## **RECOMMENDEDLIST**



# Wheat pocketbook 2019/20



**CEREALS & OILSEEDS** 

Produced in partnership with:



British Society of Plant Breeders



Maltsters Association of Great Britain



National Association of British and Irish Millers The AHDB Recommended Lists for cereals and oilseeds (RL) provides information on yield and quality performance, agronomic features and market options to assist with variety selection.

Available for wheat, barley and oats, and winter oilseed rape, the pocketbooks provide summary information\* on Recommended and Candidate varieties. With a variety per page, the format is particularly helpful for use at variety open events.

\*Information is extracted from the AHDB Recommended Lists for cereals and oilseeds 2019/20.

Winter wheat	Page						
nabim Group 1		4					
nabim Group 2	nabim Group 2						
nabim Group 3		13					
Group 4 soft-milli	ng feed varieties	18					
Group 4 hard-mill	ing feed varieties	29					
Candidate		39					
Control data from	National List trial series	49					
Spring wheat							
nabim Group 1	50						
nabim Group 2		51					
Group 4 hard-mill	ing feed varieties	54					
Candidate		58					
Control data from	National List trial series	60					
Key							
P1/P2	First/second year of recommendation						
ukp uks Classified as a ukp bread wheat of uks soft wheat for export							
*	Variety no longer in trials						
[]	Limited data						
	Very limited data						
[[ ]]							

#### Winter wheat regions



ahdb.org.uk/rl

# **Contents**

Winter wheat	Page
Bennington	22
Costello	37
Crusoe	8
Dunston	35
Elation	21
Elicit	15
Elysium	42
Evolution	36
Gleam	30
Graham	33
JB Diego	38
KWS Barrel	14
KWS Basset	16
KWS Crispin	34
KWS Extase	10
KWS Firefly	13
KWS Jackal	20
KWS Kerrin	31
KWS Kinetic	43
KWS Lili	11
KWS Parkin	47
KWS Siskin	9
KWS Trinity	6
KWS Zyatt	4
Leeds	25
LG Detroit	12
LG Graduate	40
LG Motown	24
LG Skyscraper	18
LG Spotlight	19
LG Sundance	23
Myriad	26
Revelation	27
RGT Blossom	39
RGT Gravity	29
RGT Illustrious	7
RGT Lantern	45
RGT Saki	41

Winter wheat	Page
RGT Wasabi	46
Shabras	32
Skyfall	5
SY Insitor	44
Theodore	48
Viscount	28
Zulu	17
Spring wheat	Page
Hexham	55
KWS Alderon	57
KWS Chilham	52
KWS Cochise	51
KWS Giraffe	58
KWS Kilburn	56
KWS Talisker	54
KWS Willow	53
Mulika	50
Shackleton	59





# A high-yielding **nabim**Group 1 variety

UK

**KWS UK** 



Grain yield (as % control)

01763 207300 kws-uk.com

#### Quartz x Hereford

UK	East	West	Nor	th Untreated
101	100	101	99	9 86
Quality				
Endosperm	texture		Hard	
Protein cont	ent (%)		12.1	Medium
Protein cont	ent (%) – Mi	lling spec	13.2	
Hagberg fall	ing number		283	High
Specific wei	ght (kg/hl)		78.3	High
Agronomic	features			
Lodging resi	stance no P	GR (1-9)	7	Medium-high
Lodging resi	stance with	PGR (1-9)	8	High
Height (cm)			83	Short
Ripening (da	ays +/- JB Di	iego)	0	Medium
Disease res	istance (1–9	)		
Mildew			7	Medium-high
Yellow rust			8	High
Brown rust			6	Medium
Septoria nod	dorum		[6]	Medium
Septoria triti	ci		6.4	Medium
Eyespot			7@	High
Fusarium ea	r blight		6	Medium
Orange whe	at blossom i	midge	-	
Rotation				
First cereal (	% control)		100	
Second cere	eal (% contro	ol)	101	

#### Notes

@ = Believed to carry the 'Rendezvous' *Pch1* eyespot resistance gene but this has not been verified in Recommended List tests.

**nabim** comment: This variety shows good gluten strength and milling quality, alongside a good baking performance. As a high-yielding variety, nitrogen applications may need be adjusted to achieve protein specifications.





#### A nabim Group 1 variety

UK

**RAGT Seeds** 01799 533700 ragt.co.uk

C4148 x Hurricane

	as // Contro				
UK	East	West	Nor		Untreated
99	99	99	98		81
Quality					
Endosperm	texture		Hard		
Protein cont	ent (%)		12.1	Med	dium
Protein cont	ent (%) – Mi	lling spec	13.3		
Hagberg fall	ing number		293	High	า
Specific wei	ght (kg/hl)		78.6	High	า
Agronomic	features				
Lodging resi	stance no P	GR (1-9)	8	High	า
Lodging resi	stance with	PGR (1-9)	8	High	า
Height (cm)			82	Sho	rt
Ripening (da	ays +/- JB D	iego)	0	Med	dium
Disease res	istance (1-9	)			
Mildew			5	Med	dium
Yellow rust			5	Med	dium
Brown rust			8	High	า
Septoria nod	dorum		[6]	Med	dium
Septoria triti	ci		5.9	Med	dium
Eyespot			6@	Med	dium
Fusarium ea	r blight		7	Med	dium-high
Orange whe	at blossom	midge	R	Res	istant
Rotation					
First cereal (	% control)		99		
Second cere	eal (% contro	ol)	99		

#### Notes

- @ = Believed to carry the 'Rendezvous' *Pch1* eyespot resistance gene 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.

**nabim** comment: This variety is very popular with millers because it shows good milling and baking qualities. Because it is high-yielding, nitrogen applications may need be adjusted to achieve protein specifications.





### A nabim Group 1 variety \*UK

**KWS UK** 01763 207300 kws-uk.com

#### (Grafton x Einstein) x CPBT W134

Grain yield	(as % contro	1)		
UK	East	West	Nor	th Untreated
98	98	97	98	3 76
Quality				
Endosperm	texture		Hard	
Protein cont			11.8	Medium
Protein cont	tent (%) – Mill	ing spec	12.8	
Hagberg fall	ling number	0 1	343	High
Specific wei	ight (kg/hl)		77.8	Medium
Agronomic	features			
Lodging res	istance no PO	GR (1-9)	8	High
Lodging res	istance with F	PGR (1-9)	8	High
Height (cm)			81	Short
Ripening (da	ays +/- JB Die	ego)	+1	Medium
Disease res	sistance (1-9)			
Mildew			8	High
Yellow rust			9	High
Brown rust			7	Medium-high
Septoria no	dorum		[6]	Medium
Septoria trit	ici		5.5	Medium
Eyespot			5	Medium
Сусорог				
Fusarium ea	ar blight		6	Medium
Fusarium ea	ar blight eat blossom n	nidge	6 -	Medium
Fusarium ea	Ŭ	nidge	6 -	Medium
Fusarium ea	eat blossom n	nidge	6 - 98	Medium

#### Notes

\*KWS Trinity is no longer in Recommended List trials.

nabim comment: This variety exhibits good gluten quality even at lower protein levels and has shown good baking performance. This variety has not achieved a significant market share and millers have seen relatively small quantities.



### A nabim Group 1 variety

UK

**RAGT Seeds** 01799 533700 ragt.co.uk

#### **Qplus x Battalion**

Circuit yield	as // Contro	J1)			
UK	East	West	Nor	th	Untreated
97	97	98	94	1	83
Quality					
Endosperm	texture		Hard		
Protein cont	ent (%)		12.0	Med	ium
Protein cont	ent (%) – Mi	lling spec	13.1		
Hagberg fall	ing number		278	High	1
Specific wei	ght (kg/hl)		77.5	Med	ium
Agronomic	features				
Lodging res	istance no P	GR (1-9)	7	Med	ium-high
Lodging res	istance with	PGR (1-9)	8	High	
Height (cm)		88	Med	ium	
Ripening (da	ays +/- JB D	iego)	+1	Medium	
Disease res	istance (1-9	)			
Mildew			6	Med	ium
Yellow rust			9	High	1
Brown rust			6	Med	ium
Septoria no	dorum		[6]	Med	ium
Septoria triti	ci		6.1	Med	ium
Eyespot			6@	Med	ium
Fusarium ea	r blight		6	6 Medium	
Orange whe	at blossom	midge	-		
Rotation					
First cereal (	(% control)		97		
Second cere	eal (% contro	ol)	97		

#### Notes

@ = Believed to carry the 'Rendezvous' Pch1 eyespot resistance gene but this has not been verified in Recommended List tests.

nabim comment: This variety has a higher level of water absorption (a good feature) and demonstrates good bread-making potential, even at lower protein levels.





### A **nabim** Group 1 variety UK

# Limagrain UK



01472 371471 lgseeds.co.uk

#### Cordiale x Gulliver

Grain yield (	as % contro	ol)				
UK	East	West	Nor	th	Untreated	
97	96	97	93		74	
Quality						
Endosperm	texture		Hard			
Protein cont			12.7	High	1	
Protein cont	ling spec	13.6	riigi	•		
Hagberg fall	` ′	iii ig spec	281	High	1	
Specific weight	· ·		78.3	High		
Agronomic 1	0 (0 ,		70.5	riigi		
		CP (1 0)	7	Mod	ium high	
Lodging resi		` ′	-	Medium-high		
Lodging resistance with PGR (1–9)			8	High		
Height (cm)			81	Short Medium		
Ripening (da			+1	Med	ium	
Disease resi	istance (1-9					
Mildew			6	Med		
Yellow rust			9	High	l	
Brown rust			3	Very	low	
Septoria nod	dorum		6	Med	ium	
Septoria triti	ci		6.5	High	l	
Eyespot			5	Med	ium	
Fusarium ea	r blight		6	Medium		
Orange whe	at blossom r	nidge	-			
Rotation						
First cereal (	% control)		97			
Second cere	eal (% contro	ol)	95			

#### Notes

nabim comment: Crusoe has consistently demonstrated good protein content and quality. The breadcrumb structure is notably white and of good quality. Large volumes of this variety continue to be seen and its baking performance remains good; consequently, it remains popular with millers.





### A high-yielding nabim Group 2 variety

UK





Grain yield (a	as % contro	ol)			
UK	East	West	Nor	th	Untreated
102	102	102	10	0	85
Quality					
Endosperm t	exture		Hard		
Protein conte	ent (%)		11.7	Med	ium
Protein conte	ent (%) – Mil	ling spec	12.8		
Hagberg falli	ng number		300	High	
Specific weig	ght (kg/hl)		77.5	Med	ium
Agronomic f	eatures				
Lodging resis	stance no Po	GR (1-9)	6	Medium	
Lodging resis	stance with	PGR (1-9)	7	Medium-high	
Height (cm)			83	Short	
Ripening (da	ys +/- JB Di	ego)	+1	Med	ium
Disease resi	stance (1-9)				
Mildew			8	High	
Yellow rust			9	High	
Brown rust			5	Med	ium
Septoria nod	lorum		[7]	High	
Septoria tritic	ci		6.7	High	
Eyespot	espot		4	Low	
Fusarium ear	r blight		5	Medium	
Orange whea	at blossom r	midge	-		
Rotation					
First cereal (	% control)		102		

#### Notes

Second cereal (% control)

nabim comment: This variety has protein levels and specific weights that are slightly higher than those of KWS Lili. Some yellowness may be seen in the flour colour. It has shown a degree of variability in its baking performance, so may be more suited to use in blends.

102







# A new **nabim** Group 2 variety **P1 UK**

**KWS UK** 01763 207300

kws-uk.com

Grain yield	(as % contro	ol)		
UK	East	West	North	Untreated
101	101	102	[102]	95

A		
Quality		
Endosperm texture	Hard	
Protein content (%)	11.7	Medium
Protein content (%) - Milling spec	12.6	
Hagberg falling number	307	High
Specific weight (kg/hl)	78.6	High
Agronomic features		
Lodging resistance no PGR (1-9)	7	Medium-high
Lodging resistance with PGR (1-9)	8	High
Height (cm)	89	Medium-tall
Ripening (days +/- JB Diego)	0	Medium
Disease resistance (1-9)		
Mildew	6	Medium
Yellow rust	9	High
Brown rust	7	Medium-high
Septoria nodorum	-	
Septoria tritici	8.1	Very high
Eyespot	[4]	Low
Fusarium ear blight	6	Medium
Orange wheat blossom midge	-	
Rotation		
First cereal (% control)	101	
Second cereal (% control)	101	

#### Notes

**nabim** comment: Over three years of testing, this variety showed protein levels similar to KWS Siskin and its performance was consistent with that of other Group 2 varieties. It showed some variability in its baking performance.





### A **nabim** Group 2 variety

UK

**KWS UK** 





Grain vield (as % control)

#### KWS Horizon x CPBT W134

Grain yield (	as % contro	)I)				
UK	East	West	Nor	th	Untreated	
100	100	100	103		72	
Quality						
Endosperm	texture		Hard			
Protein cont			11.4	Medi	ium	
	ent (%) – Mil	ling spec	12.4	modi	CITT CONTRACTOR	
Hagberg fall	` '	mig opoo	303	High		
Specific wei	0		77.5	Medi		
Agronomic	e (e,		77.0	Modi	CITT CONTRACTOR	
	stance no P	GR (1–9)	7	Medi	um-high	
0 0	stance with	` ′	8	High		
Height (cm)		( )	81	Short		
0 ( )	ays +/- JB Di	ego)	+2	Medium		
Disease res	istance (1-9)	)				
Mildew			8	High		
Yellow rust			7	Medi	um-high	
Brown rust			4	Low		
Septoria nod	dorum		[6]	Medi	um	
Septoria triti	ci		5.9	Medium		
Eyespot			5	Medium		
Fusarium ea	r blight		6	Medi	um	
Orange whe	at blossom r	midge	-			
Rotation						
First cereal (	% control)		101			
Second cere	eal (% contro	ol)	99			

#### Notes

**nabim** comment: This variety has lower protein levels than the other Group 2 varieties. There are some concerns about the breadcrumb structure of loaves made solely with this variety, but it will usually be used in grists.





East



# A new **nabim** Group 2 variety for the East and West regions

#### P1 East & West

Limagrain UK

01472 371471 Igseeds.co.uk

100	100	102	[95	5] 77
Quality				
Endosperm	texture		Hard	
Protein cont	tent (%)	12.2	Medium	
Protein cont	ent (%) – Millir	ng spec	13.2	
Hagberg fall	Hagberg falling number			High
Specific weight (kg/hl)			77.8	Medium
Agronomic	features			
Lodging res	istance no PG	R (1–9)	8	High
Lodging res	istance with P	GR (1–9)	7	Medium-high
Height (cm)			84	Medium
Ripening (days +/- JB Diego)			+1	Medium
Disease res	istance (1-9)			
Mildew			5	Medium
Yellow rust			9	High

Diowiiiast	U	Wicalaili
Septoria nodorum	-	
Septoria tritici	5.7	Medium
Eyespot	[5]	Medium
Fusarium ear blight	7	Medium-high
Orange wheat blossom midge	R	Resistant
Rotation		
First cereal (% control)	100	
Second cereal (% control)	100	

Medium

#### Notes

Brown rust

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

**nabim** comment: Over three years of testing, this variety showed protein levels similar to the Group 1 varieties. Gluten quality and baking performance showed some variability.





**NEW** 

Group 3 variety

P1 UK

uks

KWS UK 01763 207300 kws-uk.com

A new high-yielding nabim

Grain yield	Grain yield (as % control)						
UK	East	West	No	th	Untreated		
102	103	103	[99	9]	86		
Quality							
Endosperm	texture		Soft				
Protein content (%)			11.7				
	tent (%) – Mil	ling spec	12.8				
	ling number	iii ig opco	248	Med	lium		
Specific we	ŭ		75.9	Low			
Agronomic	0 (0)		70.0	LOW			
_	Lodging resistance no PGR (1–9)			High	1		
0 0	Lodging resistance with PGR (1–9)			High			
Height (cm)				Short			
0 ( )	avs +/- JB Di	eao)	81 +1	Medium			
1 0 (	sistance (1-9)	0 /		Wiod	il di il		
Mildew	notarioo (i o		5	Med	lium		
Yellow rust			9	High			
Brown rust			8	High			
Septoria no	dorum		-				
Septoria trit			7.0	High	1		
Eyespot			[4]	Low			
Fusarium ea	ar blight		5	Med			
	eat blossom r	midge	R		stant		

#### Notes

Rotation

First cereal (% control)

Second cereal (% control)

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

102

101

Rated 'poor' for distilling due to low alcohol levels.

**nabim** comment: Over the three years of testing, this variety showed similar quality to the Group 3 control and fully met the Group 3 criteria.





# A **nabim** Group 3 variety **UK**

KWS UK

01763 207300 kws-uk.com



#### Bantam x Viscount

Grain yield	(as % contro	1)				
UK	East	West	Nor	th Untreated		
101	101	100	10	5 72		
Quality						
Endosperm	texture		Soft			
Protein conf	tent (%)		11.2			
Protein conf	tent (%) - Mil	ling spec	12.2			
Hagberg fal	ling number		227	Medium		
Specific we	ight (kg/hl)		77.3	Medium		
Agronomic	features					
Lodging res	istance no Po	GR (1-9)	7	Medium-high		
Lodging res	istance with I	PGR (1-9)	8	High		
Height (cm)			82	Short		
Ripening (da	ays +/- JB Die	ego)	+1	Medium		
Disease res	istance (1-9)					
Mildew			6	Medium		
Yellow rust			9	High		
Brown rust			5	Medium		
Septoria no	dorum		[5]	Medium		
Septoria trit	ici		4.5	Medium		
Eyespot			4	Low		
Fusarium ea	ar blight		6	Medium		
Orange wheat blossom midge			R	Resistant		
Rotation						
First cereal	(% control)		102			
Second cere	eal (% contro	l)	101			

#### Notes

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

Rated 'poor' for distilling due low to alcohol levels.

nabim comment: This variety fully meets the Group 3 criteria.







**Elsoms Seeds** 

01775 715000 elsoms.com

A nabim Group 3 variety



#### Cassius x Viscount

Grain yield (as % control)						
UK	East	West	Nor	th Untreated		
101	101	100	10	2 82		
Quality						
Endosperm	texture		Soft			
Protein cont			11.5			
Protein content (%) – Milling spec			12.5			
Hagberg fall	( /	9	222	Medium		
Specific wei	•		77.3	Medium		
Agronomic	0 (0 )					
	istance no P	GR (1–9)	7	Medium-high		
Lodging res	istance with	PGR (1–9)	8	High		
Height (cm)		. ,	84	Medium		
Ripening (da	ays +/- JB Di	ego)	+1	Medium		
Disease res	istance (1-9	)				
Mildew			6	Medium		
Yellow rust			9	High		
Brown rust			7	Medium-high		
Septoria no	dorum		[6]	Medium		
Septoria trit	ici		6.0	Medium		
Eyespot			4	Low		
Fusarium ea	Fusarium ear blight			Medium-high		
Orange whe	at blossom r	midge	R	Resistant		
Rotation						
First cereal	(% control)		101			
Second cere	eal (% contro	ol)	101			

#### Notes

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

Rated 'good' for distilling.

nabim comment: This variety has shown a slightly lower Hagberg Falling Number and slightly weaker gluten than other Group 3 varieties, but meets the criteria for the group.





# A **nabim** Group 3 variety **UK**

KWS UK





Grain yield (as % control)						
UK	East	West	Nor	th Untreated		
99	99	99	99	74		
Quality						
Endosperm	texture		Soft			
	Protein content (%)					
	ent (%) – Mil	llina spec	12.5			
Hagberg fall	ing number	0 1	238	Medium		
Specific wei	ght (kg/hl)		77.9	Medium		
Agronomic	features					
Lodging res	istance no P	GR (1–9)	7	Medium-high		
Lodging res	istance with	PGR (1-9)	8	High		
Height (cm)			84	Medium		
Ripening (da	ays +/- JB Di	ego)	+2	Medium		
Disease res	istance (1-9)	)				
Mildew			5	Medium		
Yellow rust			8	High		
Brown rust			5	Medium		
Septoria no	dorum		[6]	Medium		
Septoria triti	ici		5.1	Medium		
Eyespot			5	Medium		
Fusarium ea	ır blight		6	6 Medium		
Orange whe	at blossom r	midge	R	Resistant		
Rotation						
First cereal (	(% control)		99			
Second cere	eal (% contro	ol)	99			

#### Notes

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

Rated 'poor' for distilling due to low alcohol levels.

**nabim** comment: Although this variety has shown some variation in dough extensibility, it fully meets the criteria for a Group 3 variety.





### A **nabim** Group 3 variety

UK

Limagrain UK

01472 371471 lgseeds.co.uk



(Cebeco99080 x Claire) x Robigus

Grain yield	(as % contro	ol)				
UK	East	West	Noi	rth Untreated		
98	98	97	10	0 72		
Quality						
Endosperm	texture		Soft			
Protein con	tent (%)		11.5			
Protein con	tent (%) - Mil	ling spec	12.6			
Hagberg fal	lling number		237	Medium		
Specific we	eight (kg/hl)		76.4	Medium		
Agronomic	features					
Lodging resistance no PGR (1-9)			6	Medium		
Lodging res	sistance with	PGR (1-9)	7	Medium-high		
Height (cm)			88	Medium		
Ripening (d	ays +/- JB Di	ego)	+1	Medium		
Disease res	sistance (1-9	)				
Mildew			7	Medium-high		
Yellow rust			5	Medium		
Brown rust			7	Medium-high		
Septoria no	dorum		[6]	Medium		
Septoria tri	tici		5.2	Medium		
Eyespot			4	Low		
Fusarium ea	ar blight		6	Medium		
Orange who	eat blossom r	midge	R	Resistant		
Rotation						
First cereal	(% control)		98			
Second cer	eal (% contro	ol)	97			

#### Notes

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

Believed to be resistant to soil-borne cereal mosaic virus (SBCMV) but this has not been verified in Recommended List tests.

Rated 'medium' for distilling.

**nabim** comment: This variety has consistently met the requirements for a Group 3 wheat.

# LG Skyscraper





# A new very high-yielding soft-milling Group 4 variety

P1 UK

Limagrain UK 01472 371471 Igseeds.co.uk

Grain yield	(as % contro	l)				
UK	East	West	Nor	th Untreated		
106	106	106	[10	4] 84		
Quality						
Endosperm	texture		Soft			
Protein cont	ent (%)		11.2			
Protein cont	ent (%) - Mil	ling spec	12.0			
Hagberg fall	ing number		221	Medium		
Specific wei	ght (kg/hl)		77.2	Medium		
Agronomic	features					
Lodging res	istance no PO	GR (1-9)	7	Medium-high		
Lodging res	istance with I	PGR (1-9)	7	Medium-high		
Height (cm)			90	Medium-tall		
Ripening (da	ays +/- JB Die	ego)	0	Medium		
Disease res	istance (1-9)					
Mildew			7	Medium-high		
Yellow rust			8	High		
Brown rust			5	Medium		
Septoria no	dorum		-			
Septoria triti	ci		5.2	Medium		
Eyespot			[4]	Low		
Fusarium ear blight			6	Medium		
	Orange wheat blossom midge			D 11 1		
	at blossom n	nidge	R	Resistant		
	at blossom n	nidge		Resistant		
Orange whe Rotation First cereal (			106 105	Resistant		

#### Notes

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



soft-milling Group 4 variety

P1 UK

Limagrain UK 01472 371471 Igseeds.co.uk

A new very high-yielding

Grain yield	(as % contro	ol)		
UK	East	West	North	Untreated
104	103	105	[101]	82
Quality				

Quality		
Endosperm texture	Soft	
Protein content (%)	11.1	
Protein content (%) - Milling spec	12.1	
Hagberg falling number	290	High
Specific weight (kg/hl)	78.3	High
Agronomic features		
Lodging resistance no PGR (1-9)	7	Medium-high
Lodging resistance with PGR (1-9)	8	High
Height (cm)	91	Medium-tall
Ripening (days +/- JB Diego)	+1	Medium
Disease resistance (1-9)		
Mildew	6	Medium
Yellow rust	8	High
Brown rust	6	Medium
Septoria nodorum	-	
Septoria tritici	5.2	Medium
Eyespot	[5]	Medium
Fusarium ear blight	7	Medium-high
Orange wheat blossom midge	R	Resistant
Rotation		
First cereal (% control)	103	
Second cereal (% control)	102	

#### Notes

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





A high-yielding soft-milling Group 4 variety for the North region

P2 North

**KWS UK** 01763 207300 kws-uk.com

UK	East	West	Nor	th Untreated		
102	103	101	10	4 77		
Quality						
Endosperm	texture		Soft			
Protein cont	ent (%)		10.9			
Protein cont	ent (%) - Mi	lling spec	12.2			
Hagberg fall	ing number		177	Medium		
Specific wei	ght (kg/hl)		76.1	Medium		
Agronomic t	features					
Lodging resistance no PGR (1–9)			7	Medium-high		
Lodging resi	stance with	PGR (1-9)	7	Medium-high		
Height (cm)			85	Medium		
Ripening (da	ys +/- JB D	iego)	+1	Medium		
Disease res	istance (1-9	9)				
Mildew			7	Medium-high		
Yellow rust			9	High		
Brown rust			5	Medium		
Septoria nod	dorum		[5]	Medium		
Septoria triti	ci		4.9	Medium		
Eyespot			4	Low		
Fusarium ea	r blight		6	Medium		
Orange whe	Orange wheat blossom midge			Resistant		
Rotation						
First cereal (	% control)		102			
Second cere	eal (% contro	ol)	103			

#### Notes

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





# A high-yielding soft-milling Group 4 variety

P2 UK



Grain vield (as % control)

Elsoms Seeds 01775 715000 elsoms.com

#### Cassius x Viscount

Ciralii yielu (	uo 70 0011tile	<i>-</i> 11				
UK	East	West	Nor	th	Untreated	
102	103	102	10	3	79	
Quality						
Endosperm	texture		Soft			
Protein cont	ent (%)		11.4			
Protein cont	ent (%) - Mi	lling spec	12.5			
Hagberg fall	ing number		209	Medi	um	
Specific wei	ght (kg/hl)		77.8	Medi	um	
Agronomic t	features					
Lodging resi	stance no P	GR (1-9)	7	Medium-high		
Lodging resi	stance with	PGR (1-9)	8	High		
Height (cm)			81	Short		
Ripening (da	ays +/- JB Di	iego)	+1	Medium		
Disease resi	istance (1-9	)				
Mildew			7	Medi	um-high	
Yellow rust			9	High		
Brown rust			6	Medi	um	
Septoria nod	dorum		[6]	Medium		
Septoria triti	ci		4.3	Low		
Eyespot			4	Low		
Fusarium ear blight			6	Medium		
Orange whe	midge	R	Resis	tant		
Rotation						
First cereal (	% control)		102			
Second cere	eal (% contro	ol)	104			

#### Notes

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

Rated 'good' for distilling.

# Bennington



uks

Grain yield (as % control)

A high-yielding soft-milling Group 4 variety for the East and West regions

**East & West** 

Elsoms Seeds 01775 715000 elsoms.com

Alchemy x Battalion

UK	East	West	Nor	th Untreated
102	102	103	99	84
Quality				
Endosperm	texture		Soft	
Protein conf	ent (%)		11.4	
Protein conf	tent (%) - Mill	ing spec	12.3	
Hagberg fal	ing number		245	Medium
Specific we	ight (kg/hl)		77.6	Medium
Agronomic	features			
Lodging res	istance no Po	GR (1–9)	7	Medium-high
Lodging resistance with PGR (1-9)			8	High
Height (cm)			90	Medium-tall
Ripening (da	ays +/- JB Die	ego)	+2	Medium
Disease res	istance (1-9)			
Mildew			7	Medium-high
Yellow rust			6	Medium
Brown rust			7	Medium-high
Septoria no	dorum		[7]	High
Septoria trit	ici		6.3	Medium
Eyespot			4	Low
Fusarium ea	ar blight		6	Medium
Orange whe	eat blossom n	nidge	-	

102

102

#### Notes

Rotation

First cereal (% control)

Second cereal (% control)

Rated 'poor' for distilling due to low alcohol levels.





#### A soft-milling Group 4 variety

UK

Limagrain UK 01472 371471 Igseeds.co.uk

#### (Hereford x Viscount) x Cassius

Grant yiola	<u> </u>			
UK	East	West	Nor	th Untreated
101	101	101	10	2 86
Quality				
Endosperm	texture		Soft	
Protein cont	tent (%)		11.2	
Protein cont	tent (%) - Mil	ling spec	12.3	
Hagberg fall	ling number		187	Medium
Specific wei	ight (kg/hl)		74.4	Low
Agronomic	features			
Lodging res	istance no P	GR (1-9)	6	Medium
Lodging res	istance with	PGR (1-9)	7	Medium-high
Height (cm)	Height (cm)			Medium
Ripening (da	ays +/- JB Di	ego)	+2	Medium
Disease res	istance (1–9	)		
Mildew			7	Medium-high
Yellow rust			9	High
Brown rust			6	Medium
Septoria no	dorum		[7]	High
Septoria trit	ici		7.9	Very high
Eyespot			3	Very low
Fusarium ea	ır blight		7	Medium-high
Orange whe	at blossom i	midge	R	Resistant
Rotation				
First cereal	(% control)		101	
Second cere	eal (% contro	ol)	103	

#### Notes

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





# A soft-milling Group 4 variety **UK**

Limagrain UK

01472 371471 lgseeds.co.uk

#### (Bantam x Huntress) x Denman

Grain yield	as % contro	1)		
UK	East	West	Nor	th Untreated
100	100	100	10	0 84
Quality				
Endosperm	texture		Soft	
Protein cont			11.3	
	ent (%) - Mill	ina spec	12.2	
Hagberg fall	. ,	9 - 1	226	Medium
Specific wei	ght (kg/hl)		76.0	Low
Agronomic	e (e,			
	stance no Po	GR (1–9)	6	Medium
Lodging resi	stance with I	PGR (1–9)	6	Medium
Height (cm)			83	Short
Ripening (da	ays +/- JB Die	ego)	0	Medium
Disease res	istance (1-9)			
Mildew			7	Medium-high
Yellow rust			9	High
Brown rust			7	Medium-high
Septoria nod	dorum		[6]	Medium
Septoria triti	ci		5.7	Medium
Eyespot			4	Low
Fusarium ear blight			6	Medium
i usanum ea	r blight		O	Medium
	r blight at blossom n	nidge	R	Resistant
	- U	nidge		
Orange whe	at blossom n	nidge		

#### Notes

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





uks

Grain yield (as % control)

A soft-milling Group 4 variety for the North region

North

**KWS UK** 

01763 207300



kws-uk.com

#### Robigus x Istabraq

UK	East	West	Nor	th Untreated
99	100	98	10	1 68
Quality				
Endosperm	texture		Soft	
Protein con			11.3	
	tent (%) - Mi	lling spec	12.4	
	ling number	mig opoo	221	Medium
Specific we			78.1	High
Agronomic	0 (0 )		7 01 1	9
	sistance no P	GR (1–9)	7	Medium-high
0 0	istance with	,	8	High
Height (cm)		,	85	Medium
Ripening (d	ays +/- JB D	iego)	+2	Medium
Disease res	sistance (1-9	9)		
Mildew			3	Very low
Yellow rust			6	Medium
Brown rust			7	Medium-high
Septoria no	dorum		[6]	Medium
Septoria trit	ici		4.6	Medium
Eyespot			4	Low
Fusarium ea	ar blight		7	Medium-high
Orange whe	eat blossom	midge	R	Resistant
Rotation				
First cereal	(% control)		100	
Second cer	eal (% contro	ol)	99	

#### Notes

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





the North region

\*North



Grain yield (as % control)

Limagrain UK 01472 371471 lgseeds.co.uk

NSL 00-0742 x Nijinsky

A soft-milling Group 4 variety for

98	98	97	10	0 63		
Quality						
Endosperm	texture		Soft			
Protein con	tent (%)		11.4			
Protein con	tent (%) - Mil	ling spec	12.6			
Hagberg fal	ling number		244	Medium		
Specific weight (kg/hl)			76.8	Medium		
Agronomic	Agronomic features					
Lodging res	sistance no P	GR (1-9)	7	Medium-high		
Lodging res	sistance with	PGR (1-9)	7	Medium-high		
Height (cm)			88	Medium		
Ripening (d	ays +/- JB Di	ego)	+2	Medium		
Disease res	sistance (1-9	)				
Mildew			5	Medium		
Yellow rust			4	Low		
Brown rust	Brown rust			Medium		
Septoria no	dorum		[5]	Medium		
Septoria trit	ici		5.6	Medium		

#### Notes

Evespot

Rotation

Fusarium ear blight

First cereal (% control)

Second cereal (% control)

Orange wheat blossom midge

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

4

6

R

98

101

Low

Medium

Resistant

<sup>\*</sup>Myriad is no longer in Recommended List trials.





#### A soft-milling Group 4 variety

UK

Limagrain UK

01472 371471 Igseeds.co.uk



Grain vield (as % control)

#### (Alchemy x Claire) x Shepherd

(as 70 Contic	, i j		
East	West	Nor	th Untreated
98	96	98	80
texture		Soft	
		11.5	
( /	lina spec	12.6	
ling number	9 - 1	257	Medium
ight (kg/hl)		76.5	Medium
features			
	GR (1–9)	7	Medium-high
Lodging resistance with PGR (1–9)			High
Height (cm)			Medium
ays +/- JB Di	ego)	+3	Late
istance (1-9	)		
		6	Medium
		9	High
		8	High
dorum		[6]	Medium
ici		6.3	Medium
		8@	High
r blight		7	Medium-high
at blossom r	midge	-	
(% control)		98	
eal (% contro	ol)	97	
	East 98  texture ent (%) ent (%) - Mil ing number ght (kg/hl) features istance no Pr istance with ays +/- JB Di istance (1-9)  dorum ici ir blight eat blossom r	texture tent (%) tent (%) - Milling spec ing number ght (kg/hl) features istance no PGR (1–9) istance with PGR (1–9) ays +/- JB Diego) istance (1–9)  dorum ici ur blight eat blossom midge	East West Nor 98 96 98  ttexture Soft 11.5 tent (%) 11.5 tent (%) - Milling spec 12.6 ting number 257 ght (kg/hl) 76.5 features tistance no PGR (1–9) 7 tistance with PGR (1–9) 8 85 ays +/- JB Diego) +3 tistance (1–9) 6 9 8 dorum [6] tici 6.3 8@ tr blight 7 teat blossom midge -

#### Notes

Rated 'good' for distilling.

@ = Believed to carry the 'Rendezvous' Pch1 eyespot resistance gene but this has not been verified in Recommended List tests.





uks

Grain yield (as % control)

A soft-milling Group 4 variety for the North region

#### North

KWS UK

01763 207300 kws-uk.com

### Robigus x Canterbury

UK	East	West	Nor	th Untreated
97	97	96	10	1 73
Quality				
Endosperm	texture		Soft	
Protein conf			11.2	
Protein conf	tent (%) - Mil	ling spec	12.2	
Hagberg fal	ling number		202	Medium
Specific we	ight (kg/hl)		76.2	Medium
Agronomic	features			
Lodging res	istance no P	7	Medium-high	
Lodging res	istance with	PGR (1-9)	8	High
Height (cm)			80	Short
Ripening (da	ays +/- JB Di	ego)	+1	Medium
Disease res	istance (1–9	)		
Mildew			6	Medium
Yellow rust			7	Medium-high
Brown rust			9	High
Septoria no	dorum		[6]	Medium
Septoria trit	ici		4.8	Medium
Eyespot			4	Low
Fusarium ea	ar blight		6	Medium
Orange whe	eat blossom r	midge	R	Resistant

#### Notes

**Rotation** 

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

98

[99]

Rated 'good' for distilling.

First cereal (% control)

Second cereal (% control)





# A very high-yielding hard-milling Group 4 variety

P2 UK

RAGT Seeds 01799 533700 ragt.co.uk

Grain yield (	as % contro	ol)		
UK	East	West	Nor	th Untreated
104	104	104	10	5 80
Quality				
Endosperm	texture		Hard	
Protein cont			11.3	
Protein cont	` '	lling spec	12.2	
Hagberg falli	ing number	0 1	211	Medium
Specific weight	ght (kg/hl)		76.4	Medium
Agronomic f	eatures			
Lodging resi	stance no P	GR (1-9)	7	Medium-high
Lodging resi	Lodging resistance with PGR (1-9)			Medium-high
Height (cm)			86	Medium
Ripening (da	ys +/- JB Di	iego)	+1	Medium
Disease resi	stance (1-9	)		
Mildew			4	Low
Yellow rust			8	High
Brown rust			6	Medium
Septoria nod	dorum		[6]	Medium
Septoria triti	ci		5.0	Medium
Eyespot			4	Low
Fusarium ea	Fusarium ear blight			Medium
Orange whe	at blossom i	midge	R	Resistant
Rotation				
First cereal (	% control)		104	
Second cere	al (% contro	ol)	105	

#### Notes





# A very high-yielding hard-milling Group 4 variety

#### P2 UK

Syngenta UK Ltd 01223 883400 syngenta.co.uk

Grain yield	(as % contro	1)		
UK	East	West	Nor	th Untreated
104	104	103	10	4 85
Quality				
Endosperm	texture		Hard	
Protein conf	tent (%)		11.1	
Protein conf	tent (%) - Mil	ling spec	12.0	
Hagberg fal	ling number		223	Medium
Specific weight (kg/hl)			76.6	Medium
Agronomic	features			
Lodging res	istance no Po	GR (1-9)	7	Medium-high
Lodging resistance with PGR (1-9)			7	Medium-high
Height (cm)			85	Medium
Ripening (da	ays +/- JB Die	ego)	0	Medium
Disease res	sistance (1–9)			
Mildew			6	Medium
Yellow rust			7	Medium-high
Brown rust			6	Medium
Septoria no	dorum		[6]	Medium
Septoria trit	ici		6.4	Medium
Eyespot			4	Low
Fusarium ea	ar blight		6	Medium
Orange whe	eat blossom n	nidge	R	Resistant
Rotation				
First cereal	(% control)		104	
Second cere	eal (% contro	l)	105	

#### Notes





A very high-yielding hard-milling Group 4 variety for the East and West regions

East & West

**KWS UK** 01763 207300 kws-uk.com

W177 x Santiago

J. J	(do /0 0011ti	/			
UK	East	West	Nor	th Untre	eated
104	104	103	10	5 8	1
Quality					
Endosperm	texture		Hard		
Protein cont			10.7		
	tent (%) – Mi	lling spec	11.6		
Hagberg fall	( /	9	150	Low	
Specific wei	0		76.5	Medium	
Agronomic	0 (0 ,				
	istance no P	GR (1–9)	7	Medium-h	igh
Lodging resistance with PGR (1–9)			7	Medium-h	igh
Height (cm)			84	Medium	-
Ripening (da	ays +/- JB Di	ego)	+1	Medium	
Disease res	istance (1-9	)			
Mildew			7	Medium-h	igh
Yellow rust			7	Medium-h	igh
Brown rust			7	Medium-h	igh
Septoria no	dorum		[6]	Medium	
Septoria trit	ici		5.0	Medium	
Eyespot			5	Medium	
Fusarium ea	ır blight		6	Medium	
Orange whe	at blossom i	midge	R	Resistant	
Rotation					
First cereal	(% control)		104		
Second cere	eal (% contro	ol)	105		

#### Notes





### A high-yielding hard-milling Group 4 variety

UK

Syngenta UK Ltd 01223 883400 syngenta.co.uk

#### Cassius x Hereford

Grain yield	(as % contro	l)		
UK	East	West	Nor	th Untreated
103	103	103	10	4 82
Quality				
Endosperm	texture		Hard	
Protein con			11.2	
	tent (%) – Mill	lina spec	12.1	
	ling number	3 - 1	219	Medium
Specific we			76.4	Medium
Agronomic	features			
Lodging res	sistance no Po	GR (1–9)	6	Medium
Lodging res	sistance with I	PGR (1-9)	7	Medium-high
Height (cm)			85	Medium
Ripening (d	ays +/- JB Die	ego)	0	Medium
Disease res	sistance (1–9)			
Mildew			6	Medium
Yellow rust			7	Medium-high
Brown rust			5	Medium
Septoria no	dorum		[6]	Medium
Septoria trit	tici		6.2	Medium
Eyespot			4	Low
Fusarium ea	ar blight		6	Medium
Orange who	eat blossom n	nidge	-	
Rotation				
First cereal	(% control)		103	
Second cer	eal (% contro	1)	104	





# A high-yielding hard-milling Group 4 variety

#### UK

### Syngenta UK Ltd

01223 883400 syngenta.co.uk

#### Premio/Expert

Grain yiola	(do /o oomarc	··/		
UK	East	West	Nor	th Untreated
102	101	105	10	0 88
Quality				
Endosperm	texture		Hard	
Protein con	tent (%)		11.3	
	tent (%) – Mi	lling spec	12.1	
Hagberg fal	ling number	0 ,	283	High
Specific we	ight (kg/hl)		76.9	Medium
Agronomic	features			
Lodging res	sistance no P	GR (1–9)	7	Medium-high
Lodging res	sistance with	PGR (1-9)	8	High
Height (cm)			86	Medium
Ripening (d	ays +/- JB Di	ego)	0	Medium
Disease res	sistance (1-9	)		
Mildew			7	Medium-high
Yellow rust			8	High
Brown rust			6	Medium
Septoria no	dorum		[6]	Medium
Septoria trit	tici		6.9	High
Eyespot			4	Low
Fusarium ear blight			6	Medium
Orange whe	eat blossom r	midge	-	
Rotation				
First cereal	(% control)		103	
Second cer	eal (% contro	ol)	100	

# KWS Crispin



# A high-yielding hard-milling Group 4 variety

UK

**KWS UK** 01763 207300 kws-uk.com

#### Conqueror x CPBT W134

Grain yield (	as % contro	1)		
UK	East	West	Nor	th Untreated
102	102	102	98	84
Quality				
Endosperm	texture		Hard	
Protein content (%)			11.5	
Protein content (%) – Milling spec			12.6	
Hagberg falling number			285	High
Specific weight (kg/hl)			77.1	Medium
Agronomic t	eatures			
Lodging resistance no PGR (1-9)			6	Medium
Lodging resistance with PGR (1-9)			7	Medium-high
Height (cm)			85	Medium
Ripening (days +/- JB Diego)			+1	Medium
Disease resi	istance (1-9)			
Mildew			6	Medium
Yellow rust			9	High
Brown rust			5	Medium
Septoria nod	dorum		[6]	Medium
Septoria triti	ci		5.8	Medium
Eyespot			4	Low
Fusarium ea	r blight		6	Medium
Orange whe	at blossom n	nidge	R	Resistant
Orange whe	at blossom n	nidge	R	Resistant
- C		nidge	102	Resistant

#### Notes





### A hard-milling Group 4 variety

#### UK

Elsoms Seeds 01775 715000 elsoms.com

### (Alchemy x Hereford) x Shepherd

Grain yield	(as % control	)		
UK	East	West	Nor	th Untreated
101	102	100	10	2 86
Quality				
Endosperm	texture		Hard	
Protein content (%)			11.4	
	tent (%) – Milli	na spec	12.4	
Hagberg falling number			236	Medium
Specific we	Ü		77.2	Medium
Agronomic	features			
Lodging resistance no PGR (1–9)			7	Medium-high
Lodging resistance with PGR (1–9)			8	High
Height (cm)			92	Medium-tall
Ripening (da	ays +/- JB Die	+1	Medium	
Disease res	istance (1-9)			
Mildew			5	Medium
Yellow rust			7	Medium-high
Brown rust			6	Medium
Septoria no	dorum		[6]	Medium
Septoria trit	ici		6.7	High
Eyespot			6@	Medium
Fusarium ear blight			6	Medium
Orange whe	eat blossom m	-		
Rotation				
First cereal	(% control)		101	
Second cere	eal (% control)	)	103	

#### Notes

@ = Believed to carry the 'Rendezvous' Pch1 eyespot resistance gene but this has not been verified in Recommended List tests.





# A hard-milling Group 4 variety \*UK

### Limagrain UK 01472 371471 lgseeds.co.uk

### (Robigus x SJ5558) x Smuggler

Grain yield	(as % control)			
UK	East	West	Nor	th Untreated
101	101	99	10	3 80
Quality				
Endosperm	texture		Hard	
Protein content (%)			11.1	
Protein content (%) – Milling spec			12.2	
Hagberg falling number			214	Medium
Specific wei	ght (kg/hl)		75.2	Low
Agronomic	features			
Lodging resistance no PGR (1–9)			7	Medium-high
Lodging resistance with PGR (1–9)			7	Medium-high
Height (cm)			89	Medium-tall
Ripening (da	ays +/- JB Dieg	0)	+2	Medium
Disease res	istance (1–9)			
Mildew			7	Medium-high
Yellow rust			8	High
Brown rust			7	Medium-high
Septoria no	dorum		[6]	Medium
Septoria triti	ici		5.4	Medium
Eyespot		4	Low	
Fusarium ear blight			6	Medium
Orange whe	at blossom mic	dge	-	
Rotation				
First cereal (	(% control)		101	
Second cere	eal (% control)		101	

#### Notes

\*Evolution is no longer in Recommended List trials.





Grain yield (as % control)

## A hard-milling Group 4 variety

UK

Senova

01223 890777 senova.uk.com

### W151 x Timaru

J. J	(do 70 0011til	/				
UK	East	West	Nor	th	Untreated	
100	100	100	10	0	82	
Quality						
Endosperm	texture		Hard			
Protein cont			11.8			
Protein cont	ent (%) – Mi	lling spec	12.7			
Hagberg falling number			330	High	l	
Specific wei	ght (kg/hl)		80.9	High	l	
Agronomic	features					
Lodging res	istance no P	GR (1–9)	7	Med	ium–high	
Lodging res	istance with	PGR (1-9)	8	High	l	
Height (cm)			82	Short		
Ripening (da	ays +/- JB Di	iego)	+2	Medium		
Disease res	istance (1–9	)				
Mildew			8	High	1	
Yellow rust			9	High	1	
Brown rust			5	Med	ium	
Septoria no	dorum		[6]	Med	ium	
Septoria triti	ici		6.1	Med	ium	
Eyespot			4	Low		
Fusarium ea	ır blight		7	Med	ium-high	
Orange whe	at blossom	midge	-			
Rotation						
First cereal	(% control)		101			
Second cere	eal (% contro	ol)	99			





# A hard-milling Group 4 variety \*UK

### Senova

01223 890777 senova.uk.com

### 3351b2 x Stru2374

Grain yield	(as % control)					
UK	East	West	Nor	th	Untreated	
100	99	100	100		71	
Quality						
Endosperm	texture		Hard			
Protein cont			11.4			
	tent (%) – Millin	a spec	12.4			
Hagberg fall	` ′	0 -1	315	High		
Specific wei	ŭ		78.1	High		
Agronomic	features					
Lodging res	istance no PGF	R (1–9)	7	Med	ium-high	
Lodging resistance with PGR (1–9)			8	High		
Height (cm)			87	Medium		
Ripening (da	ays +/- JB Dieg	0)	0	Medium		
Disease res	istance (1-9)					
Mildew			6	Med	ium	
Yellow rust			4	Low		
Brown rust			6	Medium		
Septoria no	dorum		5	Med	ium	
Septoria trit	ici		5.2	Med	ium	
Eyespot			5	Medium		
Fusarium ea	ar blight		6	Medium		
Orange whe	at blossom mid	dge	-			
Rotation						
First cereal	(% control)		100			
Second cere	eal (% control)		100			

### Notes

\*JB Diego is no longer in Recommended List trials.



A candidate for the 2020/21 AHDB Recommended List, under test for bread-making

## **RAGT Seeds**

01799 533700 ragt.co.uk

Previous name: RW41615

Grain yield	(as % contro	ol)				
UK	East	West	Nor	th	Untreated	
100	99	[101]	[[102]]		73	
Quality						
Endosperm	texture		Hard			
Protein con	tent (%)		12.6	High	1	
Hagberg fal	Hagberg falling number			High	1	
Specific we	specific weight (kg/hl)			Medium		
Agronomic	features					
Lodging %	(Untreated)		11			
Lodging %	(Treated)		4			
Height (cm)			88	Med	ium	
Ripening (d	ays +/- JB Di	ego)	0	Medium		
Disease res	sistance (1-9	)				
Mildew			5	Med	ium	
Yellow rust			9	High	1	
Brown rust			5	Med	ium	
Septoria trit	ici		6	Med	ium	
Eyespot			-			
Orange whe	eat blossom r	midge	-			

Acknowledgement is made to APHA and BSPB for the use of data from National List trials.





## **Limagrain UK** 01472 371471

Igseeds.co.uk

Previous name: LGWU133

Grain yield	(as % control)				
UK	East	West	Nor	th	Untreated
105	106	[104]	[[10	2]]	81
Quality					
Endosperm	texture		Soft		
Protein cont	ent (%)		11.6		
Hagberg falling number			237	Ме	dium
Specific wei	ght (kg/hl)		77.4	77.4 Medium	
Agronomic	features				
Lodging % (Untreated)		8			
Lodging %	(Treated)		3		
Height (cm)			89	Medium-tall	
Ripening (da	ays +/- JB Die	go)	+3	Lat	е
Disease res	istance (1-9)				
Mildew			4	Lov	V
Yellow rust			6	Ме	dium
Brown rust			8	High	
Septoria trit	ici		6	Ме	dium
Eyespot			-		
Orange whe	at blossom m	idge	R	Res	sistant

### Notes

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

Acknowledgement is made to APHA and BSPB for the use of data from National List trials.





## RAGT Seeds

01799 533700 ragt.co.uk

Previous name: RW41640

est North Untreated
-
-
_
Data cannot be
· completed
List testing*
-
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Acknowledgement is made to APHA and BSPB for the use of data from National List trials.

<sup>\*</sup>For latest information, visit ahdb.org.uk/rl





Elsoms Wheat Ltd 01775 715000 elsoms.com

Previous Name: EW4033

Grain yield	(as % contro	ol)			
UK	East	West	Noi	th	Untreated
103	104	[102]	[[99	9]]	89
Quality					
Endosperm	texture		Soft		
Protein cont	ent (%)		12.3		
Hagberg fall	ing number		293	High	
Specific wei	ght (kg/hl)		76.4	Medi	um
Agronomic	features				
Lodging % (Untreated)		1			
Lodging %	(Treated)		2		
Height (cm)			91	Medium-tall	
Ripening (da	ays +/- JB Di	ego)	+1	Medi	um
Disease res	istance (1-9	)			
Mildew			6	Medi	um
Yellow rust			8	High	
Brown rust			8	High	
Septoria trit	ici		6	Medi	um
Eyespot			-		
Orange whe	at blossom r	midge	-		

Acknowledgement is made to APHA and BSPB for the use of data from National List trials.





### **KWS UK**

01763 207300 kws-uk.com

Previous Name: KWSW346

Grain yield	(as % contro	OI)			
UK	East	West	Nor	th	Untreated
105	105	[107]	[[10	3]]	86
Quality					
Endosperm	texture		Hard		
Protein con	tent (%)		11.8		
Hagberg fal	ling number		279	High	1
Specific we	ight (kg/hl)		78.8	High	1
Agronomic	features				
Lodging %	(Untreated)		6		
Lodging %	(Treated)		2		
Height (cm)			83	Sho	rt
Ripening (d	ays +/- JB Di	ego)	0	Med	ium
Disease res	sistance (1-9	)			
Mildew			6	Med	ium
Yellow rust			6	Med	ium
Brown rust			6	Med	ium
Septoria trit	ici		6	Med	ium
Eyespot			-		
Orange whe	eat blossom i	midge	R	Resi	stant

### Notes

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

Acknowledgement is made to APHA and BSPB for the use of data from National List trials.





### Syngenta UK Ltd

01223 883400 syngenta.co.uk

Previous name: SY116157

Grain yield (a	s % contro	)			
UK	East	West	North	Untreated	
-	-	-	-	-	
Quality					
Endosperm te	exture		-		
Protein conte	nt (%)		-	_	
Hagberg fallir	ng number				
Specific weig	ht (kg/hl)		oata canno	t be	
Agronomic fe	eatures				
Lodging % (L	Intreated)	not	· completed.		
Lodging % (T	reated)		List testi	ing	
Height (cm)			_		
Ripening (day	/s +/- JB Die	ego)	-		
Disease resis	stance (1-9)				
Mildew			-		
Yellow rust			-		
Brown rust			-		
Septoria tritic	i		-		
Eyespot			-		
Orange whea	t blossom n	nidge	-		

Acknowledgement is made to APHA and BSPB for the use of data from National List trials.

<sup>\*</sup>For latest information, visit ahdb.org.uk/rl





Grain yield (as % control)

A hard-milling feed candidate for the 2020/21 AHDB Recommended List

### **RAGT Seeds**

01799 533700 ragt.co.uk

Previous Name: RW41646

Grain yield	(as % contro	)I)			
UK	East	West	Nor	th	Untreated
104	104	[105]	[[10	4]]	82
Quality					
Endosperm	texture		Hard		
Protein con	tent (%)		11.6		
Hagberg fal	ling number		273	High	l
Specific we	ight (kg/hl)		75.9	Low	
Agronomic	features				
Lodging %	(Untreated)		6		
Lodging %	(Treated)		2		
Height (cm)			82	Shor	t
Ripening (d	ays +/- JB Di	ego)	+1	Med	ium
Disease res	sistance (1-9	)			
Mildew			5	Med	ium
Yellow rust			7	Med	ium-high
Brown rust			7	Med	ium–high
Septoria trit	ici		6	Med	ium
Eyespot			-		
Orange who	eat blossom i	midge	R	Resi	stant

### Notes

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

Acknowledgement is made to APHA and BSPB for the use of data from National List trials.



# **RAGT Seeds** 01799 533700

ragt.co.uk

Previous name: RW41642

Grain yield	(as % contro	1)			
UK	East	West	North	Untreated	
-	-	-	-	-	
Quality					
Endosperm	n texture		-		
Protein cor	ntent (%)		-	_	
Hagberg fa	Illing number				
Specific we	eight (kg/hl)		ata canno	t be	
Agronomic	features				
Lodging %	odging % (Untreated)		. somnieted .		
Lodging %	(Treated)		List testi	ng	
Height (cm	)		_		
Ripening (c	days +/- JB Die	ego)	-		
, ,	days +/- JB Die sistance (1–9)	0 ,	-		
, ,	-	0 ,	-		
Disease re	sistance (1-9)	0 ,	- -		
Disease re Mildew	sistance (1-9)	0 ,			
Disease re Mildew Yellow rust	sistance (1-9)	0 ,	- - - -		
Disease re Mildew Yellow rust Brown rust	sistance (1-9)	0 ,	- - - -		

Acknowledgement is made to APHA and BSPB for the use of data from National List trials.

<sup>\*</sup>For latest information, visit ahdb.org.uk/rl





### **KWS UK**

01763 207300 kws-uk.com

Previous Name: KWSW345

Grain yield	(as % contro	ol)				
UK	East	West	Nor	th	Untreated	
103	102	[104]	[[10	3]]	84	
Quality						
Endosperm	texture		Hard			
Protein con	tent (%)		11.8			
Hagberg fal	Hagberg falling number			High		
Specific we	ight (kg/hl)		76.4	76.4 Medium		
Agronomic	features					
Lodging %	(Untreated)		1			
Lodging % (Treated)			1			
Height (cm)			78	Sho	ort	
Ripening (d	ays +/- JB Di	ego)	-1	Medium-early		
Disease res	sistance (1-9	)				
Mildew			7	Med	dium-high	
Yellow rust			9	Hig	h	
Brown rust			5	Med	dium	
Septoria trit	ici		6	Med	dium	
Eyespot			-			
Orange whe	eat blossom	midge	-			

Acknowledgement is made to APHA and BSPB for the use of data from National List trials.





### **DSV UK**

01366 388223 dsv-uk.co.uk

Previous Name: DSV316126

Grain yield	(as % control)				
UK	East	West	Nor	th	Untreated
101	100	[105]	[[93	3]]	92
Quality					
Endosperm	texture		Hard		
Protein con			12.7		
Hagberg fal	ling number		329	High	1
Specific we	ight (kg/hl)		73.9	Low	
Agronomic	features				
Lodging %	(Untreated)		9		
Lodging %	(Treated)		2		
Height (cm)			83	Sho	rt
Ripening (da	ays +/- JB Dieg	go)	0	Med	lium
Disease res	sistance (1-9)				
Mildew			7	Med	lium-high
Yellow rust			9	High	1
Brown rust			7	Med	lium-high
Septoria trit	ici		7	High	1
Eyespot			-		
Orange whe	eat blossom mi	dge	-		

Acknowledgement is made to APHA and BSPB for the use of data from National List trials.

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Grain yield (as % contr	ol)				
UK treated	101	97	100	102	101
UK untreated (as % of treated control)	87	71	84	74	72
Quality					
Endosperm texture	Hard	Soft	Hard	Hard	Hard
Protein content %	12.5	12.2	12.9	12.1	12.2
Hagberg falling number	284	225	266	223	330
Specific weight (kg/hl)	77.3	75.8	78.7	75.8	79.0
Agronomic features					
Lodging % (Untreated)	14	15	2	7	5
Lodging % (Treated)	5	3	2	2	1
Height (cm) (UT)	84	89	83	87	87
Ripening (days +/- JB Diego)	0	+1	0	+1	0
Disease resistance (1-9	9)				
Mildew	8	7	5	6	6
Yellow rust	9	5	5	7	4
Brown rust	5	7	8	5	6
Septoria tritici	7	5	6	4	5
Eyespot	4	4	6@	4	5
Orange wheat blossom midge	-	R	R	R	-

0

### Notes

- @ = Believed to carry the 'Rendezvous' Pch1 eyespot resistance gene 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.

These data are taken from the two-year data set used when considering varieties for promotion into the Recommended List trial series.

For full data on a control variety, see its own page.

Acknowledgement is made to APHA and BSPB for the use of data from National List trials.





# A **nabim** Group 1 variety for both late-autumn and spring sowing

### UK

#### Senova

01223 890777 senova.uk.com

### Paragon x (Tybalt x Robigus)

Grain yield (as % control)	Spring sown	Autumn sown
UK treated yield	95	96
Quality		
Endosperm texture	Hard	Hard
Protein content (%)	13.0	12.9
Hagberg falling number	300	328
Specific weight (kg/hl)	77.6	78.2
Agronomic features		
Lodging (%)	-	[34]
Height no PGR (cm)	81	-
Height with PGR (cm)	-	86
Ripening (days +/- Mulika)	0	0
Sprouting resistance (1-9)	-	-
Disease resistance (1-9)		
Mildew	6	Medium
Yellow rust	7	Medium-high
Brown rust	5	Medium
Septoria tritici	6	Medium
Orange wheat blossom midge	R	Resistant

### Notes

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

**nabim** comment: This variety has good rheological and baking qualities. It is the spring variety of choice for most millers.





A high-yielding **nabim** Group 2 variety for both late-autumn and spring sowing

UK

**KWS UK** 

01763 207300 kws-uk.com

Ashby x Lapis

Grain yield (as % control)	Spring sown	Autumn sown
UK treated yield	107	103
Quality		
Endosperm texture	Hard	Hard
Protein content (%)	12.7	12.7
Hagberg falling number	225	264
Specific weight (kg/hl)	79.6	79.6
Agronomic features		
Lodging (%)	-	[7]
Height no PGR (cm)	83	-
Height with PGR (cm)	-	83
Ripening (days +/- Mulika)	+1	+1
Sprouting resistance (1-9)	-	-
Disease resistance (1-9)		
Mildew	[8]	High
Yellow rust	5	Medium
Brown rust	7	Medium-high
Septoria tritici	6	Medium
Orange wheat blossom midge	R	Resistant

### Notes

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

**nabim** comment: This variety has shown good protein levels and specific weights, although there was a degree of variability in performance.

## KWS Chilham



# A **nabim** Group 2 variety for both late-autumn and spring sowing

UK

**KWS UK** 

01763 207300 kws-uk.com

### Sparrow x Azurite

Grain yield (as % control)	Spring sown	Autumn sown
UK treated yield	103	102
Quality		
Endosperm texture	Hard	Hard
Protein content (%)	12.4	12.1
Hagberg falling number	303	334
Specific weight (kg/hl)	79.0	79.6
Agronomic features		
Lodging (%)	-	[18]
Height no PGR (cm)	79	-
Height with PGR (cm)	-	79
Ripening (days +/- Mulika)	+1	+1
Sprouting resistance (1-9)	-	-
Disease resistance (1-9)		
Mildew	[7]	Medium-high
Yellow rust	7	Medium-high
Brown rust	4	Low
Septoria tritici	7	High
Orange wheat blossom midge	R	Resistant

### Notes

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

**nabim** comment: This variety has lower protein levels than Mulika, but has stronger gluten quality. The baking quality would not necessarily suit all end users.





# A **nabim** Group 2 variety for both late-autumn and spring sowing

UK

**KWS UK** 01763 207300 kws-uk.com

(00703S x Tybalt) x Belvoir

		, ,
Grain yield (as % control)	Spring sown	Autumn sown
UK treated yield	101	104
Quality		
Endosperm texture	Hard	Hard
Protein content (%)	12.4	12.1
Hagberg falling number	282	291
Specific weight (kg/hl)	78.3	78.9
Agronomic features		
Lodging (%)	-	[[5]]
Height no PGR (cm)	80	-
Height with PGR (cm)	-	83
Ripening (days +/- Mulika)	+1	0
Sprouting resistance (1-9)	-	-
Disease resistance (1-9)		
Mildew	6	Medium
Yellow rust	6	Medium
Brown rust	6	Medium
Septoria tritici	6	Medium
Orange wheat blossom midge	-	

### Notes

**nabim** comment: This variety has a tendency to produce low Hagberg Falling Numbers and, overall, has shown some variability, especially with baking performance. As a result, it is more likely to be suited to uses in blends.

## KWS Talisker



NEW

A new high-yielding, hard-milling Group 4 variety for both late-autumn and spring sowing

P1 UK

**KWS UK** 01763 207300 kws-uk.com

Grain yield (as % control)	Spring sown	Autumn sown
UK treated yield	[106]	102
Quality		
Endosperm texture	Hard	Hard
Protein content (%)	12.0	12.3
Hagberg falling number	263	275
Specific weight (kg/hl)	79.7	79.8
Agronomic features		
Lodging (%)	-	[[1]]
Height no PGR (cm)	84	-
Height with PGR (cm)	-	[87]
Ripening (days +/- Mulika)	[+1]	-1
Sprouting resistance (1-9)	-	-
Disease resistance (1-9)		
Mildew	[8]	High
Yellow rust	9	High
Brown rust	3	Very low
Septoria tritici	7	High
Orange wheat blossom midge	-	







A new high-yielding, hard-milling Group 4 variety for both late-autumn and spring sowing

### P1 UK

Senova

01223 890777 senova.uk.com

Grain yield (as % control)	Spring sown	Autumn sown
UK treated yield	[105]	107
Quality		
Endosperm texture	Hard	Hard
Protein content (%)	12.3	12.1
Hagberg falling number	275	270
Specific weight (kg/hl)	78.7	78.8
Agronomic features		
Lodging (%)	-	[[18]]
Height no PGR (cm)	83	-
Height with PGR (cm)	-	[87]
Ripening (days +/- Mulika)	[+3]	+3
Sprouting resistance (1-9)	-	-
Disease resistance (1-9)		
Mildew	[7]	Medium-high
Yellow rust	9	High
Brown rust	5	Medium
Septoria tritici	7	High
Orange wheat blossom midge	-	





A high-yielding, hard-milling Group 4 variety for both late-autumn and spring sowing

UK

**KWS UK** 

01763 207300 kws-uk.com

(Paragon x W109) x Belvoir

	(. a. a.g	
Grain yield (as % control)	Spring sown	Autumn sown
UK treated yield	104	[104]
Quality		
Endosperm texture	Hard	Hard
Protein content (%)	12.6	[12.8]
Hagberg falling number	265	[301]
Specific weight (kg/hl)	77.0	[77.4]
Agronomic features		
Lodging (%)	-	-
Height no PGR (cm)	85	-
Height with PGR (cm)	-	[93]
Ripening (days +/- Mulika)	+3	[+2]
Sprouting resistance (1-9)	-	-
Disease resistance (1-9)		
Mildew	[7]	Medium-high
Yellow rust	5	Medium
Brown rust	9	High
Septoria tritici	6	Medium
Orange wheat blossom midge	-	





A high-yielding, hard-milling Group 4 variety for both late-autumn and spring sowing

### UK

**KWS UK** 

01763 207300 kws-uk.com

Grain yield (as % control)	Spring sown	Autumn sown
UK treated yield	104	101
Quality		
Endosperm texture	Hard	Hard
Protein content (%)	12.4	12.3
Hagberg falling number	295	329
Specific weight (kg/hl)	78.2	78.1
Agronomic features		
Lodging (%)	-	[1]
Height no PGR (cm)	77	-
Height with PGR (cm)	-	78
Ripening (days +/- Mulika)	+2	+1
Sprouting resistance (1-9)	-	-
Disease resistance (1-9)		
Mildew	8	High
Yellow rust	6	Medium
Brown rust	6	Medium
Septoria tritici	6	Medium
Orange wheat blossom midge	-	





A candidate for the 2020 AHDB Recommended List, under test for bread-making

### **KWS UK**

01763 207300 kws-uk.com

Previous Name: KSWS352

Grain yield Spring-sown (as % of control)			
Treated	[107]		
Untreated	[91]		
Quality			
Endosperm texture	Hard		
Protein content (%)	[13.0]		
Hagberg falling number	253		
Specific weight (kg/hl)	[79.4]		
Agronomic features			
Height (cm)	76		
Ripening (days +/- Mulika)	-		
Disease resistance (1-9)			
Mildew	8	High	
Yellow rust	7	Medium-High	
Brown rust	6	Medium	
Septoria tritici	6	Medium	
Orange wheat blossom midge	-		

Acknowledgement is made to APHA and BSPB for the use of data from National List trials.





A candidate for the 2020 AHDB Recommended List, under test for bread-making

### Senova

01223 890777 senova.uk.com

Previous Name: SEWC137

Grain yield Spring-sown (as %	of control)		
Treated	[105]		
Untreated	[85]		
Quality			
Endosperm texture	Hard		
Protein content (%)	[12.8]		
Hagberg falling number	276		
Specific weight (kg/hl)	[76.2]		
Agronomic features			
Height (cm)	72		
Ripening (days +/- Mulika)	-		
Disease resistance (1-9)			
Mildew	8	High	
Yellow rust	8	High	
Brown rust	9	High	
Septoria tritici	7	High	
Orange wheat blossom midge	-		

Acknowledgement is made to APHA and BSPB for the use of data from National List trials.

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			•
Grain yield - Spring sown (as % co	ntrol)		
UK treated	102	103	95
UK untreated (as % of treated control)	[85]	[73]	[79]
Quality			
Endosperm texture	Hard	Hard	Hard
Protein content (%)	12.6	12.7	13.2
Hagberg falling number	280	302	296
Specific weight (kg/hl)	77.8	77.2	77.2
Agronomic features			
Height (cm)	77	73	77
Disease resistance (1-9)			
Mildew	8	6	6
Yellow rust	6	6	7
Brown rust	6	6	5
Septoria tritici	6	6	6
Orange wheat blossom midge	-	-	R

#### Notes

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

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For full data on a control variety, see its own page.

Acknowledgement is made to APHA and BSPB for the use of data from National List trials.

Publication orders

0845 245 0009 cereals.publications@ahdb.org.uk

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For specific Recommended Lists enquiries, please call 0247 693 5702.

### Preliminary data

The selection of new varieties to promote into AHDB Recommended List trials is made on the basis of preliminary data collected during National List and other trials and tests and these data also make a major contribution to the variety means presented in the Recommended List tables. Acknowledgement is made to Defra and the devolved governments as well as BSPB for the use of these data.











#### Processors

AHDB is grateful for the valuable contributions made by member companies of **nabim** and SWA who conduct milling and distilling tests both at the preliminary and Recommended List stages.





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