

Spring barley 2022

Market options, yield and grain quality



	Jensen	Skyway	Firefoxx	SY Bronte †	Spinner	SY Tungsten	LG Diablo	Laureate	SY Splendor	RGT Planet	KWS Sassy	Fairing	Fairway	Malvern	Cadiz	Prospect	CB Score ²	Described variety	Average LSD (5%)
End-use group	Malting varieties												Feed varieties						
Scope of recommendation	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	Sp	UK	W	E&W	UK		UK Null-Lox	
Variety status	NEW			NEW	NEW		C	C		C			*	NEW				NEW	
Fungicide-treated grain yield (% treated control)																			
United Kingdom (7.4 t/ha)	105	105	103	103	103	103	102	102	102	99	97	93	104	103	103	103		101	2.2
East region (7.3 t/ha)	106	106	103	104	103	101	103	102	102	99	95	92	104	103	105	105		100	3.3
West region (7.1 t/ha)	[106]	106	103	[105]	[106]	103	101	103	102	99	98	94	103	[106]	106	102		[100]	3.5
North region (7.8 t/ha)	104	103	104	102	101	104	102	102	102	99	98	92	104	102	100	101		101	2.7
Main market options																			
MBC malting approval for brewing use	T	P	-	T	T	P	F	F	P	F	N	-	-	-	-	-		-	-
MBC malting approval for malt distilling use	-	-	P	-	-	P	F	F	-	N	F	-	-	-	-	-		-	-
MBC malting approval for grain distilling use	-	-	-	-	-	-	-	-	-	N	-	F	-	-	-	-		-	-
Grain quality																			
Specific weight (kg/hl)	65.9	68.7	66.4	66.8	67.5	67.7	67.1	66.6	68.1	68.0	68.6	68.1	65.6	66.4	67.6	67.9		67.1	0.6
Screenings (% through 2.25 mm)	1.4	1.0	1.4	1.3	1.2	1.7	1.4	1.3	1.4	1.2	1.0	1.0	1.2	1.3	0.8	1.8		1.3	0.3
Screenings (% through 2.5 mm)	3.4	2.6	3.7	3.0	2.9	4.5	3.3	3.1	3.6	3.1	2.4	2.6	3.1	3.8	1.8	4.2		3.3	0.7
Nitrogen content (%)	1.50	1.57	1.54	1.54	1.54	1.50	1.52	1.54	1.55	1.56	-	-	-	[1.55]	1.60	1.59		[1.57]	0.09
Status in RL system																			
Year first listed	22	21	20	22	22	20	18	16	20	15	16	16	20	22	21	20		22	

† SY Bronte will be added to the UK National List on 19 December 2021.

Varieties no longer listed: Cosmopolitan, Iconic, Propino and Sienna.

Growers are strongly advised to check with their buyer before committing to a malting variety without full MBC approval.

Comparisons of variety performance across regions are not valid.

All yields on this table are taken from treated trials receiving a full fungicide programme.

UK = Recommended for the UK

E = Recommended for the East region

W = Recommended for the West region

Sp = Specific recommendation. Fairing is suitable for the production of malt for grain distilling

C = Yield control (for current table). For this table, Cosmopolitan and Propino were also control varieties but are no longer listed

* = Variety no longer under test in RL trials

- = Variety lacking a gene for lipogenase production (a Null-Lox variety)

[] = Limited data

F = Full MBC approval in this segment

N = Not approved by MBC in this segment

P = Provisional MBC approval in this segment

T = Under test for MBC approval in this segment

LSD = Least significant difference

Average LSD (5%): Varieties that are more than one LSD apart are significantly different at the 95% confidence level

Spring barley 2022

Yield, agronomy and disease resistance



	Jensen	Skyway	Firefoxx	SY Bronte †	Spinner	SY Tungsten	LG Diablo	Laureate	SY Splendor	RGT Planet	KWS Sassy	Fairing	Fairway	Malvern	Cadiz	Prospect	CB Score ²	Average LSD (5%)
End-use group	Malting varieties												Feed varieties					
Scope of recommendation	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	Sp	UK	W	E&W	UK	UK Null-Lox	
Variety status	NEW			NEW	NEW		C	C		C			*	NEW			NEW	
Fungicide-treated grain yield (% treated control)																		
United Kingdom (7.4 t/ha)	105	105	103	103	103	103	102	102	102	99	97	93	104	103	103	103	101	2.2
East region (7.3 t/ha)	106	106	103	104	103	101	103	102	102	99	95	92	104	103	105	105	100	3.3
West region (7.1 t/ha)	[106]	106	103	[105]	[106]	103	101	103	102	99	98	94	103	[106]	106	102	[100]	3.5
North region (7.8 t/ha)	104	103	104	102	101	104	102	102	102	99	98	92	104	102	100	101	101	2.7
Untreated grain yield (% treated control)																		
United Kingdom (7.4 t/ha)	96	94	92	92	96	90	92	94	90	90	89	84	91	95	92	93	92	2.9
Agronomic features																		
Resistance to lodging without PGR (1–9) - see note below	6	7	7	7	7	7	7	6	7	7	6	8	7	8	7	7	7	0.8
Straw height without PGR (cm)	66	74	69	73	70	71	71	69	72	72	77	70	70	71	74	69	70	1.5
Ripening (+/-RGT Planet, -ve = earlier)	+1	0	0	+1	+1	+1	+2	+1	+1	0	+1	-2	-1	0	+1	+1	+1	0.9
Resistance to brackling (1–9)	8	8	8	8	8	8	8	8	9	8	6	8	8	8	8	9	8	0.9
Disease resistance																		
Mildew (1–9)	8	9	9	9	9	8	9	9	9	8	9	8	9	9	9	9	9	0.5
Brown rust (1–9)	5	4	4	4	5	4	5	5	3	5	5	4	3	5	5	4	5	1.2
Rhynchosporium (1–9)	[6]	[4]	5	[5]	[4]	3	5	5	[4]	5	6	8	[3]	[1]	[2]	[6]	[5]	2.8

† SY Bronte will be added to the UK National List on 19 December 2021.

On the 1–9 scales, high figures indicate that a variety shows the character to a high degree (e.g. high resistance).

Comparisons of variety performance across regions are not valid.

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C = Yield control (for current table). For this table, Cosmopolitan and Propino were also control varieties but are no longer listed
 * = Variety no longer under test in RL trials
 - = Variety lacking a gene for lipogenase production (a Null-Lox variety)

PGR = Plant growth regulator
 [] = Limited data

LSD = Least significant difference
 Average LSD (5%): Varieties that are more than one LSD apart are significantly different at the 95% confidence level

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Supplementary data



	Jensen	Skyway	Firefoxx	SY Bronte †	Spinner	SY Tungsten	LG Diablo	Laureate	SY Splendor	RGT Planet	KWS Sassy	Fairing	Fairway	Malvern	Cadiz	Prospect	CB Score	Described variety	
End-use group	Malting varieties												Feed varieties						
Scope of recommendation	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	Sp	UK	W	E&W	UK		UK Null-Lox	
Variety status	NEW			NEW	NEW		C	C		C			*	NEW				NEW	
Breeder/UK contact	Sej	NS	Ack	SyP	Sec	SyP	LimEur	SyP	SyP	RAGT	KWS	SyP	NS	NS	NS	Sej		Cal	
UK contact	Lim	Agr	ElsAck	Syn	Agr	Syn	Lim	Syn	Syn	RAGT	KWS	Syn	Sen	AgV	Sen	Sen		ADM	
Annual treated yield (% control)																			
2017 (7.4 t/ha)	-	-	103	-	-	102	103	100	103	100	97	92	103	-	-	103		-	-
2018 (6.8 t/ha)	-	105	104	-	-	104	102	102	103	98	97	94	104	-	104	102		-	-
2019 (7.8 t/ha)	105	105	103	104	104	102	102	102	104	100	98	93	104	103	104	104		100	-
2020 (7.5 t/ha)	104	105	102	103	102	103	102	102	102	99	97	91	103	103	102	102		100	-
2021 (7.6 t/ha)	107	104	106	103	104	103	102	104	99	97	96	93	106	104	104	103		101	-
Malting quality																			
Hot water extract (l deg/kg)	314.0	314.1	313.4	314.8	313.2	314.4	314.1	313.8	313.6	313.3	-	[306.3]	[312.5]	308.0	312.5	312.3		312.1	2.3
Status in RL system																			
Year first listed	22	21	20	22	22	20	18	16	20	15	16	16	20	22	21	20		22	
RL status	P1	P2	-	P1	P1	-	-	-	-	-	-	-	*	P1	P2	-		P1	

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All yields on this table are taken from treated trials receiving a full fungicide programme.

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 Sp = Specific recommendation. Fairing is suitable for the production of malt for grain distilling
 C = Yield control (for current table). For this table, Cosmopolitan and Propino were also control varieties but are no longer listed
 * = Variety no longer under test in RL trials

- = Variety lacking a gene for lipogenase production (a Null-Lox variety)
 [] = Limited data
 P1 = First year of recommendation
 P2 = Second year of recommendation

Ack = Ackermann Saatzeit GmbH (sz-ackermann.de)
 ADM = ADM Agriculture Ltd (adm-agri.co.uk)
 Agr = Agrii (agrii.co.uk)
 AgV = Agrovista UK Ltd (agrovista.co.uk)
 Cal = Carlsberg Research Laboratory
 ElsAck = Elsoms Ackermann Barley
 KWS = KWS UK (kws-uk.com)
 Lim = Limagrain UK (lgseeds.co.uk)
 LimEur = Limagrain Europe SA (lgseeds.co.uk)

NS = Nordic Seed, Denmark
 RAGT = RAGT Seeds (ragt.co.uk)
 Sec = Secobra, France (secobra.com)
 Sej = Sejet, Denmark (sejet.com)
 Sen = Senova (senova.uk.com)
 Syn = Syngenta UK Ltd (syngenta.co.uk)
 SyP = Syngenta Participations AG (syngenta.co.uk)

LSD = Least significant differ
 Average LSD (5%): Varieties are more than one LSD apart significantly different at the 9 confidence level

Lodging ratings for RL 2022/23

The scales used to calculate the lodging ratings for the RL 2022/23 have been adjusted to include susceptible and resistant fixed points. The aim is to make the ratings more representative of what is seen in the field and improve consistency of the ratings over years. This has contributed to a drop in ratings for some varieties, compared to the 2021/22 RL. However, this does not mean that these varieties have become more susceptible since last year. As for all ratings, statistical significance (LSD) should be taken into account when deciding if varieties have a different susceptibility to the trait.