

AHDB Recommended List - Table 1

Winter wheat 2019/20

Market options, yield and grain quality



End-use group Scope of recommendation	KWS Zytatt	Skyfall	KWS Trinity	RGT Illustrious	Cruise	KWS Saskin	KWS Extase	KWS Lili	LG Detroit	KWS Firefly	KWS Barrel	Elicit	KWS Bassett	Zulu	LG Skyscraper	LG Spotlight	KWS Jackal	Elation	Bennington	LG Sundance	LG Motown	Leeds	Myriad	Revelation	Viscount	RGT Gravity	Gleam	KWS Kerrin	Shabraz	Graham	KWS Crispin	Dunston	Evolution	Costello	JB Diego	Average LSD (5%)		
	nabim Group 1					nabim Group 2				nabim Group 3					Soft Group 4										Hard Group 4													
	UK	UK	UK	UK	UK	UK	UK	UK	E&W	UK	UK	UK	UK	UK	UK	UK	N	UK	E&W	UK	UK	N	N	UK	N	UK	UK	UK	E&W	UK	UK	UK	UK	UK	UK	UK	UK	
Fungicide-treated grain yield (% treated control)	C		*			C	NEW		NEW	NEW				C	NEW	NEW								*														
United Kingdom (11.2 t/ha)	101	99	98	97	97	102	101	100	100	102	101	101	99	98	106	104	102	102	102	101	100	99	98	97	97	104	104	104	103	102	102	101	101	100	100	100	2.0	
East region (11.2 t/ha)	100	99	98	97	96	102	101	100	100	103	101	101	99	98	106	103	103	103	102	101	100	100	98	98	97	104	104	104	103	101	102	102	101	100	99	100	99	2.3
West region (11.3 t/ha)	101	99	97	98	97	102	102	100	102	103	100	100	99	97	106	105	101	102	103	101	100	98	97	96	96	104	103	103	103	105	102	100	99	100	100	100	2.6	
North region (11.2 t/ha)	99	98	98	94	93	100	[102]	103	[95]	[99]	105	102	99	100	[104]	[101]	104	103	99	102	100	101	100	98	101	105	104	105	104	100	98	102	103	100	100	100	3.1	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UK distilling	-	-	-	-	-	-	-	-	-	-	-	Y	-	[Y]	[Y]	[Y]	[Y]	Y	-	[M]	[M]	[M]	[Y]	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-
ukp bread wheat for export	Y	-	-	-	Y	Y	[Y]	Y	[Y]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
uks soft wheat for export	-	-	-	-	-	-	-	-	-	[Y]	Y	[Y]	Y	Y	-	-	-	[Y]	Y	-	-	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	
Grain quality																																						
Endosperm texture	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Soft	Soft	Soft	Soft	Soft	Soft	Soft	Soft	Soft	Soft	Soft	Soft	Soft	Soft	Soft	Soft	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	0.2
Protein content (%)	12.1	12.1	11.8	12.0	12.7	11.7	11.7	11.4	12.2	11.7	11.2	11.5	11.4	11.5	11.2	11.1	10.9	11.4	11.4	11.2	11.3	11.3	11.4	11.5	11.2	11.3	11.1	10.7	11.2	11.3	11.5	11.4	11.1	11.8	11.4	11.4	0.3	
Protein content (%) - Milling spec	13.2	13.3	12.8	13.1	13.6	12.8	12.6	12.4	13.2	12.8	12.2	12.5	12.5	12.6	12.0	12.1	12.2	12.5	12.3	12.3	12.2	12.4	12.6	12.6	12.2	12.2	12.0	11.6	12.1	12.1	12.6	12.4	12.2	12.7	12.4	12.4	25	
Hagberg Falling Number	283	293	343	278	281	300	307	303	280	248	227	222	238	237	221	290	177	209	245	187	226	221	244	257	202	211	223	150	219	283	285	236	214	330	315	25		
Specific weight (kg/hl)	78.3	78.6	[241]	77.5	78.3	77.5	78.6	77.5	77.8	75.9	77.3	77.3	77.9	76.4	77.2	78.3	76.1	77.8	77.6	74.4	76.0	78.1	76.8	76.5	76.2	76.4	76.6	76.5	76.4	76.9	77.1	77.2	75.2	80.9	78.1	0.7		
Chopin alveograph W	183	-	[241]	-	212	174	186	185	214	88	88	88	89	100	-	[67]	[72]	91	88	72	57	[78]	[98]	[75]	-	-	-	-	-	125	-	[72]	-	[198]	-	21		
Chopin alveograph P/L	0.6	-	[1.0]	-	0.6	0.6	0.6	0.7	0.7	0.3	0.4	0.3	0.3	0.3	-	[0.3]	[0.3]	0.3	0.4	0.3	0.3	0.3	[0.2]	[0.3]	[0.4]	-	-	-	-	0.5	-	[0.6]	-	[0.9]	-	0.1		

Varieties no longer listed: Cordiale, Dickens, Freiston, Grafton, Hardwicke, KWS Santiago, KWS Silverstone, Moulton, Reflection, Savello and Spyder.

Comparisons of varieties across regions are not valid.

All yields in this table are taken from treated trials receiving a full fungicide and PGR programme.

UK = Recommended for the UK
E&W = Recommended for the East and West regions
N = Recommended for the North region

C = Yield control (for current table). For this table KWS Santiago was also a yield control but is no longer listed.
* = Variety no longer in trials
[] = Limited data

Y = Suited to that market
[Y] = May be suited to that market

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

AHDB Recommended List - Table 1

Winter wheat 2019/20

Yield, agronomy and disease resistance



End-use group	KWS Zjeff	Skylift	KWS Trinity	RGT Illustrious	Cruse	KWS Siskin	KWS Exase	KWS Lili	LG Detroit	KWS Firefly	KWS Barrel	Elet	KWS Basset	Zulu	LG Skyscraper	LG Spotlight	KWS Jackal	Elalon	Bennington	LG Sundance	LG Motown	Leeds	Myriad	Revelation	Viscount	RGT Gravity	Gleam	KWS Kerin	Shabraz	Graham	KWS Clispin	Dunston	Evolution	Costello	JIB Diego	Average LSD (5%)	
	nabim Group 1					nabim Group 2				nabim Group 3					Soft Group 4							Hard Group 4															
Scope of recommendation	UK	UK	UK	UK	UK	UK	UK	UK	E&W	UK	UK	UK	UK	UK	UK	UK	N	UK	E&W	UK	UK	N	N	UK	N	UK	UK	E&W	UK	UK	UK	UK	UK	UK	UK	UK	
Fungicide-treated grain yield (% treated control)																																					
United Kingdom (11.2 t/ha)	101	99	98	97	97	102	101	100	100	102	101	101	99	98	106	104	102	102	102	101	100	99	98	97	97	104	104	104	103	102	102	101	101	100	100	2.0	
East region (11.2 t/ha)	100	99	98	97	96	102	101	100	100	103	101	101	99	98	106	103	103	103	102	101	100	100	98	98	97	104	104	104	103	101	102	102	101	100	99	2.3	
West region (11.3 t/ha)	101	99	97	98	97	102	102	100	102	103	100	100	99	97	106	105	101	102	103	101	100	98	97	96	96	104	103	103	103	105	102	100	99	100	100	2.6	
North region (11.2 t/ha)	99	98	98	94	93	100	[102]	103	[95]	[99]	105	102	99	100	[104]	[101]	104	103	99	102	100	101	100	98	101	105	104	105	104	100	98	102	103	100	100	3.1	
Untreated grain yield (% treated control)																																					
United Kingdom (11.2 t/ha)	86	81	76	83	74	85	95	72	77	86	72	82	74	72	84	82	77	79	84	86	84	68	63	80	73	80	85	81	82	88	84	86	80	82	71	5.3	
Agonomic features																																					
Resistance to lodging without PGR (1-9)	7	8	8	7	7	6	7	7	8	8	7	7	7	6	7	7	7	7	7	6	6	7	7	7	7	7	7	7	6	7	6	7	7	7	7	0.5	
Resistance to lodging with PGR (1-9)	8	8	8	8	8	7	8	8	7	8	8	8	8	7	7	8	7	8	8	7	6	8	7	8	8	7	7	7	7	8	7	8	7	8	7	8	0.5
Height without PGR (cm)	83	82	81	88	81	83	89	81	84	81	82	84	84	88	90	91	85	81	90	86	83	85	88	85	80	86	85	84	85	86	85	92	89	82	87	1.7	
Ripening (days +/- JB Diego, -ve = earlier)	0	0	+1	+1	+1	+1	0	+2	+1	+1	+1	+1	+2	+1	0	+1	+1	+1	+2	+2	0	+2	+2	+3	+1	+1	0	+1	0	0	+1	+1	+2	+2	0	0.6	
Resistance to sprouting (1-9)	[5]	5	6	[6]	6	[5]	-	7	-	-	[6]	[5]	[6]	5	-	-	[5]	[6]	[5]	[4]	[6]	6	6	5	5	[4]	[5]	[5]	[4]	[7]	[5]	[5]	6	7	7	1.1	
Disease resistance																																					
Mildew (1-9)	7	5	8	6	6	8	6	8	5	5	6	6	5	7	7	6	7	7	7	7	7	3	5	6	6	4	6	7	6	7	6	5	7	8	6	1.1	
Yellow rust (1-9)	8	5	9	9	9	9	9	7	9	9	9	9	8	5	8	8	9	9	6	9	9	6	4	9	7	8	7	7	7	8	9	7	8	9	4	0.7	
Brown rust (1-9)	6	8	7	6	3	5	7	4	5	8	5	7	5	7	5	6	5	6	7	6	7	7	6	8	9	6	6	7	5	6	5	6	7	5	6	0.9	
Septoria nodorum (1-9)	[6]	[6]	[6]	[6]	6	[7]	-	[6]	-	-	[5]	[6]	[6]	[6]	-	-	[5]	[6]	[7]	[7]	[6]	[6]	[5]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	5	0.7
Septoria tritici (1-9)	6.4	5.9	5.5	6.1	6.5	6.7	8.1	5.9	5.7	7.0	4.5	6.0	5.1	5.2	5.2	5.2	4.9	4.3	6.3	7.9	5.7	4.6	5.6	6.3	4.8	5.0	6.4	5.0	6.2	6.9	5.8	6.7	5.4	6.1	5.2	0.7	
Eyespot (1-9)	7@	6@	5	6@	5	4	[4]	5	[5]	[4]	4	4	5	4	[4]	[5]	4	4	4	3	4	4	4	8@	4	4	4	5	4	4	4	6@	4	4	5	1.1	
Fusarium ear blight (1-9)	6	7	6	6	6	5	6	6	7	5	6	7	6	6	6	7	6	6	6	7	6	7	6	7	6	6	6	6	6	6	6	6	6	7	6	0.5	
Orange wheat blossom midge	-	R	-	-	-	-	-	-	R	R	R	R	R	R	R	R	R	R	-	R	R	R	R	-	R	R	R	R	-	-	R	-	-	-	-	-	

On the 1-9 scales, high figures indicate that a variety shows the character to a high degree (e.g. high resistance). Comparisons of varieties across regions are not valid.

UK = Recommended for the UK
 E&W = Recommended for the East and West regions
 N = Recommended for the North region

C = Yield control (for current table). For this table KWS Santiago was also a yield control but is no longer listed.
 * = Variety no longer in trials
 [] = Limited data

@ = Believed to carry the Pch1 Rendezvous resistance gene to eyespot but this has not been verified in Recommended List tests.
 R = Believed to be resistant to orange wheat blossom midge (OWBM) but this has not been verified in Recommended List tests.

LSD = Least significant difference

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

