

Spring barley 2023

Market options, yield and grain quality



	Florence	SY Tennyson	Skyway	Sun King	Diviner	SY Signet	KWS Curitis	Firefox	Laureate	LG Diablo	RGT Planet	KWS Sassy	Fairing	Hurler	Cadiz	Malvern	Prospect	Described variety	Average LSD (5%)
End-use group	Malting varieties													Feed varieties				CB Score	
Scope of recommendation	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	Sp	UK	E&W	W	UK	UK Null-Lox	
Variety status	NEW	NEW		NEW	NEW	NEW	NEW		C	C	C			NEW	*	*	*		
Fungicide-treated grain yield (% treated control)																			
United Kingdom (7.5 t/ha)	105	105	105	104	104	104	104	103	103	101	98	97	93	107	103	103	102	101	2.3
East region (7.5 t/ha)	106	107	106	104	104	105	105	103	103	102	99	96	93	108	104	103	103	101	3.3
West region (7.3 t/ha)	[106]	[104]	106	[107]	[104]	[103]	[103]	104	104	101	98	98	94	[108]	106	105	102	101	3.8
North region (7.8 t/ha)	104	106	102	103	105	105	103	103	102	102	99	98	92	106	100	102	101	101	2.8
Main market options																			
MBC malting approval for brewing use	T	T	P	T	N	T	T	-	F	F	F	N	-	-	-	-	-	-	-
MBC malting approval for malt distilling use	-	T	-	-	T	-	T	F	F	F	N	F	-	-	-	-	-	-	-
MBC malting approval for grain distilling use	-	-	-	-	-	-	-	-	-	-	N	-	F	-	-	-	-	-	-
Grain quality																			
Specific weight (kg/hl)	68.2	66.6	69.4	67.7	67.7	67.4	67.5	67.1	67.2	67.8	68.8	69.1	68.9	66.2	68.3	66.9	68.5	67.8	0.6
Screenings (% through 2.25 mm)	1.0	1.3	0.9	1.1	1.6	1.4	1.9	1.4	1.2	1.3	1.2	0.9	1.0	1.5	0.8	1.3	1.7	1.3	0.3
Screenings (% through 2.5 mm)	2.7	2.6	2.4	2.5	4.0	3.1	5.2	3.6	3.0	3.2	3.2	2.2	2.6	4.4	1.7	4.2	4.1	3.5	0.9
Nitrogen content (%)	1.51	1.47	1.54	1.51	1.51	1.48	1.50	1.51	1.52	1.49	1.54	-	-	[1.51]	1.57	[1.52]	1.56	[1.53]	0.08
Status in RL system																			
Year first listed	23	23	21	23	23	23	23	20	16	18	15	16	16	23	21	22	20	22	

Varieties no longer listed: Fairway, Jensen, Spinner, SY Bronte, SY Tungsten and SY Splendor.

Null-Lox spring barley varieties are described. Data is provided for information only and does not constitute a recommendation.

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 this table, Propino and SY Tungsten 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)
 MBC = Malting Barley Committee
 [] = 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 2023

Yield, agronomy and disease resistance



	Florence	SY Tennyson	Skyway	Sun King	Diviner	SY Signet	KWS Curtis	Firefox	Laureate	LG Diablo	RGT Planet	KWS Sassy	Fairing	Hurler	Cadiz	Malvern	Prospect	Described variety	Average LSD (5%)
	Malting varieties													Feed varieties				CB Score	
End-use group	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	Sp	UK	E&W	W	UK	UK Null-Lox	
Variety status	NEW	NEW		NEW	NEW	NEW	NEW		C	C	C			NEW	*	*	*		
Fungicide-treated grain yield (% treated control)																			
United Kingdom (7.5 t/ha)	105	105	105	104	104	104	104	103	103	101	98	97	93	107	103	103	102	101	2.3
East region (7.5 t/ha)	106	107	106	104	104	105	105	103	103	102	99	96	93	108	104	103	103	101	3.3
West region (7.3 t/ha)	[106]	[104]	106	[107]	[104]	[103]	[103]	104	104	101	98	98	94	[108]	106	105	102	101	3.8
North region (7.8 t/ha)	104	106	102	103	105	105	103	103	102	102	99	98	92	106	100	102	101	101	2.8
Untreated grain yield (% treated control)																			
United Kingdom (7.5 t/ha)	95	92	94	96	92	95	93	92	94	92	89	89	84	94	92	94	92	92	2.9
Agronomic features																			
Resistance to lodging without PGR (1–9)	[8]	[7]	7	[8]	[8]	[8]	[8]	7	6	7	7	6	8	[9]	7	8	7	7	1.1
Straw length without PGR (cm)	[69]	[69]	75	[72]	[67]	[71]	[69]	69	70	71	73	78	70	[65]	75	71	70	71	2.0
Ripening (days +/- RGT Planet)	0	+1	+1	+1	+1	+1	+1	0	+1	+2	0	+1	-2	+1	0	+1	+1	+1	0.8
Resistance to brackling (1–9)	9	7	7	9	9	8	9	8	8	8	8	6	8	9	8	8	9	8	0.8
Disease resistance																			
Mildew (1–9)	8	9	9	9	9	9	9	9	9	9	8	9	8	8	9	9	9	9	0.7
Brown rust (1–9)	5	4	4	6	5	5	4	4	5	5	5	5	5	4	4	5	5	5	1.1
Rhynchosporium (1–9) – see note below	[6]	[3]	7	[4]	[3]	[5]	[7]	5	7	6	6	6	8	[6]	[5]	3	7	7	2.6

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 this table, Propino and SY Tungsten 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

Spring barley 2023

Supplementary data



	Florence	SY Tennyson	Skyway	Sun King	Diviner	SY Signet	KWS Curtis	Firefoxx	Laureate	LG Diablo	RGT Planet	KWS Sassy	Fairing	Hurler	Cadiz	Malvern	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	UK	Sp	UK	E&W	W	UK		UK Null-Lox
Variety status	NEW	NEW		NEW	NEW	NEW	NEW		C	C	C			NEW	*	*	*		
Breeder/UK contact																			
Breeder	Bre	SyP	NS	Sec	Sec	SyP	KWS	Ack	SyP	LimEur	RAGT	KWS	SyP	Sec	NS	NS	Sej		Cal
UK contact	Sen	Syn	Agr	Agr	Agr	Syn	KWS	ElsAck	Syn	Lim	RAGT	KWS	Syn	Agr	Sen	AgV	Sen		ADM
Annual treated yield (% control)																			
2018 (6.8 t/ha)	-	-	105	-	-	-	-	104	103	102	98	97	94	-	104	-	102		-
2019 (7.8 t/ha)	-	-	105	-	-	-	-	103	103	102	100	98	93	-	104	103	103		100
2020 (7.5 t/ha)	103	105	105	103	104	104	104	102	102	102	98	97	91	106	102	103	102		100
2021 (7.8 t/ha)	107	106	104	104	105	105	105	105	104	101	97	97	93	108	104	103	103		102
2022 (7.7 t/ha)	104	104	105	105	104	104	102	103	104	100	99	98	94	107	103	102	100		101
Malting quality																			
Hot water extract (l deg/kg)	313.8	315.9	314.0	312.4	314.6	314.9	312.0	313.3	313.8	313.9	313.2	-	-	311.9	312.5	308.1	312.2		312.1
Status in RL system																			
Year first listed	23	23	21	23	23	23	23	20	16	18	15	16	16	23	21	22	20		22
RL status	P1	P1	-	P1	P1	P1	P1	-	-	-	-	-	-	P1	*	*	*		P2

Average LSD (5%)

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

UK = Recommended for the UK
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C = Yield control. For this table, Propino and SY Tungsten 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

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

Ack = Ackermann Saatzzucht GmbH (sz-ackermann.de)
 ADM = ADM Agriculture Ltd (adm-agri.co.uk)
 Agr = Agrii (agrii.co.uk)
 AgV = Agrovista UK Ltd (agrovista.co.uk)
 Bre = Saatzzucht Josef Breun, Germany (breun.de)

Cal = Carlsberg Research Laboratory
 ElsAck = Elsoms Ackermann Barley (elsoms.com)
 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)

Rhynchosporium ratings

Low disease levels in trials in 2020 and 2021 limited data and resulted in low confidence in the rhynchosporium ratings for newer varieties (indicated by bracketed ratings), with some recommended with very low ratings. Sufficient data from 2022 has enabled more robust ratings to be calculated, producing ratings more in line with those expected for recommended varieties.