

HGCA Recommended List[®] Winter Wheat 2007/08

MARKET OPTIONS AND GRAIN QUALITY

	P2					C				P1			C				*		C		C		*		P1		P1		P2		P1		*		P2		*		*		P2		Average LSD 5%
	X119	Soistice	Mascot	Malacca	Hereward	Battalion	Einstein	Cordiale	Soissons	Zebedee	Deben	Robigus	Nijinsky	Claire	Consort	Riband	Glasgow	Oakley	Humber	Ambrosia	Istabraq	Brompton +	Alchemy	Gladiator	Timber &	Napier	Hyperion #	Welford \$	Access	Richmond	Gatsby \$	Average LSD 5%											
End-use group	nabim Group 1					nabim Group 2				nabim Group 3							nabim Group 4																										
Scope of recommendation	UK	UK	UK	UK	UK	UK	UK	UK	E&W	E&W	UK	UK	UK	UK	UK	North	UK	UK	UK	UK	UK	East	UK	UK	Sp	UK	Sp	Sp	North	UK	Sp												
UK treated yield (% control, 10.2 t/ha)	104	101	98	94	93	105	104	102	91	105	104	103	101	100	98	96	108	107	106	106	106	106	105	105	104	103	103	103	103	102	102	2.5											
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	-	-	-	-	Y	[Y]	-	-	-	-	-	-	-	-	-											
ukp bread wheat for export	Y	Y	[Y]	B	Y	[B]	B	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	[B]	-	-	-	-	-	-	-											
uks soft wheat for export	-	-	-	-	-	-	-	-	-	[Y]	-	Y	B	Y	Y	-	Y	-	-	Y	Y	-	[B]	-	-	-	-	-	-	-	-	[Y]											
Year first listed	02	02	06	99	91	07	03	04	95	07	01	03	04	99	95	89	05	07	07	05	04	05	06	04	07	00	06	04	02	03	06												
Grain quality																																											
Endosperm texture	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Soft	Soft	Soft	Soft	Soft	Soft	Soft	Soft	Hard	Hard	Soft	Soft	Hard	Soft	Hard	Hard	Hard	Soft	Hard	Hard	Hard	Soft												
Protein content (%)	11.7	12.3	12.5	12.4	13.2	12.3	12.0	12.4	12.8	11.6	11.3	11.8	11.9	11.8	11.7	11.7	11.2	11.1	11.8	11.6	11.1	11.7	11.8	11.8	12.3	11.5	12.3	11.7	11.2	12.0	12.0	0.2											
Hagberg falling number	280	273	278	298	241	261	268	301	245	256	208	198	216	236	223	202	174	184	281	195	203	223	245	267	251	175	227	258	191	259	229	18											
Specific weight (kg/hl)	75.7	78.4	77.4	75.2	79.1	76.5	77.1	79.1	79.5	74.4	76.1	76.4	74.8	76.2	76.8	74.3	76.3	75.3	77.0	77.1	78.2	73.8	77.3	77.2	77.9	75.7	77.9	74.4	75.4	78.5	76.2	0.5											
1000 grain weight (g)	52.0	50.8	[51.1]	45.7	48.7	[50.7]	50.8	47.3	46.7	[48.8]	53.5	45.7	47.1	47.7	50.7	53.2	[44.8]	[49.2]	[52.2]	[52.8]	49.2	50.5	[48.4]	46.7	[47.9]	52.3	[50.2]	43.4	50.3	48.9	[42.8]	3.3											
Zeleny volume	46.5	50.8	51.8	48.1	57.7	48.1	42.1	51.1	58.6	23.0	27.7	26.9	30.1	25.2	24.0	[20]	[6]	37.1	26.3	[8]	[16]	[11]	10.2	[28]	33.1	23.6	[19]	[27]	20.1	44.9	19.2	7.0											
Chopin alveograph W	181	194	[233]	223	[229]	182	173	241	[303]	[89]	124	104	103	99	102	-	[89]	[123]	[106]	[73]	67	[76]	[60]	[93]	178	[82]	[99]	[69]	70	165	[80]	27											
Chopin alveograph P/L	0.8	0.7	[0.6]	0.7	[0.5]	0.8	0.5	0.7	[0.5]	[0.3]	0.6	0.3	0.3	0.3	0.2	-	[0.2]	[0.5]	[0.9]	[0.3]	0.3	[2]	[0.3]	[0.8]	0.7	[2.2]	[0.7]	[1.1]	2.0	1.5	[0.4]	0.3											

P1, P2 = first and second year of recommendation

* = variety no longer in trials

C = yield control

[] = limited data

Y = suited to that market

[Y] = may be suited to that market

B = suitable for blending into export cargoes

[B] = may be suitable for blending into export cargoes

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

UK = recommended to UK

\$ = Welford and Gatsby are specific recommendations for growers wanting a variety with resistance to orange wheat blossom midge.

East = recommended for the dry (East) Region

+ = Brompton is a specific recommendation for the East and for UK growers wanting a variety with genetic resistance to orange wheat blossom midge.

E&W = recommended for the dry (East) and wet (West) regions.

= Hyperion is a specific recommendation for growers in situations where eyespot is a major risk

Sp = specific recommendation

& = Timber is a specific recommendation for growers wanting good disease resistance. Isolates of yellow rust and mildew which can infect Timber have been found in the UK but so far disease levels have been low.

Varieties no longer Listed: Option, Savannah and Wizard

® = "HGCA RECOMMENDED LIST" is a registered trademark of the Home-Grown Cereals Authority.

HGCA Recommended List[®] Winter Wheat 2007/08

YIELD, AGRONOMY AND DISEASE RESISTANCE

	P2		C	P1		C	P1		C	*	C	C	*	P1		P1	P2		P1	*	P2	*	*	*	P2	Average LSD 5%						
	X19	Soistice	Mascot	Malacca	Hereward	Battalion	Einstein	Cordiale	Soissons	Zebedee	Deben	Robigus	Nijinsky	Claire	Consort	Riband	Glasgow	Oakley	Humber	Ambrosia	Istabraq	Brompton +	Alchemy	Gladiator	Timber &	Napier	Hyperion #	Welford \$	Access	Richmond	Gatsby \$	Average LSD 5%
End-use group	nabim Group 1					nabim Group 2				nabim Group 3					nabim Group 4																	
Scope of recommendation	UK	UK	UK	UK	UK	UK	UK	UK	E&W	E&W	UK	UK	UK	UK	UK	North	UK	UK	UK	UK	UK	East	UK	UK	Sp	UK	Sp	Sp	North	UK	Sp	
Fungicide treated grain yield (% treated control)																																
United Kingdom (10.2 t/ha)	104	101	98	94	93	105	104	102	91	105	104	103	101	100	98	96	108	107	106	106	106	106	105	105	104	103	103	103	103	102	102	2.5
Dry (East) region (10.2 t/ha)	104	100	99	94	94	105	104	102	91	105	104	104	101	100	98	95	108	106	107	106	106	106	104	104	104	103	103	103	103	102	101	2.9
Wet (West) region (10.4 t/ha)	102	102	97	94	92	103	104	102	90	105	103	104	102	101	97	95	107	110	107	106	106	105	107	106	106	103	103	102	102	103	103	3.3
North region (9.8 t/ha)	102	100	97	96	-	[103]	105	102	-	103	103	102	99	98	100	101	105	[110]	[103]	105	106	104	104	106	[101]	104	103	101	105	104	103	4.0
Untreated grain yield (% treated control in comparable trials)																																
United Kingdom	81	81	80	74	77	90	85	79	75	81	84	85	80	79	71	69	84	88	84	84	84	82	90	83	91	80	85	80	78	82	86	3.6
Agronomic features																																
Resistance to lodging without PGR	4	8	7	7	8	7	7	9	7	6	4	7	7	6	8	8	5	6	9	8	7	7	7	7	7	7	7	9	8	7	7	1.5
Resistance to lodging with PGR	7	9	9	8	9	8	8	9	8	7	6	8	8	7	8	8	7	8	9	8	8	8	9	8	9	8	8	9	9	8	9	1.1
Height without PGR (cm)	94	91	90	84	86	85	86	80	86	85	91	87	85	88	84	89	84	85	80	84	93	81	89	83	85	81	83	78	80	83	89	1.8
Ripening (days +/- Claire, -ve = early)	0	0	0	-1	0	0	0	-1	-2	0	+2	+1	0	0	+2	+2	0	0	0	0	+2	0	+1	0	0	+1	0	+1	+2	0	+2	0.8
Resistance to sprouting	6	7	-	6	6	-	6	6	7	-	5	5	4	5	6	6	[4]	-	-	[6]	5	[6]	-	6	-	6	-	7	6	5	-	1.2
Disease resistance																																
Mildew	7	4	6	6	6	7	6	6	6	6	6	7	6	4	6	6	7	7	5	6	5	4	7	6	9&	6	6	6	7	5	7	1.0
Yellow rust	9	9	5	9	5	7	6	6	7	9	9	3	8	9	6	6	4	6	9	5	9	8	9	8	9&	4	5	7	3	8	9	[2.0]
Brown rust	7	4	5	6	5	9	6	3	4	4	4	9	5	5	3	3	5	9	7	7	5	7	4	8	9	8	9	6	8	9	8	[2.3]
Septoria nodorum	6	6	[6]	7	6	-	5	5	6	[6]	6	8	6	8	4	4	5	-	-	5	8	6	[8]	6	-	6	[6]	6	6	6	[8]	1.9
Septoria tritici	5	5	5	5	6	5	5	5	5	5	6	6	5	6	4	3	5	6	5	4	5	5	7	5	7	4	5	5	5	5	7	0.6
Eyespot	4	4	6	4	4	6@	6	5	3	4	7	4	6	5	6	6	5	4	7	4	6	5	6	4	5	5	8@	8	4	4	5	1.6
Fusarium ear blight	5	6	-	6	5	-	6	6	8	-	6	5	7	7	5	6	[5]	-	-	[4]	7	[6]	-	5	-	5	-	5	5	6	-	2.1
Orange wheat blossom midge	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-	R	R	-	-	-	R	-	-	-	-	-	-	-	-	-	R

P1, P2 = first and second year of recommendation. * = variety no longer in trials. C = yield control.

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

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

R = believed to be resistant to orange wheat blossom midge (OWBM) but this has not been verified in RL tests.

\$ = Welford and Gatsby are specific recommendations for growers wanting a variety with resistance to orange wheat blossom midge.

+ = Brompton is a specific recommendation for the East and for UK growers wanting a variety with resistance to orange wheat blossom midge.

@ Battalion and Hyperion are believed to carry the Rendezvous resistance gene to eyespot but this has not been verified in RL tests.

= Hyperion is a specific recommendation for growers in situations where eyespot is a major risk.

& = Timber is a specific recommendation for growers wanting good disease resistance. Isolates of yellow rust and mildew which can infect Timber have been found in the UK but so far disease levels have been low.

[] = limited data.

UK = recommended for the UK.

East = recommended for the dry (East) Region.

E&W = Recommended for the dry (East) and wet (West) regions.

Sp = specific recommendation.

Comparisons of varieties across regions are not valid

HGCA Recommended List[®] Winter Wheat 2007/08

SUPPLEMENTARY DATA

	P2		C		P1		C		P1		C		*		C		C		*		P1		P1		P2		P1		*		P2		*		*		*		P2		Average LSD 5%	
	X19	Soistice	Mascot	Malacca	Hereward	Battalion	Einstein	Cordiale	Soissons	Zebedee	Deben	Robigus	Nijinsky	Claire	Consort	Riband	Glasgow	Oakley	Humber	Ambrosia	Istabraq	Brompton	Alchemy	Gladiator	Timber	Napier	Hyperion	Welford	Access	Richmond	Gatsby											
End-use group	nabim Group 1					nabim Group 2					nabim Group 3					nabim Group 4																										
Scope of recommendation	UK	UK	UK	UK	UK	UK	UK	UK	E&W	Sp	UK	UK	UK	UK	UK	North	UK	UK	UK	UK	UK	UK	East	UK	UK	Sp	UK	Sp	Sp	Sp	North	UK	Sp									
Breeder/ UK contact																																										
Breeder	Nick	Nick	RAGT	CPB	RAGT	RAGT	Nick	CPB	Depr	Nick	Nick	CPB	Nick	Nick	RAGT	RAGT	SU	CPB	CPB	RAGT	Nick	Els	Nick	RAGT	SU	RAGT	Nick	Els	CPB	Nick	Nick											
UK contact	Nick	Nick	RAGT	CPB	RAGT	RAGT	Nick	CPB	Els	Nick	Nick	CPB	Nick	Nick	RAGT	RAGT	SU	CPB	CPB	RAGT	Nick	Els	Nick	RAGT	SU	RAGT	Nick	Els	CPB	Nick	Nick											
Annual yield (% control)																																										
2002 treated (10.4 t/ha)	99	99	-	96	93	-	104	101	88	-	102	104	105	100	97	96	106	-	-	103	106	104	-	103	-	102	-	100	101	103	-	-	2.5									
2003 treated (10.2 t/ha)	103	101	99	94	93	-	104	101	92	107	105	103	102	101	98	99	109	-	-	107	109	104	106	105	-	103	103	102	102	103	102	-	-	2.5								
2004 treated (10.3 t/ha)	104	100	96	95	93	105	104	102	86	101	101	104	99	98	98	101	106	109	106	105	102	107	107	104	103	103	103	104	103	102	106	-	-	3.3								
2005 treated (10.0 t/ha)	105	101	99	94	90	105	104	102	90	104	105	105	100	98	99	100	107	111	106	106	106	107	105	105	105	103	104	104	107	102	102	-	-	2.6								
2006 treated (10.0 t/ha)	105	102	99	94	94	105	105	103	99	107	105	101	99	101	99	101	108	106	108	108	107	106	105	105	107	-	104	102	-	-	100	-	-	2.3								
Rotational position																																										
First cereal treated (10.5 t/ha)	103	101	98	94	93	103	104	101	90	105	104	105	101	100	98	99	107	108	106	105	106	106	105	105	104	103	102	103	102	102	102	-	-	1.5								
Second and more treated (9.5 t/ha)	104	102	98	96	93	108	106	104	91	104	103	100	100	99	100	99	107	106	107	107	106	105	104	106	106	104	105	103	104	103	102	102	-	-	2.5							
Sowing date (most trials were sown during October)																																										
Before 6 Oct treated (10.1 t/ha)	103	101	97	95	93	103	104	102	89	104	104	103	100	100	98	99	106	108	106	106	106	106	105	106	104	104	103	103	104	102	102	-	-	1.7								
Late autumn treated (9.6 t/ha)	105	100	[98]	94	~	-	104	102	93	[106]	101	105	98	99	99	-	109	-	-	108	107	106	[106]	105	-	[102]	[105]	102	103	104	[105]	-	-	5.1								
Soil type (about 50% of trials are on medium soils)																																										
Light soils treated (9.6 t/ha)	102	100	98	95	93	105	105	102	92	104	104	104	101	99	98	97	105	108	106	106	106	105	104	105	106	102	102	101	101	102	102	-	-	2.6								
Heavy soils treated (10.8 t/ha)	103	101	98	95	94	105	104	101	87	104	103	103	101	100	98	96	107	106	107	105	106	106	105	104	104	104	103	104	103	102	102	-	-	2.1								
Agronomic features																																										
Lodging % without PGR	10.7	1.1	2.7	2.3	0.6	2.5	1.7	0.5	2.7	4.9	12.6	1.9	1.9	3.8	1.5	1.2	6.7	3.9	0.5	1.2	3.0	2.1	2.5	3.2	2.2	1.8	2.4	0.3	1.3	1.8	2.6	-	-									
Lodging % with PGR	6.0	0.4	0.9	1.9	0.7	1.0	1.8	0.4	2.4	6.1	8.1	2.0	2.1	3.2	1.3	1.9	4.9	2.6	0.2	1.0	2.6	1.6	0.9	1.6	0.5	1.7	1.9	0.1	0.3	1.1	0.9	-	-									
Latest safe sowing date #	End Feb	End Jan	[End Jan]	End Jan	End Jan	-	End Jan	End Jan	Mid Feb	[End Jan]	Mid Feb	End Feb	End Jan	End Feb	End Jan	End Jan	[End Feb]	-	-	Mid Feb	End Feb	End Jan	[End Jan]	End Jan	-	End Jan	[End Jan]	End Jan	End Jan	End Jan	End Jan	[Mid Feb]	-	-								

All yields on this table are taken from treated trials receiving a full fungicide and PGR programme ~ = See RL Plus for late-autumn data on Hereward [] = limited data

Key to breeder/UK contact codes:

CPB = CPB Twyford Ltd (www.cpb-twyford.co.uk)

Depr = Maison Florimond Desprez, France

Els = Elsoms Seeds Ltd (www.elsoms.com)

Nick = Nickerson-Advanta Ltd (www.nickersonuk.com)

RAGT = RAGT Seeds Ltd (www.ragt.co.uk)

SU = Saaten Union UK Ltd (www.saaten-union.co.uk)

= Latest safe sowing date is the advised latest date to give a sufficient cold period for flowering.

® = "HGCA RECOMMENDED LIST" is a registered trademark of the Home-Grown Cereals Authority.