, patotype: VYr 1,2,3,6,9,17
- Yellow rust, patotype: VYr 1,2,3, CV
- Yellow rust, patotype, Vyr 1,2,3,4,6,9,17
- Yellow rust, patotype, Vyr 1,2,3,4,9,17
- Wheat bunt
- Percent of heads with Fusarium
- Tan spot, artificial infection

## Cultivation (Observation Plots)

- Ripening date
- Dead plants
- Vitality
- Straw length

Cancel

Save settings

## Certified seed, tons

- Prebasic seed
- Basic seed
- C1 seed
- C2 seed

## Area with certified seed

- Prebasic, area
- Basic, area
- C1, area
- C2, area

## Area with certified organic seed

- Prebasic, area
- Basic, area
- C1, area
- C2, area

## Susceptibility group in Plantprotection Online

- Mildew
- Septoria
- Brown rust (Puccinia recondita)
- Yellow rust (Puccinia striiformis)
- Tan spot
- Fusarium, ear
- Eyespot

## List of bread wheat varieties

- Bread wheat variety

Cancel

Save settings

SEGES  
INNOVATION

# Example Grain yield without fungus control – find the best varieties

## SortInfo



ONLY SHOW CHOSEN

SHOW DATA CHART

EXPORT TO EXCEL

TABLE SETUP

FULLSCREEN

Winter wheat

National trials

Latest year

Yield

Grain yield index  
(index)



Grain yield, hkg per ha  
(hkg/ha)



Surplus yield for funguscontrol  
(hkg/ha)



Grain yield without funguscontrol  
(hkg/ha)



Showing 49 of 49 rows

Year

2022

2022

2022

2022

LSD

2.0

3.00

4.00

5.00

NOS 514218.07



106 (10)

126.5 (10)

3.6 (4)

122.6 (4)

Guinness



105 (10)

125.2 (10)

4.0 (4)

119.0 (4)

DLG Wheat Mix Star



102 (10)

121.8 (10)

3.1 (4)

116.6 (4)

KW 2528-20



102 (10)

121.4 (10)

3.5 (4)

116.2 (4)

SU Willem



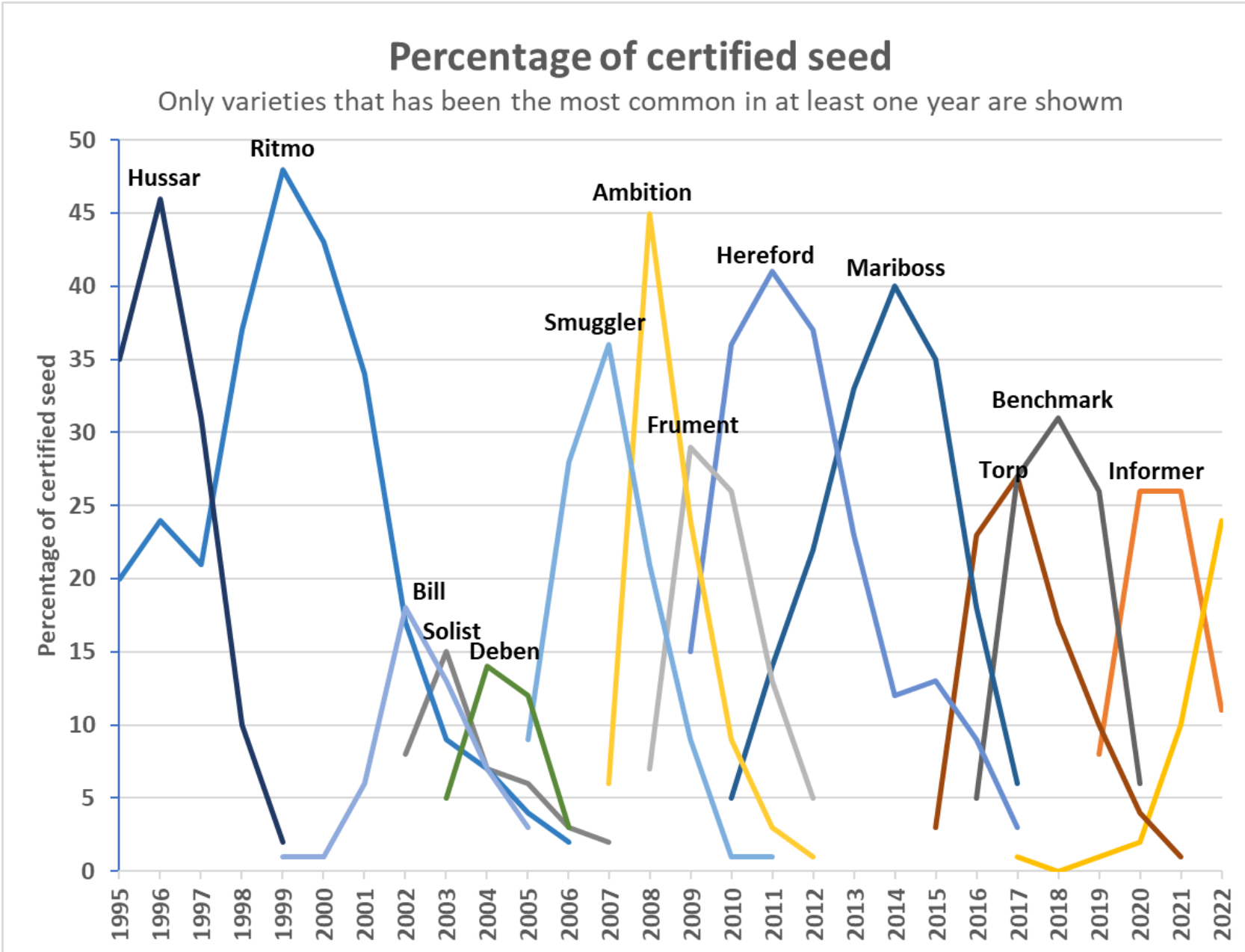
101 (10)

120.5 (10)

4.7 (4)

114.8 (4)

# Fast turn over of winter wheat varieties





A high-angle, close-up view of a dense field of wheat. The stalks are tall and thin, with long, narrow leaves. The grain heads are a mix of green and golden-brown, indicating they are nearly ready for harvest. The field stretches far into the distance, creating a sense of vastness and abundance. The lighting is bright and even, highlighting the texture of the wheat.

**Thank you for your attention!**