AHDB RECOMMENDEDLISTS

Winter wheat 2024/25

AHDB RECOMMENDED

	KWS Zyatt	SY Cheer	Skyfall	Crusoe	RGT Illustrious	KWS Extase	KWS Ultimatum	KWS Palladium	Mayflower	Bamford	RGT Wilkinson	KWS Brium	RGT Rashid	Almara	LG Illuminate	LG Astronomer
End-use group	UKFM Group 1					UKFM Group 2				UKFM Group 3						
Scope of recommendation	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	E	N	UK	UK
Variety status		NEW	C			C				NEW		*		NEW	*	
Fungicide-treated grain yield (% treated control)																
United Kingdom (11.0 t/ha)	99	97	96	95	95	101	101	100	97	106	100	100	99	99	98	98
East region (10.9 t/ha)	98	97	96	95	95	101	101	99	97	105	101	100	100	98	98	98
West region (11.2 t/ha)	99	98	96	96	96	102	101	101	97	107	99	99	98	99	99	98
North region (11.3 t/ha)	97	[98]	95	94	94	99	101	99	96	[105]	99	100	98	[102]	100	97
Untreated grain yield (% treated control)																
United Kingdom (11.0 t/ha)	71	84	66	75	82	93	90	90	91	92	83	80	78	87	83	85
Disease resistance																
Mildew (1–9)	7	[8]	6	7	6	7	7	8	7	[6]	7	7	3	[6]	5	4
Yellow rust (1–9)	3	7	3	8	7	7	9	9	9	7	7	9	8	8	7	8
Yellow rust (young plant)	s	-	s	s	s	s	r	r	r	-	s	s	s	-	r	r
Brown rust (1–9)	7	6	9	3	5	6	6	5	6	6	5	5	5	6	6	7
Septoria tritici (1–9)	6.3	6.0	5.8	6.3	5.9	7.4	6.5	7.3	8.9	6.7	5.5	5.7	6.1	6.0	5.6	5.9
Eyespot (1–9)	6@	4	6@	5	6@	4	6	6	5@	6@	6@	5	5	4	5	5
Fusarium ear blight (1–9)	6	[7]	7	7	6	6	6	6	6	[5]	6	6	7	[6]	6	6
Orange wheat blossom midge	-	-	R	-	-	-	-	-	-	-	-	-	R	R	R	R
Agronomic features																
Resistance to lodging without PGR (1–9)	8	8	8	7	8	7	6	8	6	7	8	8	8	6	7	7
Resistance to lodging with PGR (1–9)	8	7	7	8	9	8	7	8	7	7	8	7	8	7	7	9
Lodging without PGR (%)	1	1	1	2	1	3	6	2	6	3	1	2	2	6	3	2
Lodging with PGR (%)	1	3	3	2	0	2	4	2	4	4	1	4	2	3	3	0
Straw length without PGR (cm)	86	91	87	84	91	92	87	85	90	90	84	93	87	86	85	90
Straw length with PGR (cm)	76	82	78	77	81	86	77	78	83	83	78	85	80	79	77	80
Ripening (days +/- Skyfall)	0	+1	0	+1	+1	-1	+1	-1	0	+1	+2	+2	+3	+1	+1	+2
Resistance to sprouting (1–9)	6	-	5	6	6	6	[6]	[6]	[6]	-	[5]	[6]	[6]	-	[6]	[7]
Main market options (The specific attributes of varieties are different, so, whenever possible, varieties should not be mixed in store)																
UK bread-making	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-	-	-
UK biscuit, cake-making	-	-	-	-	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y
UK distilling	-	-	-	-	-	-	-	-	-	[Y]	[Y]	[Y]	[Y]	[Y]	[Y]	[Y]
ukp bread wheat for export	Y	-	-	Y	-	Y	[Y]	-	Y	-	-	-	-	-	-	-
uks soft wheat for export	-	-	-	-	-	-	-	-	-	[Y]	[Y]	-	-	[Y]	Y	-
Grain quality																
Endosperm texture	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Soft	Soft	Soft	Soft	Soft	Soft	Soft
Protein content (%)	11.7	11.8	11.8	12.3	11.8	11.5	11.3	11.4	11.6	10.9	11.1	11.0	10.8	11.1	11.3	11.4
Protein content (%) – milling spec	12.5	13.0	12.9	13.2	12.5	12.3	12.2	12.2	12.5	11.6	12.1	11.8	12.0	12.2	12.4	12.5
Hagberg Falling Number	248	299	265	265	258	283	271	305	294	239	248	260	221	186	251	232
Specific weight (kg/hl)	78.3	79.5	79.1	78.3	78.0	79.1	79.6	77.6	79.1	78.5	75.4	78.0	77.1	77.6	77.0	78.1
Chopin Alveograph W	-	[275]	266	243	-	203	189	[186]	207	103	105	[78]	[76]	98	88	-
Chopin Alveograph P/L	-	[1.6]	1.0	0.6	-	0.7	0.7	[0.6]	0.8	0.5	0.4	[0.3]	[0.3]	0.3	0.3	-
Annual treated yield (% control)																
2019 (11.6 t/ha)	96	-	95	97	94	100	-	100	98	-	-	99	99	-	100	99
2020 (10.4 t/ha)	97	-	95	94	96	99	[102]	[100]	[96]	-	[101]	[102]	[100]	-	100	98
2021 (11.0 t/ha)	99	97	97	95	93	101	100	98	95	104	98	98	98	100	97	97
2022 (11.7 t/ha)	100	98	96	94	96	102	101	100	97	106	101	100	98	99	98	97
2023 (10.9 t/ha)	99	96	98	96	96	101	101	100	97	106	99	99	99	99	97	97
Rotational position																
First cereal (11.3 t/ha)	98	97	96	96	95	101	101	100	97	105	100	100	99	99	98	98
Second and more (10.2 t/ha)	98	95	97	94	93	101	101	99	98	106	100	100	99	98	98	97
Sowing date (most trials were sown in October)																
Early sown (before 25 Sept) (11.4 t/ha)	[100]	[[97]]	96	[98]	[99]	101	[[103]]	[[99]]	101	[104]	[100]	100	[[98]]	[[100]]	101	99
Late sown (after 1 Nov) (9.5 t/ha)	97	[[100]]	97	94	93	101	[101]	98	94	[[105]]	[102]	101	103	[[96]]	97	97
Latest safe-sowing date	End Jan	[[End Jan]]	End Feb	End Jan	End Jan	End Jan	[End Jan]	End Jan	End Jan	[[End Jan]]	[End Jan]	End Feb	End Jan	[[End Jan]]	Mid Feb	End Jan
Soil type (about 50% of trials are on medium soils)																
Light soils (10.7 t/ha)	97	[96]	96	93	94	101	101	99	96	[105]	100	99	99	[102]	100	98
Heavy soils (11.4 t/ha)	99	97	96	96	96	101	101	99	97	106	100	99	99	98	98	98
Breeder/UK contact																
Breeder	KWS	SCP	RAGT	Lim	R2n	Mom	KWS	KWS	ElsW	ElsW	R2n	KWS	RAGT	KWS	LimEur	LimEur
UK contact	KWS	Syn	RAGT	Lim	RAGT	KWS	KWS	KWS	Els	Els	RAGT	KWS	RAGT	Sen	Lim	Lim
Status in RL system																
Year first listed	17	24	14	12	16	19	23	22	22	24	23	22	22	24	21	21
RL status	-	P1	-	-	-	-	P2	-	-	P1	P2	*	-	P1	*	-

	LG Redwald	Blackstone	KWS Zealum	RGT Bairstow	LG Skyscraper	RGT Stokes	Swallow	LG Beowulf	Champion	SY Insitor	Oxford	KWS Dawsum	Gleam	Graham	KWS Cranium	LG Typhoon	RGT Wolverine	Costello	Average LSD (5%)
End-use group	Soft Group 4							Hard Group 4											
Scope of recommendation	E&W	UK	N	UK	UK	N&W	N	UK	UK	UK	E&W	UK	UK	UK	UK	UK	Sp	UK	
Variety status		NEW			C		*	NEW					C						
Fungicide-treated grain yield (% treated control)																			
United Kingdom (11.0 t/ha)	106	103	102	102	102	101	96	106	106	104	104	103	103	102	102	100	99	98	2.3
East region (10.9 t/ha)	105	103	103	102	103	100	96	106	106	104	104	103	103	101	102	100	99	99	2.7
West region (11.2 t/ha)	107	101	102	103	101	103	96	106	106	105	104	104	103	104	100	100	100	98	3.0
North region (11.3 t/ha)	104	[103]	102	102	101	103	100	[107]	103	105	101	105	103	102	102	101	99	99	3.4
Untreated grain yield (% treated control)																			
United Kingdom (11.0 t/ha)	89	87	84	84	83	83	76	91	90	79	88	91	80	89	79	89	72	83	4.8
Disease resistance																			
Mildew (1–9)	5	[7]	7	6	7	6	6	[6]	7	7	5	8	6	6	5	7	6	8	1.5
Yellow rust (1–9)	7	9	9	8	7	7	7	9	8	4	8	9	5	7	9	9	4	9	0.6
Yellow rust (young plant)	s	-	s	s	s	r	r	-	r	s	r	r	s	s	r	r	s	r	
Brown rust (1–9)	7	6	5	6	5	5	5	5	5	6	6	7	6	5	4	6	7	5	0.6
Septoria tritici (1–9)	6.5	6.2	6.1	5.9	4.9	6.0	5.1	6.7	7.9	6.4	6.6	6.3	5.7	6.6	5.8	7.2	6.0	5.8	0.7
Eyespot (1–9)	4	5	5	4	5	4	4	6	4	5	5	5	5	4	5	5	6	5	1.5
Fusarium ear blight (1–9)	6	[8]	7	6	6	6	6	[6]	6	7	6	7	6	6	7	6	6	7	0.4
Orange wheat blossom midge	R	R	R	R	R	-	R	R	R	R	R	-	R	-	R	R	-	-	
Agronomic features																			
Resistance to lodging without PGR (1–9)	5	8	6	6	6	5	8	8	6	6	7	7	7	7	8	7	7	7	1.4
Resistance to lodging with PGR (1–9)	5	7	7	6	6	7	9	8	6	7	7	7	7	8	8	7	7	8	1.0
Lodging without PGR (%)	22	2	6	10	8	12	1	1	6	7	3	3	3	3	2	3	3	2	-
Lodging with PGR (%)	25	3	3	7	10	6	0	2	7	4	3	3	4	2	2	3	3	2	-
Straw length without PGR (cm)	95	92	90	92	93	92	80	90	89	95	86	85	89	91	90	88	88	85	1.5
Straw length with PGR (cm)	88	85	82	82	84	81	74	81	82	84	79	77	78	81	81	79	79	76	1.4
Ripening (days +/- Skyfall)	+2	+2	+2	+2	0	+3	+1	+2	0	+1	+2	+1	0	-1	+3	+2	+2	+2	0.7
Resistance to sprouting (1–9)	[6]	-	[6]	[6]	6	[6]	[5]	-	[6]	5	[6]	[6]	6	6	[6]	[5]	[6]	6	1.1
Main market options (The specific attributes of varieties are different, so, whenever possible, varieties should not be mixed in store)																			
UK bread-making	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UK biscuit, cake-making	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UK distilling	[Y]	[Y]	[Y]	Y	[Y]	Y	Y	-	-	-	-	-	-	-	-	-	-	-	
ukp bread wheat for export	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
uks soft wheat for export	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Grain quality																			
Endosperm texture	Soft	Soft	Soft	Soft	Soft	Soft	Soft	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	
Protein content (%)	10.7	10.9	10.7	10.8	11.0	10.9	10.9	11.1	11.0	10.5	11.2	10.8	10.9	11.0	10.9	10.8	10.7	11.4	0.2
Protein content (%) – milling spec	11.4	11.7	11.8	11.7	12.0	11.9	11.8	12.3	11.9	11.2	12.2	11.7	11.5	11.8	11.7	11.8	11.4	12.3	0.5
Hagberg Falling Number	147	299	202	224	204	240	255	253	235	261	202	299	215	271	286	164	271	321	21.8
Specific weight (kg/hl)	75.2	78.2	76.8	76.6	77.1	76.2	76.6	78.3	75.4	78.6	76.1	79.9	76.9	77.7	75.8	77.1	76.3	81.1	0.6
Chopin Alveograph W	-	124	[74]	[54]	-	[65]	-	-	-	-	-	-	-	-	-	-	-	-	30.1
Chopin Alveograph P/L	-	0.5	[0.3]	[0.3]	-	[0.3]	-	-	-	-	-	-	-	-	-	-	-	-	0.3
Annual treated yield (% control)																			
2019 (11.6 t/ha)	-	-	-	103	103	103	98	-	104	105	-	104	102	102	101	102	101	98	-
2020 (10.4 t/ha)	[105]	-	[103]	[103]	102	[101]	101	-	[105]	103	[104]	[105]	103	102	103	[101]	101	99	-
2021 (11.0 t/ha)	106	102	101	101	101	102	97	107	105	105	102	103	104	103	99	100	95	99	-
2022 (11.7 t/ha)	106	103	102	102	102	101	98	105	105	105	102	103	103	103	102	99	101	98	-
2023 (10.9 t/ha)	105	102	102	102	100	101	94	106	106	106	105	104	104	102	102	101	100	98	-
Rotational position																			
First cereal (11.3 t/ha)	106	103	102	102	102	101	97	106	105	104	104	104	103	102	101	100	100	99	2.3
Second and more (10.2 t/ha)	106	102	104	103	103	101	98	106	107	105	104	104	102	101	102	102	98	97	3.4
Sowing date (most trials were sown in October)																			
Early sown (before 25 Sept) (11.4 t/ha)	[104]	[103]	105	101	102	101	99	[105]	107	[107]	104	106	103	101	[101]	103	100	99	4.3
Late sown (after 1 Nov) (9.5 t/ha)	[104]	[[105]]	[[104]]	104	102	99	97	[[108]]	106	102	[105]	103	102	99	104	100	99	100	4.6
Latest safe-sowing date	[Mid Feb]	[[Mid Feb]]	[End Jan]	End Feb	End Jan	End Jan	End Feb	[[End Jan]]	Mid Feb	End Jan	[End Jan]	End Jan	Mid Feb	End Jan	Mid Feb	End Jan	End Jan	End Jan	
Soil type (about 50% of trials are on medium soils)																			
Light soils (10.7 t/ha)	105	[102]	[101]	103	102	102	100	[105]	105	106	102	105	103	102	103	101	97	99	3.2
Heavy soils (11.4 t/ha)	105	102	103	103	102	101	96	106	106	104	105	103	103	102	101	100	100	98	3.2
Breeder/UK contact																			
Breeder	LimEur	ElsW	KWS	RAGT	LimEur	RAGT	BA	LimEur	DSV	SyP	DSV	KWS	SyP	SyP	KWS	LimEur	R2n	KWS	
UK contact	Lim	Els	KWS	RAGT	Lim	RAGT	Sen	Lim	DSV	Syn	DSV	KWS	Syn	Syn	KWS	Lim	RAGT	Sen	
Status in RL system																			
Year first listed	23	24	23	22	19	22	21	24	22	20	23	22	18	16	21	22	21	15	
RL status	P2	P1	P2	-	-	-	*	P1	-	-	P2	-	-	-	-	-	-	-	

Varieties no longer listed: Elation, Elicit, KWS Firefly, KWS Guium, KWS Jackal, KWS Siskin, LG Prince, Merit, RGT Saki and Theodore.
For this table, KWS Barrel was also a control variety but is no longer listed.
RGT Wolverine has a specific recommendation for resistance to *Barley yellow dwarf virus* (BYDV). Resistance to BYDV has not been verified in RL tests.
Yellow rust plant resistance categorisations have been updated based on the latest UKCPVS screening, so this table has been updated and might vary from the RL 2024/25 booklet.

Comparisons of varieties across regions are not valid.
On the 1–9 scales, high figures indicate that a variety shows the character to a high degree (e.g. high resistance).
Protein content (%) – milling spec data is taken from trials managed to a bread-milling protocol.
Latest safe-sowing date is the advised latest sowing time to give a sufficient cold period for flowering.

UKFM = UK Flour Millers
UK = Recommended for the UK
E = Recommended for the East region
W = Recommended for the West region
N = Recommended for the North region

C = Yield control
* = Variety no longer under test in RL trials
PGR = Plant growth regulator
[ ] = Limited data
[[ ]] = Very limited data

P1 = First year of listing
P2 = Second year of listing
Y = Suited to that market
[Y] = May be suited to that market

r = Young plant resistance to yellow rust as shown by UKCPVS tests and RL trial data
s = Young plant susceptibility to yellow rust as shown by UKCPVS tests and RL trial data
@ = Believed to carry the *Pch1* Rendezvous resistance gene to eyespot, but this has not been verified in RL tests
R = Believed to be resistant to the trait, but this has not been verified in RL tests

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

BA = Blackman Agriculture
DSV = DSV UK Ltd (**dsv-uk.co.uk**)
Els = Elsoms Seeds Ltd (**elsoms.com**)
ElsW = Elsoms Wheat Ltd (**elsoms.com**)

KWS = KWS UK (**kws-uk.com**)
Lim = Limagrain UK (**lgseeds.co.uk**)
LimEur = Limagrain Europe SA (**lgseeds.co.uk**)

Mom = Momont, France (**kws-uk.com**)
R2n = RAGT, France (**ragt.co.uk**)
RAGT = RAGT Seeds (**ragt.co.uk**)

Sen = Senova (**senova.uk.com**)
SCP = Syngenta Crop Protection (**syngenta-crop.co.uk**)
Syn = Syngenta UK Ltd (**syngenta.co.uk**)
SyP = Syngenta Participations AG (**syngenta.co.uk**)