

Autumn sowing of spring barley

Leif Hagelskjær, SEGES Innovation

NFTN-Conference 2026

Efterårssået maltbyg gav ét ton mere end det forårssåede

Den efterårssåede vårbyg gav 6,3 ton mod 5,3 ton i den forårssåede. Det er nok til at prøve igen, mener Claus Justesen.

16. aug 2023 | 09:31 |

Skrevet af [Merete Hattesen](#) | 

To landmænd efter to sæsoner med efterårssået vårbyg: Markant højere udbytte

Der er en række fordele, men også nogle udfordringer, når man sår vårafgrøder i efteråret. Det fortæller to landmænd, der har eksperimenteret med såtidspunktet i de sidste to år.

11. okt 2023 | 08:50 |

Skrevet af [Merete Hattesen](#) | 



UDVIKLINGSPULJE
FOR PLANTESEKTOREN

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Why sow spring barley in the autumn?

- **Establishing spring barley in spring has been challenging, especially on clay soils**
 - 2023 og 2024
- **Early summer drought has severely affected spring crops**
 - 2018 og 2023
- **Good experience from Germany, France and some from Denmark**
 - Earlier harvest, higher yield, variable malting quality
- **There is risk of winterkill, but results have generally been good**

Ytteborg, sown 15/11 2023. Photo 28/2 2024

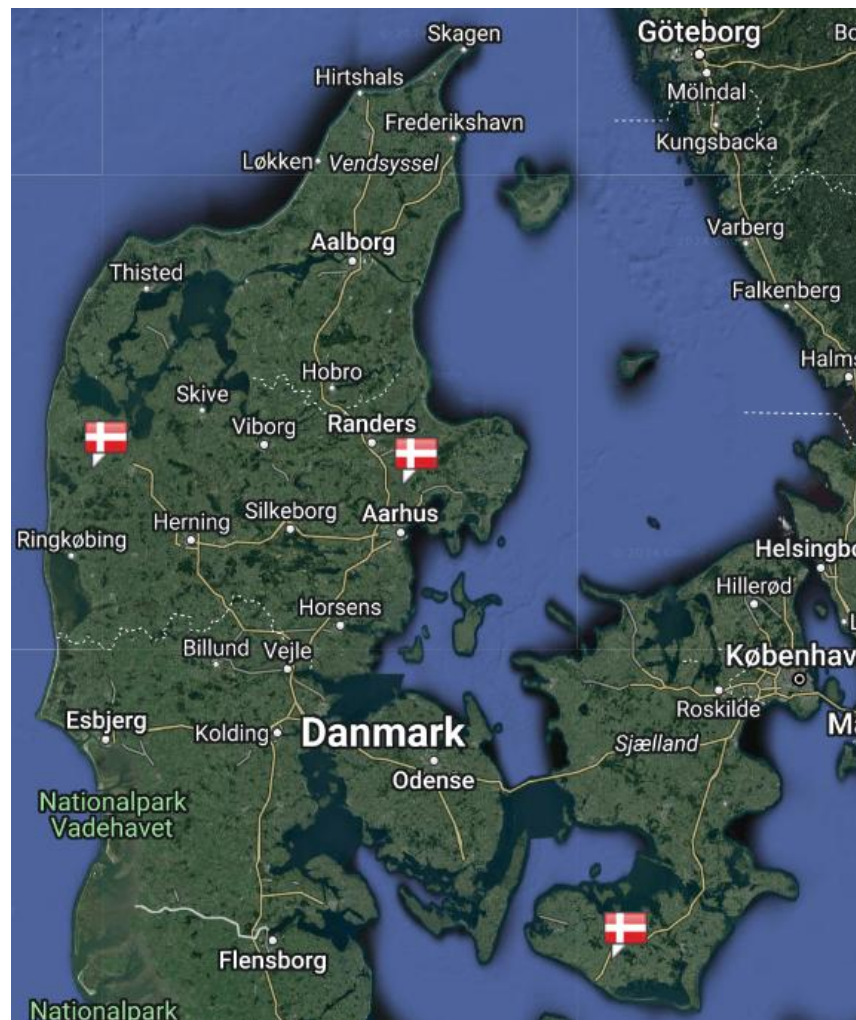


Photo: Leif Hagelskjær, SEGES Innovation



VKST, Holeby, sown 8/11 2023

Photo: Louise Lund, VKST Trials



Three trials in 2024 and 2025 – same locations

Ytteborg, Holstebro
VKST, Holeby
Djursland Lbf.

Djursland, sown 18/12 2023. Photo 13/2 2024



Photo: Leif Hagelskjær, SEGES Innovation

Djursland, sown 18/12 2023. Photo 13/2 2024



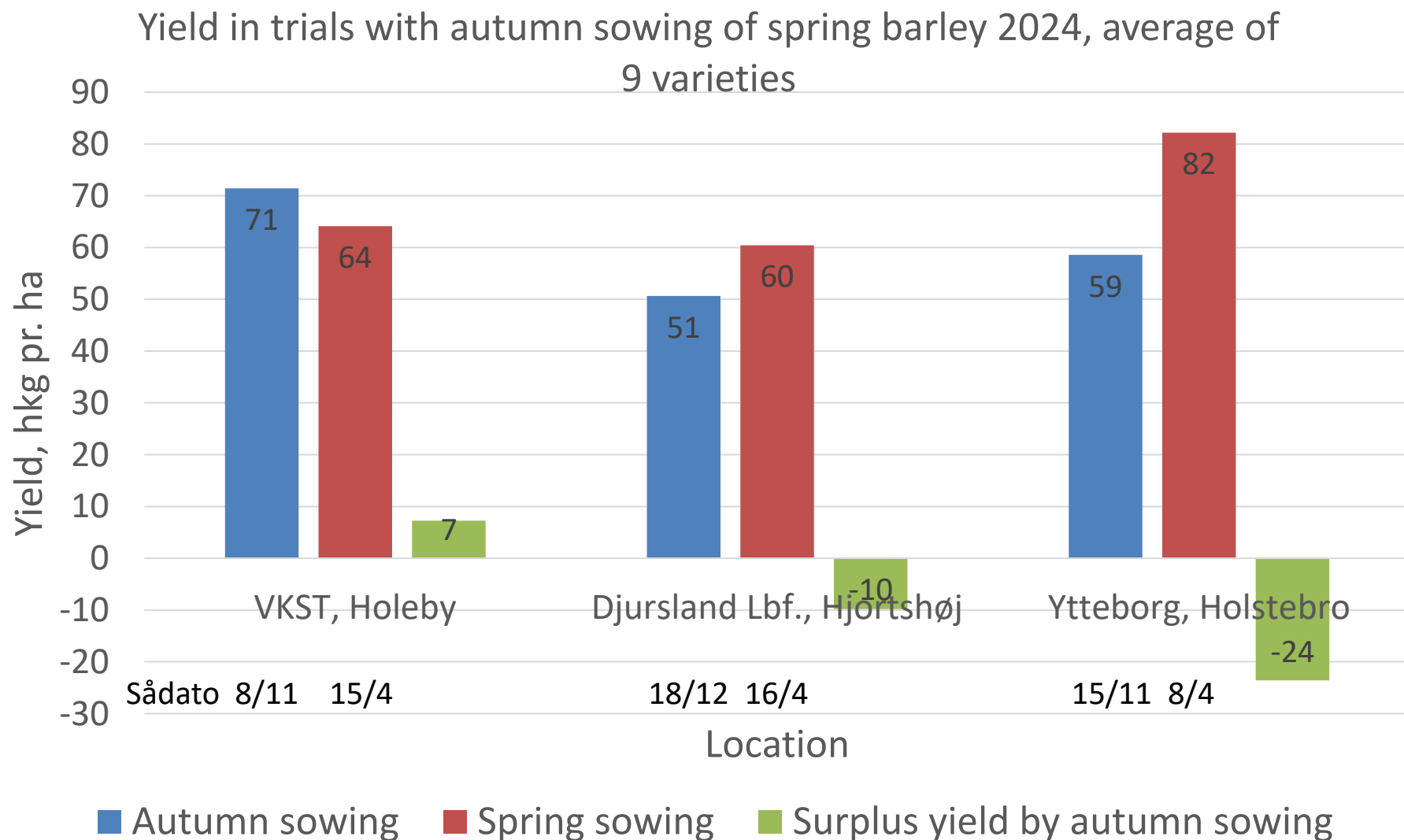
Photo: Leif Hagelskjær, SEGES Innovation

Plant population

- 400 viable seeds/m² in autumn, 340 in spring.

Average achieved plant numbers, plants per sqm.	Autumn sowing Counted in February	Spring sowing Counted at the beginning of May
Ytteborg, Holstebro	299 (75%)	333 (98%)
VKST, Holeby	185 (46%)	200 (59%)
Djursland Lbf.	276 (69%)	362 (106%)
Gennemsnit	253 (63%)	298 (88%)

Yield – results from autumn sowing trials of spring barley 2024

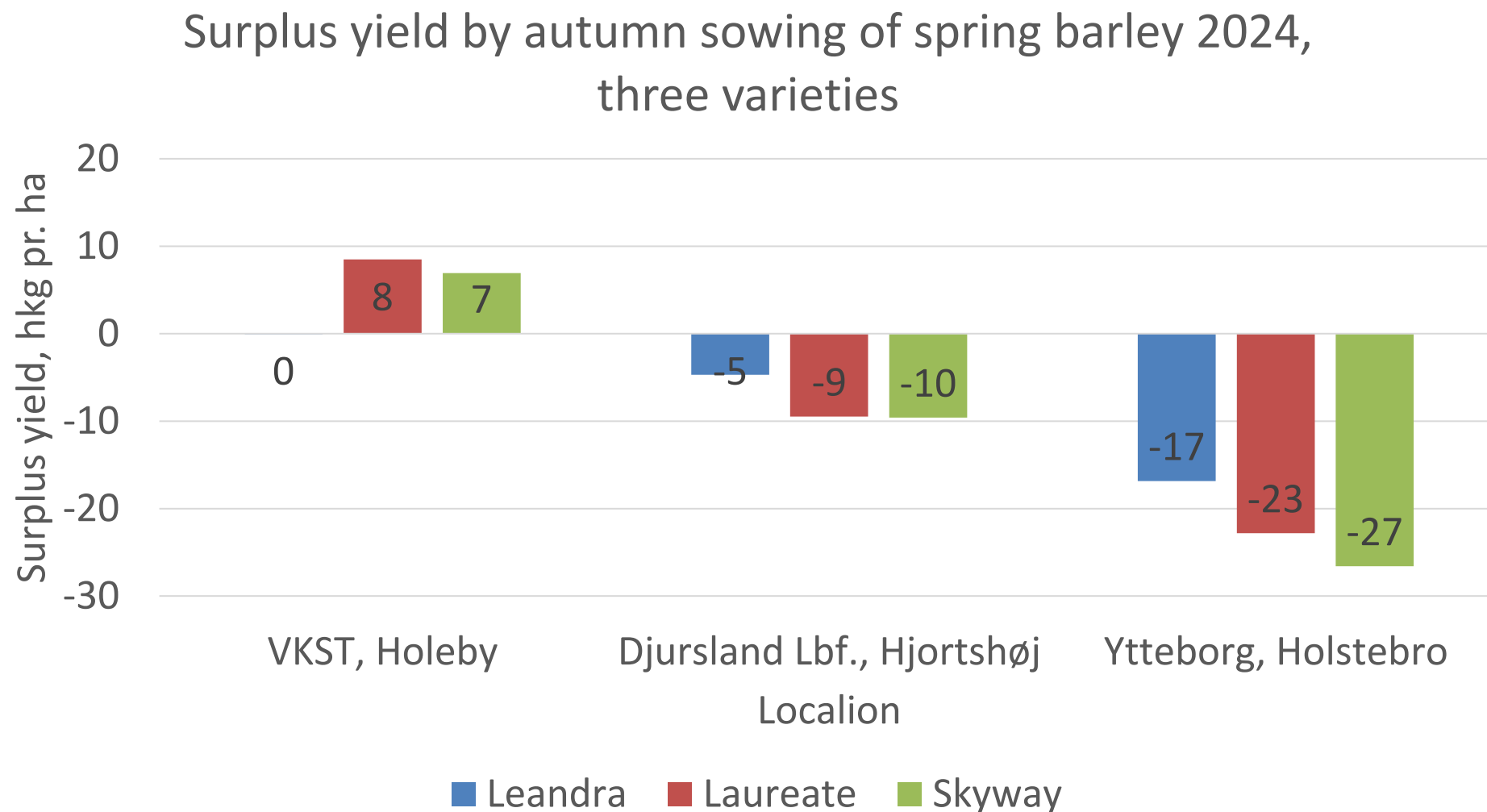


Statistically significant difference in sowing times in all three trials, but not in the same direction!



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Yield – varieties 2024



- Varietal interaction
- Different varieties respond differently to sowing time.
- Leandra least affected, Laureate and Skyway more affected.

Yield – results from 2024 and 2025

Spring barley	Yield, hkg per ha		Surplus yield by autumn sowing, hkg per ha
	Autumn sowing	Spring sowing	

2024-2025, 5 trials

Laureate	69,2	74,7	-5,6
Skyway	67,6	74,4	-6,8
Prospect	67,5	63,6	3,9
CB Score	67,0	72,6	-5,6
LG Flamenco	65,3	71,9	-6,6
RGT Planet	65,0	72,3	-7,3
Average	66,9	71,6	-4,7

LSD variety

ns

LSD sowing time

ns

LSD variety x sowing time

4,5



Autumn sowing

- Tendency to lower yield
- Interaction: Prospect higher yield by autumn sowing

Quality

Spring barley	Percentage of crude protein in dry matter		Specific weight, kg per hectolitre		Grading, percent kernels >2,5 mm	
	Autumn sowing	Spring sowing	Autumn sowing	Spring sowing	Autumn sowing	Spring sowing
2024-2025, 5 trials						
Laureate	9,8	10,2	66,8	65,1	96	93
Skyway	9,9	10,4	69,1	67,5	97	94
Prospect	10,1	11,5	68,0	65,1	96	93
CB Score	9,8	10,4	67,9	66,1	97	92
LG Flamenco	9,9	10,3	66,9	65,0	96	94
RGT Planet	10,3	10,2	68,7	66,4	97	93
Average	10,0	10,5	67,9	65,8	96	93
LSD variety	ns		1,2		ns	
LSD sowing time	0,4		0,7		1,2	
LSD variety x sowing time	ns		ns		ns	

Autumn sowing

- Lower protein
- Higher specific weight
- Higher grading



Scald

(*Rhynchosporium secalis*)

- Scald more widespread in autumn-sown parcels — known from Germany and France.
- Little difference in other diseases.
- Choose varieties with lower susceptibility; Leandra performs relatively well.

Variety	Scald leaf coverage Autumn sown	Scald leaf coverage Spring sown
Leandra	4,3	0,6
Prospect	8,7	1,8
Firefoxx	8,2	3,1
KWS Thalix	7,1	2,0
Laureate	8,6	2,4
RGT Planet	9,3	2,6
LG Flamenco	8,5	3,0
CB Score	4,9	2,7
Skyway	9,1	1,8
Gennemsnit	7,6	2,2



Photos from Ytteborg 12/6 2024

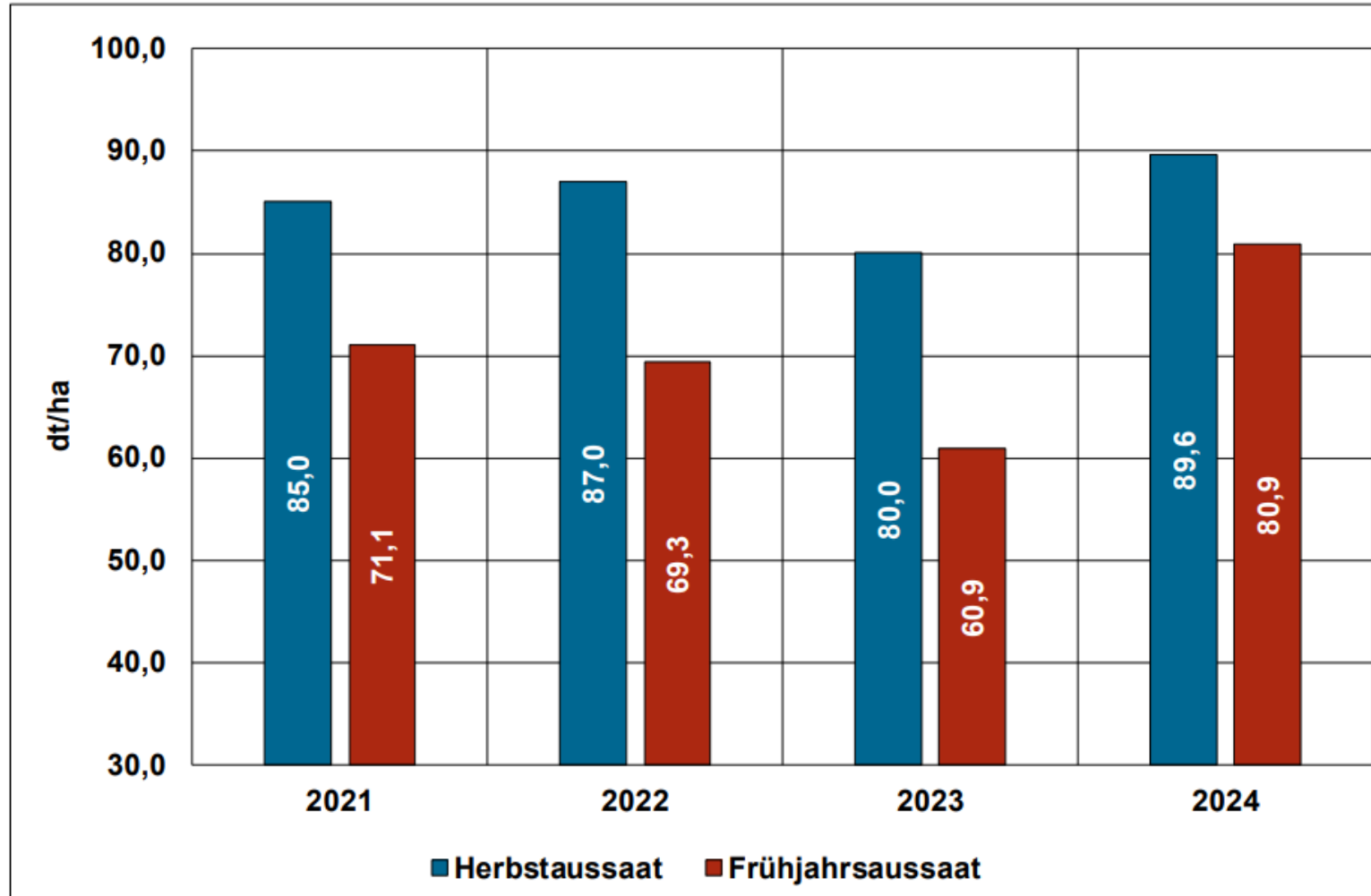
Photos: Leif Hagelskjær, SEGES Innovation



German trials with autumn sowing of spring barley

Erträge

Überblick Kornerträge (dt/ha; 86 % TS) nach Saattermin, behandelte Stufe 2021-2024



- **Yield:** On average, +16 hkg per hectare (+24%) for autumn sowing
- **Quality:** Better grading due to earlier grain filling in warm summers.
- **Diseases:** Scald more common during autumn sowing. Rust and net blotch (*Drechslera teres*) less common.

Results are average of the varieties in 5 trials per year, however, only 2 trials in 2024, due to wintering.

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Source: Sortenversuche in Thüringen. Sommerbraugerste in Herbstaussaat, Versuchsbericht 2024.

https://www.tllr.de/www/daten/publikationen/voe/lsv/lv_sgbherbst.pdf

STREIFENVERSUCH ZUR BESTIMMUNG DES OPTIMALEN AUSSAATTERMINS ERNTE 2021 IN MORGENROT

Streifen	1	2	3	4	5	6	7
Aussaatdatum	17.9.2020	24.9.2020	1.10.2020	8.10.2020	13.10.2020	22.10.2020	27.10.2020
Ernte	4.7.2021		12.7.2021	12.7.2021	12.7.2021	12.7.2021	12.7.2021
Ertrag (dt/ha)	70,33		65,68	72,30	75,20	77,01	79,40

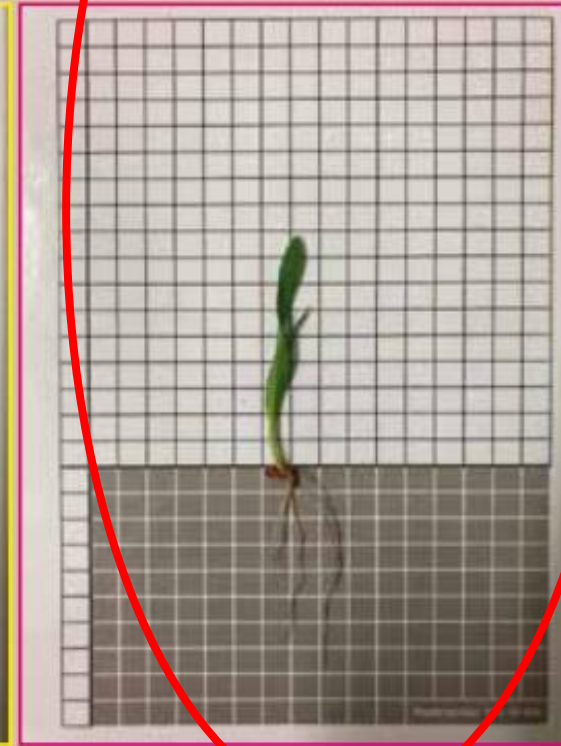


Abb. 2 Ertrag der Sorte Leandra bei unterschiedlichen Aussaatterminen, Saatenstand vor Winter am 30. November 2020

Fotos: Nils Krawczyk

German trials with sowing time in autumn

- Trials with 7 sowing times!
- Sowing at the end of October has given the highest yields!

Conclusions

- Good overwintering of all varieties
- Plant numbers reduced during winter
 - → recommend 400 plants/m²
- Aim for late Oct–early Nov.
- Yields vary between regions and soil types
- Lower protein, higher specific weight and better grading with autumn sowing
- Watch for scald
 - choose resistant varieties
- Regulations in Denmark:
 - cannot sow after catch crops;
 - N quota as spring barley

