



AUTUMN SEED BROCHURE 2023





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DRILL DATES AUTUMN 2023

Variety	Drilling Window	Second Wheat Performance
KWS Zyatt	20th Sept - End Jan	Excellent
Skyfall	Mid Oct - End Jan (Latest safe sowing date 7th March)	Good
Crusoe	Mid Sept - End Jan	1st wheat preferred
KWS Ladum	1st Nov - April	No Data
Nissaba	1st October - April	No Data
KWS Extase	25th Sept - End Jan	1st wheat preferred
KWS Ultimatum	20th Sept - End Jan	Good
KWS Palladium	7th Sept - Mid Feb	Good
Mayflower	20th Sept - End Feb	Good
LG Astronomer	15 Sept - Mid Feb	Good
LG Illuminate	15 Sept - Mid Feb	Good
KWS Zealum	13th Sept - End Jan	Excellent
LG Skyscraper	25th Sept - End Jan	Good
RGT Bairstow	Mid Sept - End Feb	Good
LG Spotlight	25th Sept - End Feb	1st wheat preferred
Champion	20th Sept - Mid Feb	Good
KWS Dawsum	7th Sept - End Jan	Good
Gleam	1st Sept - Mid Feb	Excellent
Graham	1st Sept - End Jan	1st wheat preferred
KWS Cranium	Mid Sept - End Jan	Excellent
LG Typhoon	Mid Sept - End Feb	Good
Costello	12th Sept - End Jan	1st wheat preferred

HARVEST 2023

Harvest 2022 will be remembered for being one of the hottest, driest and earliest on record. For Mortimers, Harvest 2022 was a huge success, processing more seed than ever before. Many farmers made the most of the long gap between harvest and drilling by farm saving seed, knowing that at Mortimers, it is processed to the same very high standards as our certified seed, with every grain passing through the colour sorter.

Since last harvest we have continued to invest, building a new seed storage shed, which will make seed dispatch even more straightforward for Harvest 2023. We have also continued to invest in our haulage fleet, giving us a broader range of delivery options for getting your seed onto farm as quickly as possible.

We are continuing with our hugely successful independent trials at the Beevers' Farm at Cottam Warren. The trials day last year was incredibly well received, and we will be doing the same again, with even more breeders present, end home user analysis and more trade stands. The plots remain farm scale, honest assessments, to allow us all to scrutinise together the best varieties to grow.

New, interesting varieties which have impressed us this year include the new highest yielding feed barley on the recommended list, LG Caravelle, which yields at 10g in our region, 3% more than any of the hybrids! This, coupled with its

excellent grain quality (a bushel weight of 71.8) and robust disease package, means it should be very popular.

To all of our winter malting barley growers, Muntons preference for Harvest 2024 is SY Vessel. Demand for barley varieties which are classed as nil GN is increasing. Distilling varieties can also be used for brewing but brewing varieties cannot be used for distilling. SY vessel is a distilling winter barley that has performed well both on farm and in the maltings over the last two seasons. Winter barley growers need to move to SY Vessel for Harvest 2024 to reflect the increasing local maltster demand for distilling barley. The target is low nitrogen grain for this market.

On the wheats, there is an interesting option for Group 1 milling wheat growers. Nissaba is categorised as a spring wheat as it has no vernalisation, but it can be drilled from 1st October through to April. When sown in Autumn, it yields the same as skyfall, but benefits from a more robust disease package with 5 for yellow rust, 9 for brown rust, 6 for Septoria tritici and is OWBM. This variety can be seen at the crop trails for anybody who is interested.

Thank you for your ongoing support and we look forward to doing business in the coming Harvest 2023 season.

From all at Mortimers.



AGRICULTURAL LABORATORY SERVICES – NEW IN 2023

Mortimers has established a new Official DEFRA Seed Testing Laboratory – Agricultural Laboratory Services Ltd (ALS), here in Driffield.

We have created ALS to meet our own needs as a professional seed producer and to offer the same service to the wider industry and our farmer customers as well.

Simon and Josie who now run the ALS laboratory are both fully qualified licenced seed analysts and have worked in the local area in a number of agricultural businesses for many years, including most recently at SGS.

ALS is a fully DEFRA (OSTS) licenced seed laboratory and will offer both official DEFRA and advisory seed and germination analysis, disease analysis, grain analysis and mycotoxin analysis. Please see the advert on the back cover of the brochure for more details.

Mortimers already has a fantastic reputation for its locally produced seed backed by significant investment in colour sorting, storage and handling facilities, its own haulage and an outstanding team of people.

Having ALS on site will remove any delays to testing, so speeding up the delivery of seed to farm at Harvest.

All of ALS's services will also be available to our customers for their farm saved seed, whether produced through our plant, or treated by a mobile on farm. Putting Simon and Josie's experience to work in the new business, but running it alongside Mortimers, means that you benefit from all of Simon and Josie's skills, with the confidence that comes from Mortimers existing 150 year reputation for service, financial stability and local knowledge.

Looking into the future, it is my belief that staying local and independent, whilst also investing in and developing the services we offer are essential: you cannot stand still.

From all at ALS.

ABOUT US

Mortimers are independent grain, seed and fertiliser merchants in Driffield, East Yorkshire who produce the highest quality seed at their new production facility. The state of the art plant, built in 2014, has been further enhanced in 2021, with the installation of a new large treater, a precleaner and an optical (colour) sorter. This ensures the best possible cleaning and accurate chemical application of all cereals and pulses and Mortimers offer a service for both certified and farm saved seed.

FARM SAVED SEED

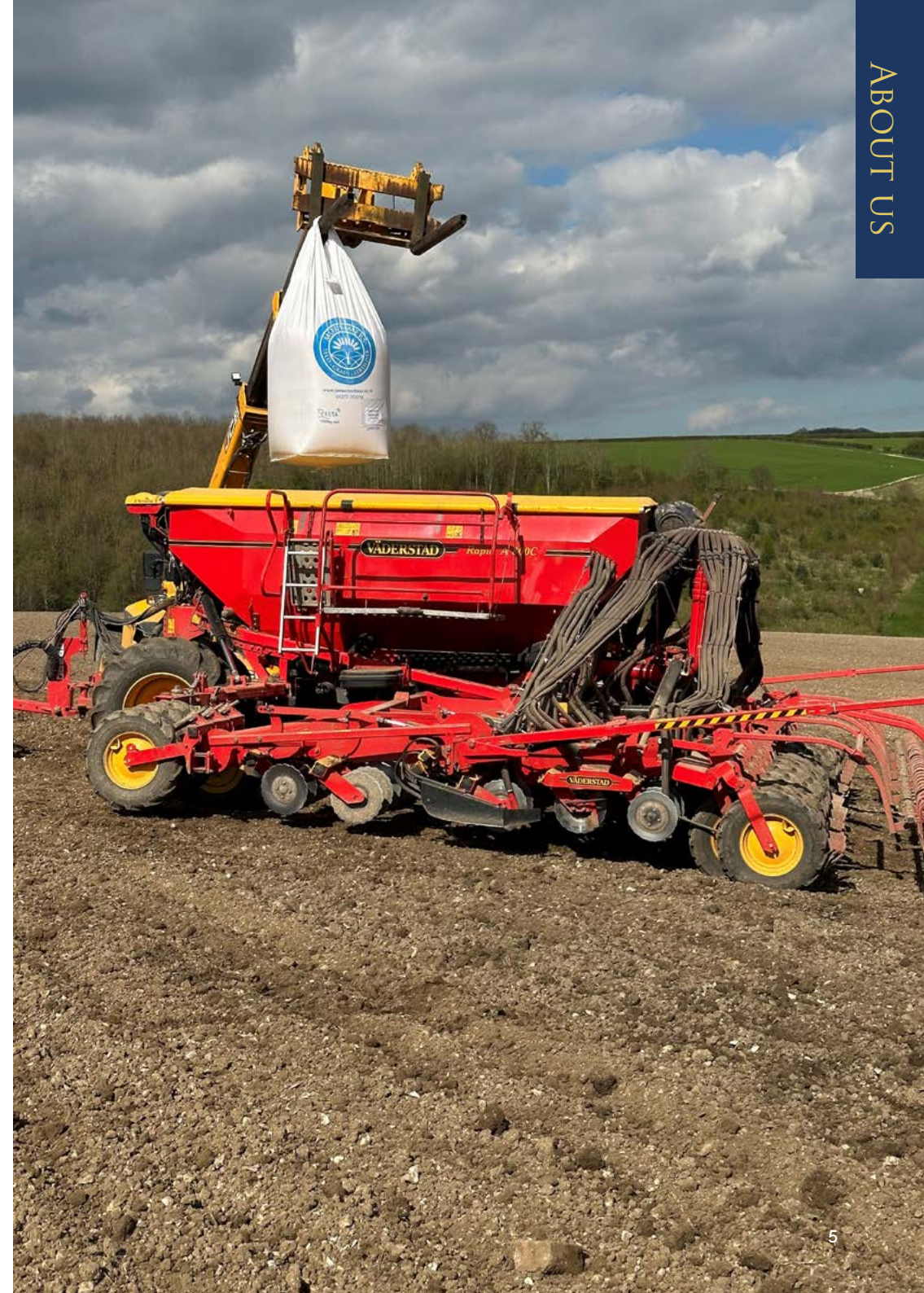
Included in the farm saved seed service is an option to haul your tonnage to and from our plant. Alternatively, we can arrange for your grain to be collected and brought back to farm. We can also test seed for germination and TGW. If a Glyphosate type product has been used, a full grow-on test would be required. Collection of any BSPB royalty is typically undertaken by us and paid over on your behalf. Alternatively, you are free to pay royalty on a hectareage basis. Full guidance is available on request.

We have our own on site weighbridge: farm saved seed will be weighed in and screenings will be credited with their feed value at the time. Our emphasis is on quality when cleaning and treating your farm saved seed. Our Cimbria seed cleaning equipment and optical sorter ensures the seed is cleaned to the highest standard, and accurate chemical application through the Bayer Evolution seed treatment applicator, results in the best possible start to your crop.

CERTIFIED SEED

Certified Seed wherever possible will be selected from one of our own local quality growers. Our staff regularly inspect the growing crops to ensure they are grown to the highest standard and in the best possible conditions. Once harvested, we undertake full germination, purity and screening tests on all lots. During intake, the seed is checked again before it is allowed to tip.

Once cleaned, a representative sample is taken to an Official Seed Testing Station for a germination and purity test. We are always competitive on price and service. While it is impossible to stock every variety, we will be very pleased to offer impartial advice on varietal selection and chemical applications.



MORTIMERS COMMERCIAL CLEANING

During 2022 and 2023, our plant and colour sorter has been busy undertaking commercial cleaning of crops. We can clean ergot out of milling wheat, barley out of milling wheat, fusarium out of malting barley and the general cleaning up of wheat.

The Optical (Colour) Sorter



If in future you need to clean up an otherwise valuable crop please get in touch.

JAMES MORTIMER LTD CROP TRIALS 2023

Mortimer's have our own independent crop trials, very kindly hosted on one of our customers farms, close to Driffield on the Yorkshire Wolds. We have drilled a wide range of winter barley and wheat varieties, both new and existing. The trials are on a farm scale, to give our customers a realistic

view for future selection. Please let your farm representative know if you would like to look around the trials at any point.

In June, Mortimers are holding a trials day, please let your farm representative know if you would like to attend.



Some of the varieties at the trials include:

BARLEYS:

Malting: Craft, SY Vessel

2-Row Feed: LG Caravelle, KWS Tardis, KWS Orwell, KWS Cassia

Hybrid: SY Kingsbarn, SY Canyon

WHEATS:

Group 1: Skyfall, Crusoe, Nissaba

Group 2: KWS Extase, KWS Palladium, KWS Ultimum

Group 3 Soft: LG Astronomer, LG Illuminate

Group 4 Soft: LG Redwald, KWS Zealum, RGT Birstow, LG Skyscraper, LG Spotlight

Group 4 Hard: KWS Dawsum, Champion, KWS Cranium, Gleam, Costello, LG Typhoon

THE FORGOTTEN WHEAT DISEASES

Why do we use seed treatments?



BUNT
Higher risk in farm saved seed repeatedly sown without a SPD



LOOSE SMUT
Higher risk sowing untreated seed



SEPTORIA SEEDLING BLIGHT
Reduces plant establishment



MICRODOCHMIUM NIVALE
Causes significant reduction in crop establishment



ERGOT
Risk to health and grain rejections

THE FORGOTTEN BARLEY DISEASES

Why do we use seed treatments?



LOOSE SMUT
Higher risk from growing repeatedly farm saved, untreated seed



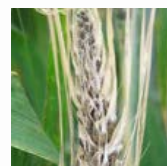
LEAF STRIPE
Can build up rapidly in repeatedly home-saved seed



ERGOT
Risk to health and grain rejections



MICRODOCHMIUM NIVALE
Causes significant reduction in crop establishment



COVERED SMUT
Higher risk from growing repeatedly farm saved, untreated seed

OUR TOP TIPS FOR WINTER BARLEY VARIETY SELECTION THIS AUTUMN...

TOP YIELDERS

LG Caravelle
KWS Tardis

CONSISTENT PERFORMERS...

KWS Tardis
KWS Orwell
KWS Cassia

WHICH HYBRID VARIETY IS THE BEST CHOICE FOR BLACKGRASS COMPETITION?

Bazooka

BEST HYBRID PERFORMER ON HEAVY LAND...

SY Thunderbolt

THE FARMERS FRIEND'S OF THE WINTER BARLEY VARIETIES...

KWS Cassia
Bold grain
Good straw quality.

MARKET LEADERS FROM AUTUMN 2022

KWS Tardis
SY Kingsbarn

OUR PICK OF THE HYBRIDS FOR AUTUMN 2022

SY Canyon

EXCITING OPPORTUNITY FOR MALTING BARLEY GROWERS!

SY Vessel
The first dual purpose Non-GN winter malting barley with strong interest from maltsters.



WINTER BARLEY

AHDB RECOMMENDED LISTS

Winter barley 2023/24

Market options, yield and grain quality



End-use group	Electrum	Craft	LG Caravelle	Bolivia	KWS Tardis	Bolton	Lightning
	Two-row feed						
Fungicide-treated grain yield (% treated control)							
United Kingdom (9.8 t/ha)	96	94	106	104	103	103	103
East region (9.5 t/ha)	96	94	109	105	105	105	104
Untreated grain yield (% treated control)							
United Kingdom (9.8 t/ha)	79	79	89	89	85	86	90
Main market options							
MBC malting approval for brewing use	F	F	-	-	-	-	-
Grain quality							
Specific weight (kg/hl)	70.5	70.7	71.8	70.2	70.6	69.9	69.4
Screenings (% through 2.25 mm)	2.3	2.2	1.5	1.1	1.7	1.5	1.9
Screenings (% through 2.5 mm)	6.6	6.7	4.3	2.6	5.2	4.7	5.5
Nitrogen content (%)	1.76	1.71	-	-	-	-	-
Agronomic features							
Resistance to lodging without PGR (1-9)	7	7	-	-	8	7	[6]
Resistance to lodging with PGR(1-9)	7	8	7	8	8	8	6
Straw length without PGR (cm)	98	96	[93]	[91]	95	94	92
Straw length with PGR (cm)	90	89	85	89	85	83	88
Ripening (days +/- KWS Orwell)	-1	0	0	0	0	0	0
Disease resistance							
Mildew (1-9)	6	6	7	7	5	6	7
Brown rust (1-9)	7	7	-	-	6	6	8
Rhynchosporium (1-9)	5	6	6	6	6	5	7
Net blotch (1-9)	5	5	[5]	[6]	5	5	5
BaYMV	R	R	R	R	R	R	R
Breeder/UK contact							
Breeder	SyP	SyP	LimEur	NS	KWS	Ack	Ack
UK contact	Syn	Syn	Lim	Agr	KWS	ElsAck	ElsAck
Soil type (about 50% of trials are medium soils)							
Light soils (9.7 t/ha)	96	95	103	104	102	103	102
Heavy soils (9.3 t/ha)	97	95	[106]	[104]	107	105	103
Agronomic characteristics							
Lodging without PGR (%)	6	3	-	-	2	4	[11]
Lodging with PGR (%)	5	2	2	2	1	1	9
Brackling (%)	9	9	7	12	6	8	11
Status in RL system							
Year first listed	18	16	23	23	21	21	22

End-use group	Bordeaux	LG Mountain	KWS Hawking	KWS Orwell	Valerie	KWS Cassia	SY Thunderbolt #	SY Kingsbarn #	SY Canyon #	Bazooka #	Average LSD (5%)
							Six-row feed				
Fungicide-treated grain yield (% treated control)											
United Kingdom (9.8 t/ha)	103	102	100	100	99	97	106	106	106	104	2.4
East region (9.5 t/ha)	105	102	102	100	100	97	106	106	106	104	2.9
Untreated grain yield (% treated control)											
United Kingdom (9.8 t/ha)	83	83	83	82	78	82	89	85	91	84	4.7
Main market options											
MBC malting approval for brewing use	-	-	-	-	-	-	-	-	-	-	
Grain quality											
Specific weight (kg/hl)	71.1	71.1	69.8	69.3	71.2	72.4	70.9	70.9	71.7	70.5	0.7
Screenings (% through 2.25 mm)	1.2	1.9	2.0	1.8	0.8	1.5	2.1	1.4	2.0	2.4	0.7
Screenings (% through 2.5 mm)	3.5	5.8	5.9	5.5	1.9	4.1	7.5	5.4	6.4	8.1	1.7
Nitrogen content (%)	-	-	-	-	-	-	-	-	-	-	0.14
Agronomic features											
Resistance to lodging without PGR (1-9)	7	6	7	7	7	7	5	6	[7]	6	1.7
Resistance to lodging with PGR(1-9)	8	7	8	8	8	7	5	7	5	6	1.4
Straw length without PGR (cm)	93	91	95	94	93	95	111	111	115	117	3.9
Straw length with PGR (cm)	84	84	86	86	87	90	104	104	107	108	2.4
Ripening (days +/- KWS Orwell)	0	-1	+1	0	-1	0	-1	0	0	0	1.0
Disease resistance											
Mildew (1-9)	6	5	6	3	7	5	7	7	7	5	1.2
Brown rust (1-9)	6	7	7	7	4	7	6	5	7	5	1.0
Rhynchosporium (1-9)	4	5	6	6	6	5	6	6	6	7	1.2
Net blotch (1-9)	5	5	5	5	5	5	6	5	5	5	0.9
BaYMV	R	R	R	R	R	R	R	R	R	R	-
Breeder/UK contact											
Breeder	NS	LimEur	KWS	KWS	Bre	KWS	SyP	SyP	SyP	SyP	
UK contact	Sen	Lim	KWS	KWS	Sen	KWS	Syn	Syn	Syn	Syn	
Soil type (about 50% of trials are medium soils)											
Light soils (9.7 t/ha)	102	102	99	99	99	95	104	105	105	103	3.4
Heavy soils (9.3 t/ha)	104	102	102	101	[100]	99	107	105	105	105	6.0
Agronomic characteristics											
Lodging without PGR (%)	3	8	3	3	4	5	20	11	[6]	8	-
Lodging with PGR (%)	1	5	1	2	1	4	15	5	15	6	-
Brackling (%)	9	22	5	8	6	8	14	13	9	10	-
Status in RL system											
Year first listed	21	19	20	16	19	10	21	19	22	16	

Brewing fine quality ale takes real Craft



The winter malting barley best served with very high yields and excellent grain quality



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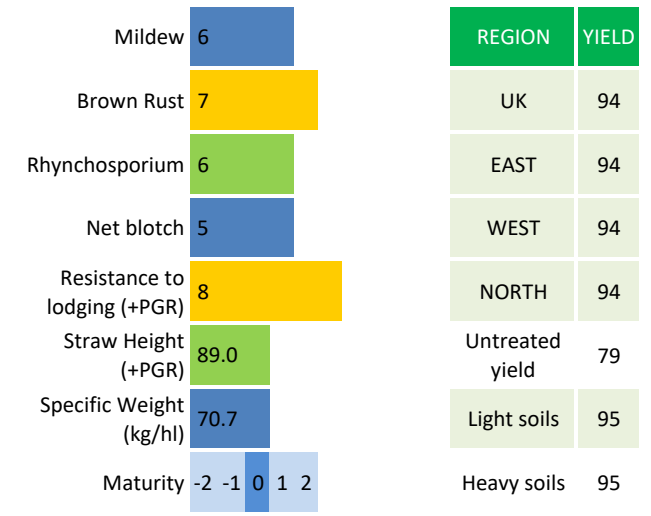
BARLEY

WINTER BARLEY – MALTING

CRAFT (SY 208-56 X SY VENTURE)

Craft remains the most popular winter malting variety which has had strong demand from maltsters over the last few years.

However, locally we are starting to see a shift in demand from local maltsters to SY Vessel. If you are a regular winter malting barley grower, please speak to us to discuss the best option for you this autumn to maximise marketing opportunities.



Many growers achieve very good yields with Craft despite its official yield figures reading lower than many other 2-row varieties.

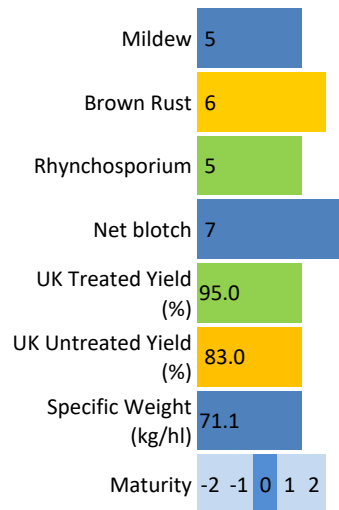
WINTER BARLEY – MALTING

SY VESSEL

SY Vessel is a specialist winter malting barley which has seen a surge in demand from maltsters over the last 12 months due to its ability to both brew and distill.

SY Vessel attracts a larger premium than Craft. We advise regular winter malting barley growers to try some SY Vessel this autumn - please give us a ring to discuss.

We had several customers grow both Craft and SY Vessel for harvest 2022. The yield of SY Vessel was comparable to that of Craft.



SY Vessel **NEW**

The flexible winter malt variety with multiple end-use options



 **SY Vessel**
Winter barley



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WINTER BARLEY FEED – 2 ROW CONVENTIONAL

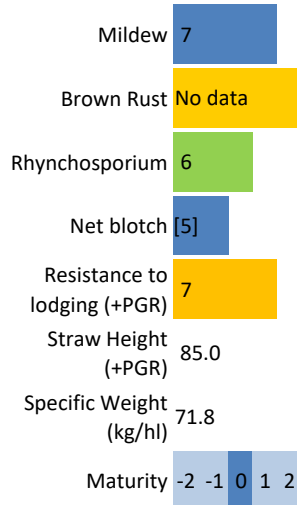
LG CARAVELLE (LGBU11-5493-B x KWS MOSELLE)

NEW for autumn 2023! LG Caravelle is the highest yielding feed barley on the market with particularly good performance in the East.

Excellent grain quality and disease package.

LG Caravelle is a great barn filler, offering growers a low risk, high yielding feed barley.

For those growing the likes of KWS Tardis, it might worth trying some LG Caravelle alongside it on farm this autumn.



REGION	YIELD
UK	106
EAST	109
WEST	[105]
NORTH	[104]
Untreated yield	89
Light soils	103
Heavy soils	[106]



AHDB
RECOMMENDED

BARLEY

WINTER BARLEY CHOICE MADE EASY



LG CARAVELLE WINTER BARLEY

- Highest yielding 2 row winter barley in every region of the 23/24 RL
- Robust disease resistance package
- Excellent specific weight



lgseeds.co.uk/lg-caravelle

Limagrain

WINTER BARLEY FEED – 2 ROW CONVENTIONAL

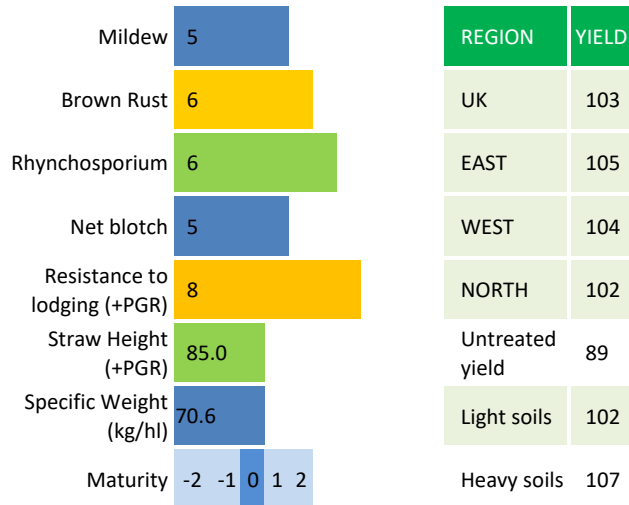
KWS TARDIS - (11-12 X KWS ORWELL)

New to the market last autumn, KWS Tardis is a very high yielding feed variety.

KWS Tardis had 34% of the conventional feed barley market in autumn 2022.

Excellent grain quality, stiff strawed and good agronomics - KWS Tardis is a step on for the traditional KWS Cassia and KWS Orwell growers.

We had some excellent KWS Tardis samples through the lab last harvest. We received some good feedback from growers who had KWS Tardis on the farm last season.



Big on **yield** and **quality!**

TARDIS

KWS TARDIS

- Exceptional yield across the UK combined with very high specific weight
- Outstanding yields in the east and on heavy land
- Super stiff straw – the only winter barley on the 2023/24 RL with twin 8s for standing



www.kws-uk.com

SEEDING
THE FUTURE
SINCE 1856



WINTER BARLEY FEED – 2 ROW CONVENTIONAL

KWS ORWELL (KWS TOWER X KWS SALSA)

KWS Orwell has been the most popular feed barley variety over the last few years and represented 7% of the UK market in autumn 2022.

Its consistent performance has gained KWS Orwell a loyal following but its market share is now in decline due to likes of KWS Tardis and LG Caravelle.

Good grain quality and good standing ability in the field but it does need watching for mildew.

		REGION	YIELD
Mildew	3	UK	100
Brown Rust	7	EAST	100
Rhynchosporium	6	WEST	101
Net blotch	5	NORTH	98
Resistance to lodging (+PGR)	8	Untreated yield	82
Straw Height (+PGR)	86.0	Light soils	99
Specific Weight (kg/hl)	69.3	Heavy soils	101
Maturity	-2 -1 0 1 2		

KWS CASSIA (EDEN X CARAT) X SAFFRON)

Despite 12 years on the market, KWS Cassia still has the highest specific weight on the 2023/24 RL.

Consistent yields, bold grain and low screenings keep KWS Cassia a very popular variety on farm.

Good quality straw and solid disease package. KWS Cassia seed supply is limited - please let us know if you would like some this autumn.

		REGION	YIELD
Mildew	5	UK	97
Brown Rust	7	EAST	97
Rhynchosporium	5	WEST	97
Net blotch	5	NORTH	95
Resistance to lodging (+PGR)	7	Untreated yield	82
Straw Height (+PGR)	90.0	Light soils	95
Specific Weight (kg/hl)	72.4	Heavy soils	99
Maturity	-2 -1 0 1 2		

WINTER BARLEY – HYBRID

SY CANYON - HYBRID

SY Canyon was a new hybrid to the market for autumn 2022 which Mortimers have exclusive access to.

It is very high yielding with the best grain quality of all the hybrid varieties with a specific weight of 71.7 kg/hl.

SY Canyon has the highest untreated yield of all the hybrids of 91%.

SY Canyon performs particularly well on lighter soils.

		REGION	YIELD
Mildew	7	UK	106
Brown Rust	7	EAST	106
Rhynchosporium	6	WEST	107
Net blotch	5	NORTH	105
Resistance to lodging (+PGR)	5	Untreated yield	91
Straw Height (+PGR)	107.0	Light soils	105
Specific Weight (kg/hl)	71.7	Heavy soils	105
Maturity	-2 -1 0 1 2		

SY THUNDERBOLT - HYBRID

New to the market in autumn 2021, SY Thunderbolt is the highest yielding hybrid barley variety.

Performs particularly well on heavier land.

Good disease ratings with a 6 for both Brown Rust and Rhynchosporium.

Early to mature to provide flexibility at harvest.

		REGION	YIELD
Mildew	7	UK	106
Brown Rust	6	EAST	106
Rhynchosporium	6	WEST	108
Net blotch	6	NORTH	105
Resistance to lodging (+PGR)	5	Untreated yield	89
Straw Height (+PGR)	104.0	Light soils	104
Specific Weight (kg/hl)	70.9	Heavy soils	107
Maturity	-2 -1 0 1 2		

INTRODUCING SY Canyon

HYBRID BARLEY



SUPERIOR GRAIN QUALITY
and disease resistance all in one variety



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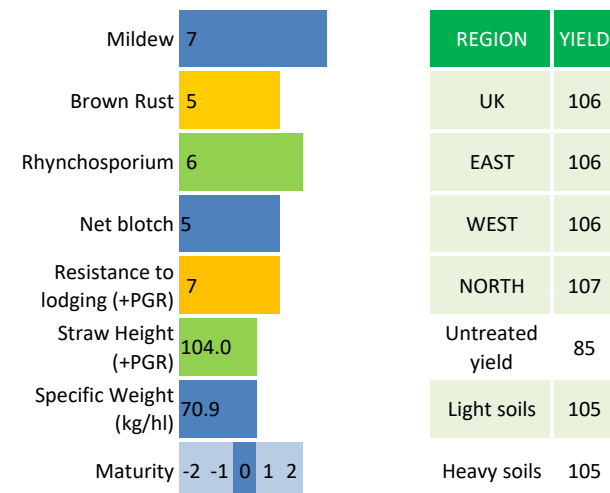
SY KINGSBARN - HYBRID

SY Kingsbarn is the leading hybrid barley variety, with 12% market share of the total UK barley market in autumn 2022.

A good all-rounder that performs well on all soil types.

High yields, good grain quality and disease package.

Competitive growth habit good for grassweed suppression.

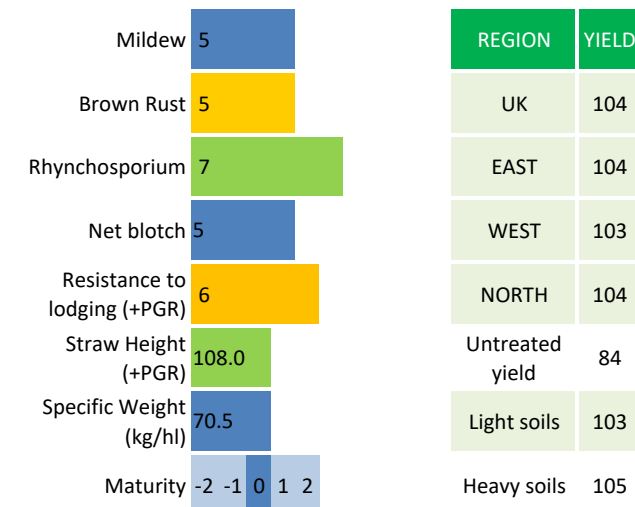


BAZOOKA - HYBRID

Bazooka is one of the older hybrid barley's on the market but still performs very well on farm.

The best hybrid for grassweed suppression.

It has reasonably stiff straw but requires a careful PGR program to manage its height.



OUR TOP TIPS FOR WINTER WHEAT VARIETY SELECTION THIS AUTUMN....

CHOOSING VARIETIES TO SPREAD HARVEST WORKLOAD

Early to harvest:

KWS Extase
KWS Palladium
Graham
Mayflower

Later to harvest:

Costello
KWS Cranium
KWS Zealum

WHICH VARIETIES CAN I DRILL FROM EARLY SEPTEMBER?

Graham
KWS Dawsum
Gleam
KWS Palladium

WHICH NEW VARIETIES SHOULD I TRY THIS AUTUMN?

KWS Zealum

A NEW high yielding feed wheat with the potential for soft biscuit premium. Suitable for earlier drilling and good 2nd wheat performance.

KWS Ultimatum

A NEW Group 2 variety with an untreated yield of 93% and excellent grain quality.

GOOD 2ND WHEAT OPTIONS:

LG Skyscraper
Gleam
KWS Cranium
KWS Palladium
LG Typhoon
Champion
KWS Zealum

WHICH VARIETIES GIVE ME THE MOST FLEXIBILITY FOR LATE DRILLING?

Skyfall
LG Astronomer
LG Illuminate
LG Spotlight
LG Typhoon
KWS Cranium
Gleam
RGT Bairstow
Champion
Nissaba

TOP PICKS FOR FEED VARIETIES WITH EXCELLENT GRAIN QUALITY

Costello
LG Spotlight
KWS Dawsum

WHICH VARIETIES OFFER ME THE BEST GENETIC DISEASE RESISTANCE?

KWS Extase
KWS Palladium
Champion
Graham
Mayflower

TOP YIELDERS:

Champion
KWS Dawsum
LG Skyscraper
KWS Zealum

WINTER WHEAT

AHDB RECOMMENDED LISTS

Winter wheat 2023/24

Market options, yield and grain quality



End-use group	UKFM Group 1			UKFM Group 2				UKFM Group 3			
	KWS Zyant	Skyfall	Cruse	KWS Estax	KWS Ultratum	KWS Palladium	Mayflower	KWS Gloum	RGT Wilkinsen	LG Pinco	KWS Solum
Fungicide-treated grain yield (% treated control)											
United Kingdom (10.9 t/ha)	99	97	96	102	101	100	97	101	101	101	100
East region (10.7 t/ha)	98	97	96	102	101	100	97	102	102	101	101
Untreated grain yield (% treated control)											
United Kingdom (10.9 t/ha)	75	70	76	97	93	94	93	80	87	85	83
Grain quality											
Endosperm texture	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Soft	Soft	Soft	Soft
Protein content (%)	12.0	12.0	12.5	11.7	11.6	11.6	11.8	11.0	11.2	11.0	11.3
Protein content (%) – milling spec	12.6	13.1	13.4	12.5	12.3	12.4	12.8	11.8	[12.0]	12.1	11.9
Hagberg Falling Number	271	290	279	294	287	320	304	257	264	266	278
Specific weight (kg/hl)	78.4	79.2	78.5	79.4	79.6	77.6	79.2	78.8	75.4	75.0	76.0
Chopin Alveograph W	[180]	268	230	196	189	[169]	209	[56]	96	[74]	[74]
Chopin Alveograph P/L	[0.7]	1.0	0.6	0.6	0.7	[0.7]	0.8	[0.3]	0.3	[0.2]	[0.3]
Agronomic features											
Resistance to lodging without PGR (1-9)	8	8	8	7	[7]	7	6	7	[8]	7	7
Resistance to lodging with PGR (1-9)	8	7	7	8	7	8	7	7	8	8	7
Straw length without PGR (cm)	85	85	82	81	85	83	89	90	83	83	92
Straw length with PGR (cm)	75	77	75	85	75	78	82	82	77	75	85
Ripening (days +/- Skyfall)	-1	0	+1	-1	+1	-1	-1	+3	+2	+2	+2
Resistance to sprouting (1-9)	6	6	6	6	[7]	[6]	[6]	[6]	[5]	[5]	[6]
Disease resistance											
Mildew (1-9)	7	6	7	7	7	8	7	5	8	4	7
Yellow rust (1-9)	3	3	9	8	9	9	9	9	7	8	9
Yellow rust (young plant) – see note below	8	8	1	1	1	1	1	1	8	1	1
Brown rust (1-9)	7	9	3	6	6	5	6	3	5	7	5
Septoria tritici (1-9) – see note below	6.1	5.4	6.2	7.8	6.4	7.4	8.9	5.1	5.5	5.9	5.6
Eyespot (1-9) – see note below	[6]@	[5]@	[5]	[4]	[5]	[6]	[6]@	[5]	[7]@	[4]	[6]
Fusarium ear blight (1-9)	6	7	7	6	7	6	6	7	6	6	6
Orange wheat blossom midge	-	R	-	-	-	-	-	R	-	R	-
Breeder/UK contact											
Breeder	KWS	RAGT	Lim	Mem	KWS	KWS	ElsW	KWS	R2n	LimEur	KWS
UK contact	KWS	RAGT	Lim	KWS	KWS	KWS	Els	KWS	RAGT	Lim	KWS
Annual treated yield (% control)											
2018 (10.7 t/ha)	98	97	95	101	-	-	-	-	-	100	-
2019 (11.6 t/ha)	96	95	98	100	-	100	98	100	-	100	100
2020 (10.3 t/ha)	97	96	94	100	[103]	[100]	[96]	[103]	[102]	102	[102]
2021 (10.9 t/ha)	100	97	96	102	101	99	96	100	100	99	99
2022 (11.5 t/ha)	101	97	94	103	102	101	97	101	101	98	100
Rotational position											
First cereal (11.2 t/ha)	98	96	96	101	101	100	97	101	101	100	100
Second and more (9.7 t/ha)	99	97	94	102	[102]	100	99	101	[101]	102	101
Sowing date (most trials were sown in October)											
Early sown (before 25 Sept) (11.3 t/ha)	[101]	96	[95]	[99]	-	[98]	[100]	[102]	-	103	100
Late sown (after 1 Nov) (9.2 t/ha)	98	97	95	102	[[101]]	[99]	[95]	[102]	[[103]]	102	[102]
Soil type (about 50% of trials are on medium soils)											
Light soils (10.8 t/ha)	97	96	94	102	[[101]]	99	97	101	[102]	102	99
Heavy soils (11.1 t/ha)	99	97	96	101	100	99	96	102	101	101	99
Agronomic features											
Lodging % without PGR	1	1	2	4	[4]	3	9	3	[2]	4	2
Lodging % with PGR	1	3	3	3	4	3	8	5	1	3	7
Latest safe-sowing date ^o	End Jan	End Feb	End Jan	End Jan	[[End Jan]]	[End Jan]	[Mid Feb]	[End Jan]	[[End Jan]]	End Jan	[End Feb]
Speed of development to growth stage 31 (days +/- average)											
Early sown (Sept)	-4	-2	-2	-4	-	[-2]	[-4]	[+2]	-	[-2]	[+2]
Med sown (Oct)	-4	-4	-1	-6	-	-	-	-	-	[0]	-
Late sown (Nov)	-2	-3	-2	-4	-	-	-	[+1]	-	[+1]	-
Status in RL system											
Year first listed	17	14	12	19	23	22	22	22	23	21	22

LG Illuminate	LG Astronomer	LG Reichard	KWS Zealium	LG Skystraper	RGT Balrow	RGT Stokes	Champion	KWS Dawdum	Oxford	Glenn	Graham	KWS Cranium	LG Typhoon	Costello	Average LSD (5%)
Soft Group 4		Soft Group 4					Hard Group 4								
100	99	107	103	103	103	102	106	104	104	103	102	102	101	99	2.3
100	99	107	103	103	103	101	107	103	104	103	101	103	101	99	2.7
87	88	92	86	86	87	87	93	95	89	84	93	82	92	86	5.6
Soft	Soft	Soft	Soft	Soft	Soft	Soft	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	
11.5	11.5	[11.5]	10.9	11.2	11.1	11.1	11.2	11.1	11.3	11.1	11.1	11.1	11.0	11.6	0.2
12.6	12.5	[12.0]	[12.0]	12.1	12.0	12.1	12.1	11.9	[12.4]	11.8	11.9	11.9	11.9	12.4	0.5
262	245	172	218	227	239	255	251	311	218	237	281	293	183	324	22.6
77.0	78.2	75.5	76.7	77.3	76.8	76.2	75.5	80.0	76.0	77.3	77.6	75.8	77.1	81.2	0.6
84	[137]	-	[63]	-	[50]	[61]	-	-	-	-	-	-	-	-	39.4
0.3	[0.4]	-	[0.4]	-	[0.3]	[0.3]	-	-	-	-	-	-	-	-	0.2
7	7	[5]	[6]	6	6	5	6	7	[6]	7	7	8	7	7	1.4
7	9	5	8	6	6	6	6	7	7	7	8	8	7	8	1.2
83	88	94	88	92	91	91	88	84	85	87	88	88	87	84	1.6
76	79	89	81	83	83	82	82	76	79	77	80	80	78	75	0.7
+1	+1	+2	+2	0	+2	+2	0	+1	+2	0	-1	+3	+1	+2	1.6
[6]	[6]	[6]	[6]	6	[6]	[6]	[6]	[7]	[6]	6	6	[6]	[5]	6	1.0
5	4	6	7	7	6	5	7	8	6	7	6	6	6	8	1.4
7	9	7	9	7	8	7	8	9	9	5	8	9	9	9	0.6
1	1	8	1	8	1	1	1	1	1	8	8	1	1	1	0.9
6	8	6	5	5	6	5	5	7	6	6	5	4	6	5	0.9
5.8	6.2	6.7	5.8	4.9	6.0	6.3	8.1	6.4	6.4	5.7	6.7	5.9	7.3	5.8	0.9
[6]	[5]	[6]	[6]	[6]	[4]	[5]	[5]	[5]	[5]	[5]	[4]	[5]	[6]	[4]	2.0
6	6	6	7	6	6	6	6	7	6	6	7	7	6	7	0.4
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-
LimEur	LimEur	LimEur	KWS	LimEur	RAGT	RAGT	DSV	KWS	DSV	SyP	SyP	KWS	LimEur	KWS	
Lim	Lim	Lim	KWS	Lim	RAGT	RAGT	DSV	KWS	DSV	Syn	Syn	KWS	Lim	Sen	
100	99	-	-	102	-	-	-	-	-	103	101	102	-	100	-
101	99	-	-	103	103	104	104	104	104	103	102	101	102	99	-
101	99	[105]	[103]	103	[104]	[102]	[105]	[105]	[104]	103	102	103	[101]	100	-
98	98	107	102	102	102	103	106	105	103	105	104	100	101	100	-
99	97	107	103	103	103	102	106	104	103	103	104	103	99	98	-
100	99	107	103	103	103	102	106	104	103	103	102	102	100	99	2.3
100	98	[109]	[104]	104	103	103	107	105	[104]	103	102	103	103	99	3.5
103	100	[106]	[106]	103	[[104]]	[[105]]	106	107	[103]	103	101	[[102]]	103	99	4.8
98	99	[[108]]	[[105]]	103	[105]	[101]	[107]	[104]	[[105]]	103	100	105	[101]	102	4.3
101	99	[105]	[[102]]	103	105	104	106	105	[102]	103	102	103	102	99	3.3
100	100	107	104	103	104	102	107	104	104	103	102	101	100	99	3.1
3	2	[19]	[5]	7	11	25	11	4	[6]	4	5	2	3	2	-
4	0	33	3	13	14	9	13	5	8	5	3	2	5	2	-
Mid Feb	End Jan	[[Mid Feb]]	[[End Jan]]	End Jan	[End Feb]	[End Jan]	[Mid Feb]	[End Jan]	[[Mid Feb]]	Mid Feb	End Jan	Mid Feb	[End Jan]	End Jan	-
[-3]	[-8]	-	-	-4	[+3]	[+2]	[-2]	[0]	-	+6	0	[-4]	[+5]	-3	7.8
[-2]	[0]	-	-	0	-	-	-	-	-	+4	+2	[-3]	-	0	8.8
[+1]	-	-	-	-3	-	-	[-5]	[+3]	-	+2	-2	[-4]	-	-1	4.8
21	21	23	23	19	22	22	22	22	23	18	16	21	22	15	



NISSABA

GODDESS of GRAIN

A WHEAT FOR ALL SEASONS

Recommended by AHDB as a Spring Wheat (AHDB 22-23). Nissaba has no vernalisation requirement and can be sown in the Spring like any other Spring Wheat. When sown in the Autumn, anytime from October onwards it remains Winter dormant until the Spring Equinox.

- Competitive to winter Group 1's from October onwards planting
- Wide drilling window - October to April
- UKFM Group 1
- OWBM resistant
- Not prone to Yellow Rust races attacking current Winter UKFM Group 1 (Zyatt & Skyfall)
- High protein content enhancing opportunity of full Group 1 specification
- Excellent baking performance at a wide range of protein contents
- High seedling vigour and rapid emergence



WHEAT

WINTER WHEAT GROUP 1

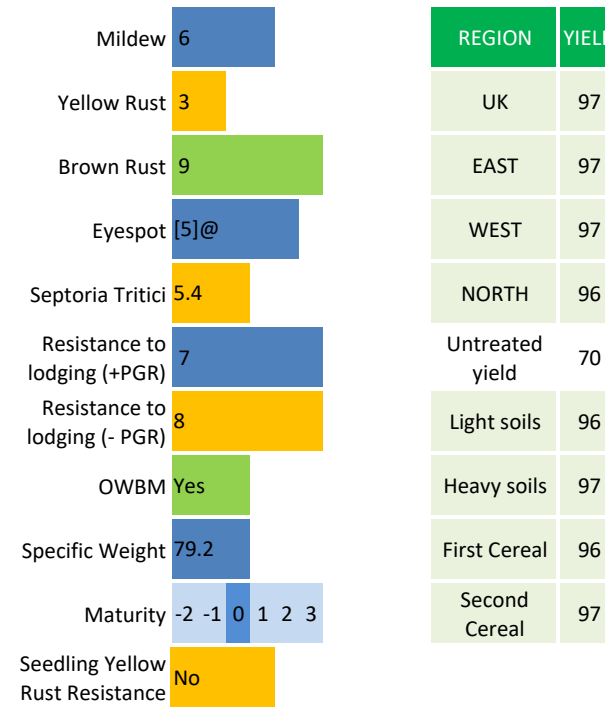
SKYFALL (C4148 X HURRICANE)

Skyfall has been the most popular milling wheat on farm since 2014, and is likely to remain the Group 1 of choice this Autumn.

Very wide drilling window as it can be drilled from end September through to the 7th of March.

Reasonable 2nd wheat performance.

Needs watching for yellow rust and can be susceptible to sprouting so should be given priority at harvest.



WINTER WHEAT GROUP 1

CRUSOE (CORDIALE X GULLIVER)

Crusoe was first introduced in 2012, and is still very popular with milling wheat growers due its consistent grain quality and ability to meet milling specifications.

Suits the main drilling window of mid september onwards through to the end of January.

A solid disease package except for its weakness to Brown Rust which needs watching.

After a very variable season in protein content in milling wheat samples harvest, Crusoe was the most consistent out of all varieties we had through the laboratory.

		REGION	YIELD
Mildew	7	UK	96
Yellow Rust	9	EAST	96
Brown Rust	3	WEST	97
Eyespot	[5]	NORTH	94
Septoria Tritici	6.2	Untreated yield	76
Resistance to lodging (+PGR)	7	Light soils	94
Resistance to lodging (- PGR)	8	Heavy soils	96
OWBM	No	First Cereal	96
Specific Weight	78.5	Second Cereal	94
Maturity	-2 -1 0 1 2 3		
Seedling Yellow Rust Resistance	Yes		

KWS LADUM (KWS SYWELL X KWS TALLAND)

KWS Ladum was new to the RL as a spring Group 1 milling wheat last season

Whilst it is recommended as a spring wheat, it can be drilled from 1st November onwards and has out performed other Group 1 winter milling wheats such as Skyfall, Crusoe and KWS Zyatt in the January drilling slot.

With many Group 1 milling wheats now breaking down to diseases such as yellow rust and very little material in the pipeline, KWS Ladum is worth considering for those milling wheat growers that are able to drill later on in the autumn.

		REGION	YIELD
Mildew	[7]	UK Yield as % control (Autumn Sowing)	
Yellow Rust	6	UK Yield as % control (Spring Sowing)	102
Brown Rust	[7]		
Septoria Tritici	[7]		
Straw Height without PGR	75.0		
OWBM	No		
Specific Weight	78.0		
Maturity	-2 -1 0 1 2 3		

It's a Group 1, but not as we know it!

KWS LADUM

- Taking top-quality spring breadmaking yields to the next level
- UK Spring yield 7% ahead of Mulika
- Excellent disease package including a [7] for *Septoria*



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WINTER WHEAT GROUP 1

NISSABA (MULIKA X PREMIO X W45)

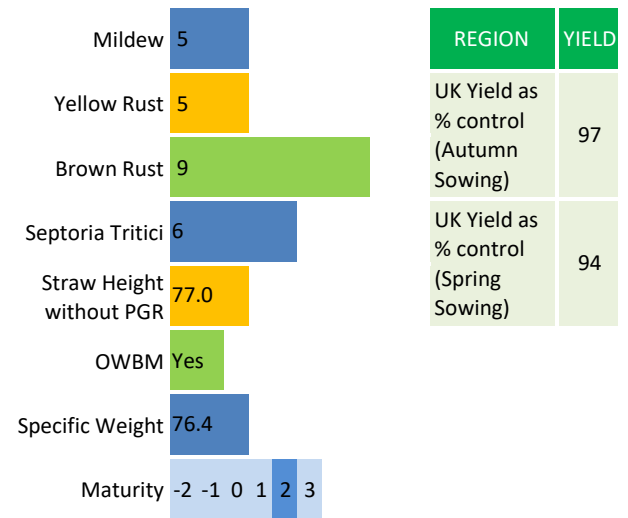
Nissaba was another new Group 1 spring wheat added to the AHDB RL in 2022/23.

Nissaba has no vernalisation requirement and can be sown in the Spring. When sown in the Autumn from October onwards it remains Winter dormant until the Spring Equinox.

Nissaba is yield competitive against Winter Group 1 varieties from October drilling over 3 years of breeder assessment trialling.

With some G1 winter wheats starting to have disease issues, Nissaba is worth trying for milling wheat growers this autumn.

Locally, Bradshaw's flour mill based in Driffield are interested in taking some Nissaba next season providing samples meet milling specification requirements.



The **super clean** bread maker with harvest security built-in



KWS PALLADIUM

- Excellent disease resistance including 7.4 for *Septoria tritici*
- Very high untreated yield
- Short and stiff with early maturity



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WINTER WHEAT GROUP 2

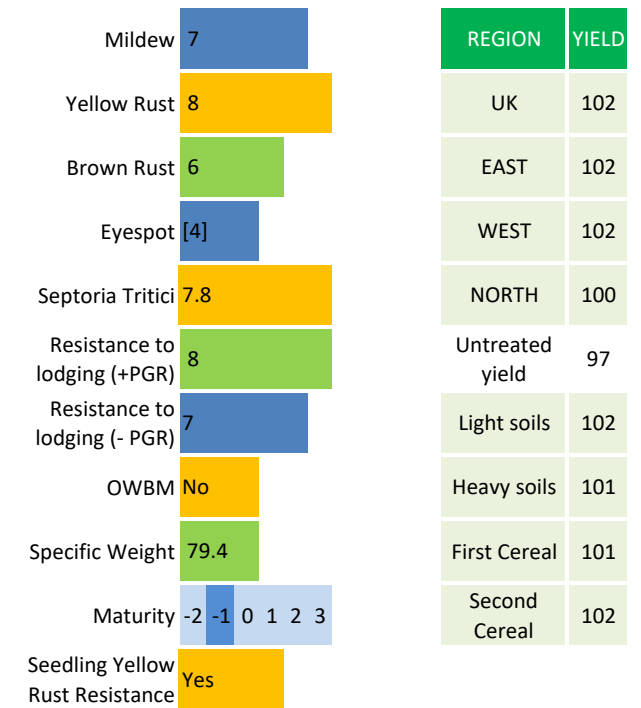
KWS EXTASE (BOISSEAU X SOLHEIO)

KWS Extase was the most popular variety sold in the UK last harvest, alongside KWS Dawsum with a market share of 14.5%.

It has the highest untreated yield on the recommended list at 97% of control.

It is a tall variety that needs a good PGR programme and early to mature.

KWS Extase must not be drilled too early (not before 25th September) as it has a fast speed of development due to its french parentage.



WINTER WHEAT GROUP 2

KWS ULTIMATUM (KWS ZYATT X COSTELLO)

KWS Ultimatum is a new variety for the Group 2 market in Autumn 2023.

Its parentage combines good grain quality with relatively stiff straw and good sprouting resistance.

With an untreated yield of 93%, KWS Ultimatum offers growers a good risk manager with flexibility of chemistry timings, as well as various marketing options for the milling market with respectable premiums over feed.

Further North, KWS Ultimatum rivals some of the feed varieties on yield such as Champion and Gleam.

		REGION	YIELD
Mildew	7	UK	101
Yellow Rust	9	EAST	101
Brown Rust	6	WEST	102
Eyespot	[5]	NORTH	[103]
Septoria Tritici	6.4	Untreated yield	93
Resistance to lodging (+PGR)	7	Light soils	[101]
Resistance to lodging (- PGR)	7	Heavy soils	100
OWBM	No	First Cereal	101
Specific Weight	79.6	Second Cereal	[102]
Maturity	-2 -1 0 1 2 3		
Seedling Yellow Rust Resistance	Yes		

The ultimate wheat on-farm and for the market

WHEAT

KWS ULTIMATUM

- Very high yielding, especially in the north, with additional market opportunities
- Excellent resistance to sprouting and *Fusarium*
- High untreated yields supported by very good disease resistance



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WINTER WHEAT GROUP 2

KWS PALLADIUM (KWS ZYATT X KWS TRINITY)

A new variety added to the AHDB Recommended List last season.

Very high untreated yield of 94% of control with short, stiff straw and good all-round disease resistance.

Can be drilled slightly earlier than KWS Extase and performs well as a 2nd wheat.

Excellent grain quality with milling potential, accepted by the millers as a Group 2 grade.

KWS Palladium is a great all-rounder which is suitable for earlier drilling with very stiff straw and good performance on heavier land.

		REGION	YIELD
Mildew	8	UK	100
Yellow Rust	9	EAST	99
Brown Rust	5	WEST	101
Eyespot	[6]	NORTH	[99]
Septoria Tritici	7.4	Untreated yield	94
Resistance to lodging (+PGR)	8	Light soils	[98]
Resistance to lodging (- PGR)	7	Heavy soils	98
OWBM	No	First Cereal	100
Specific Weight	77.6	Second Cereal	100
Maturity	-2 -1 0 1 2 3		
Seedling Yellow Rust Resistance	Yes		

MAYFLOWER (ASCOTT X ARMADA)

Mayflower was new to the market in Autumn 2022.

It has an excellent agronomic package with an untreated yield of 93%, Yellow Rust score of 9, and a Septoria Tritici rating of 8.9.

It offers increased marketing opportunities in comparison to some of the other Group 2 varieties, due to less protein dilution and ability to reach the 13% protein specification for milling grades.

Some recent nitrogen use efficiency trials suggest that when N levels are reduced, Mayflower's relative yield increases compared to other established varieties.

		REGION	YIELD
Mildew	7	UK	97
Yellow Rust	9	EAST	97
Brown Rust	6	WEST	98
Eyespot	[6]@	NORTH	96
Septoria Tritici	8.9	Untreated yield	93
Resistance to lodging (+PGR)	7	Light soils	97
Resistance to lodging (- PGR)	6	Heavy soils	96
OWBM	No	First Cereal	97
Specific Weight	79.2	Second Cereal	99
Maturity	-2 -1 0 1 2 3		
Seedling Yellow Rust Resistance	Yes		

NEW

When everything's going up, it pays to bring your costs down.

Increased flexibility

Mayflower has a **wider, more flexible** growing window than its competitors.

Increased income opportunities

When grown as a milling wheat, it consistently achieves the **13%** contract specification of protein with a specific weight of **79.2kg**.

Reduced fuel costs

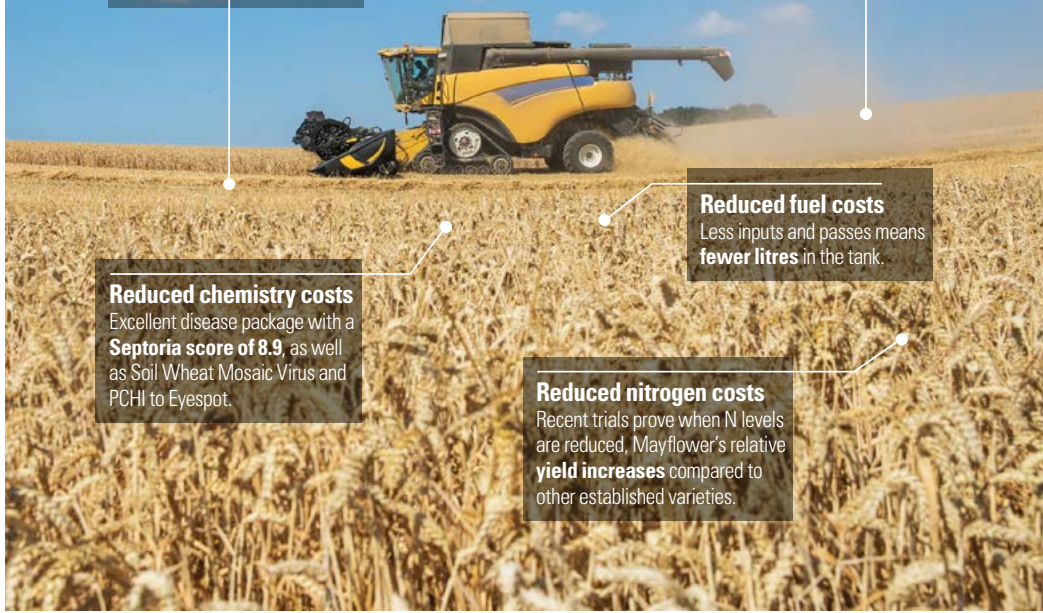
Less inputs and passes means **fewer litres** in the tank.

Reduced chemistry costs

Excellent disease package with a **Septoria score of 8.9**, as well as Soil Wheat Mosaic Virus and PCHV to Eyespot.

Reduced nitrogen costs

Recent trials prove when N levels are reduced, Mayflower's relative **yield increases** compared to other established varieties.



WINTER WHEAT GROUP 3

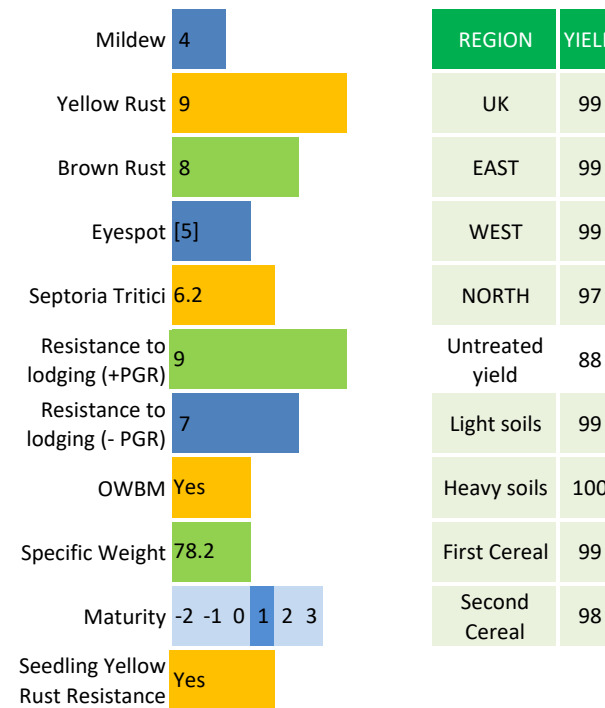
LG ASTRONOMER ((COUGAR X LEEDS) X BRITANNIA)

In our opinion, LG Astronomer is the best Group 3 on the market, with excellent grain quality and disease profile.

Can be drilled from 15th September - Mid Feb and performs well across all soil types.

Although a relatively tall variety, LG Astronomer is very stiff strawed.

There is concern around a lot of the soft wheat varieties due to the presence of Cougar in their parentage, and its breakdown in Septoria Tritici resistance over the last couple of seasons. It is a complex issue as not all varieties are affected to the same extent. At present, LG Astronomer is holding up its resistance to Septoria Tritici well in comparison to others.



This season choose the lower input variety. It could just deliver a higher impact on your bottom line.

Speak to your seed merchant today about availability.

MAYFLOWER
Winter Wheat





AHDB
RECOMMENDED

INSPIRING CONFIDENCE



“ We chose LG Astronomer for its quality, good agronomics and disease resistance. ”

John, East Yorkshire



LG ASTRONOMER WINTER WHEAT

- Exceptional All Round Agronomic Security
- Excellent Disease Resistance
- Market Opportunities for Biscuit and Distilling



WINTER WHEAT GROUP 3

LG ILLUMINATE ((COUGAR X LEEDS) X BRITANNIA)

A sister variety to LG Astronomer which is slightly higher yielding and will drill slightly earlier.

LG Illuminate is one of the shorter wheat varieties on the market and is stiff strawed.

Solid all-round disease package and good resistance to sprouting.

		REGION	YIELD
Mildew	5	UK	100
Yellow Rust	7	EAST	100
Brown Rust	6	WEST	100
Eyespot	[6]	NORTH	100
Septoria Tritici	5.8	Untreated yield	87
Resistance to lodging (+PGR)	7	Light soils	101
Resistance to lodging (- PGR)	7	Heavy soils	100
OWBM	Yes	First Cereal	100
Specific Weight	77.0	Second Cereal	100
Maturity	-2 -1 0 1 2 3		
Seedling Yellow Rust Resistance	Yes		



AHDB
RECOMMENDED

SHINING BRIGHT IN ALL SITUATIONS



uks



LG ILLUMINATE WINTER WHEAT

Casts new light on flexibility of drilling, market options, growing regions & conditions

@LGSeedsUK   
lgseeds.co.uk/lg-illuminate

Tel: 01472 371471
lgseeds.co.uk enquiries@limagrain.co.uk

Limagrain 

WINTER WHEAT GROUP 4 (SOFT)

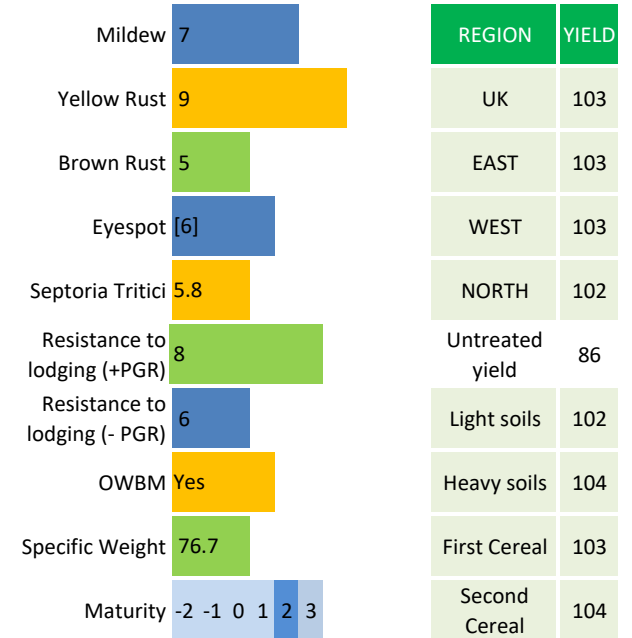
KWS ZEALUM (KWS BASSET X REFLECTION)

KWS Zealum is NEW to the Group 4 Soft market this autumn.

It is suitable for earlier drilling, stiff strawed and performs well on heavier land as well as good performance in the 2nd wheat position.

It is slightly later to mature with excellent sprouting resistance which is a big advantage the further North it is grown.

It has a good alcohol yield for the distilling market with attractive premiums over feed.



Resilient, Reliable, Returns.

KWS Zealum has you covered!

KWS ZEALUM

- Exceptional performance in the early sown slot
- Super stiff strawed
- High yielding soft Group 4 with premium market opportunities



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WINTER WHEAT GROUP 4 (SOFT)

LG SKYSCRAPER ((CASSIUS X NAWW 29) X KWS SANTIAGO)

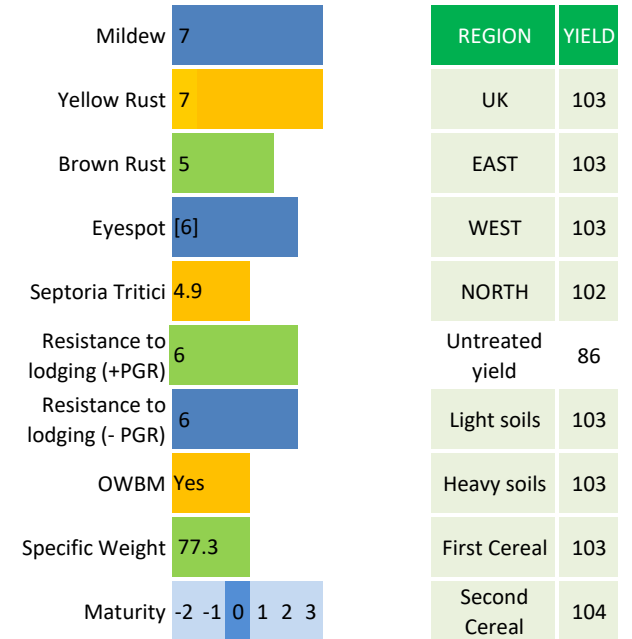
LG Skyscraper has been on the RL since 2019 and has been one of the most popular varieties over the last few seasons with 10% market share in autumn 2022.

It has given consistently high yields across all regions and soil types. Performs particularly well on lighter land.

Excellent performance in both the first and second wheat slot.

It is a tall variety (92cm without PGR) but is stiff strawed.

LG Skyscraper has a high tillering capacity so is very competitive against grassweeds.



WINTER WHEAT GROUP 4 (SOFT)

RGT BAIRSTOW ((REVELATION X SANTIAGO) X COUGAR)

RGT Bairstow new to the RL last autumn, and is one of the highest yielding wheats on the market.

Performs well across all soil types and is a very good second wheat.

RGT Bairstow is later to mature which should be considered, but for those needing to spread the workload at harvest it is a useful variety.

It is a tall variety with average straw stiffness which is something to bear in mind on the heavier, more fertile land.

Mildew	6	REGION	YIELD
Yellow Rust	8	UK	103
Brown Rust	6	EAST	103
Eyespot	[4]	WEST	103
Septoria Tritici	6.0	NORTH	103
Resistance to lodging (+PGR)	6	Untreated yield	87
Resistance to lodging (- PGR)	6	Light soils	105
OWBM	Yes	Heavy soils	104
Specific Weight	76.8	First Cereal	103
Maturity	-2 -1 0 1 2 3	Second Cereal	103

G4 WINTER WHEAT

WHEAT



RGT BAIRSTOW

Joint highest yielding soft wheat on the RL*

- ✓ Consistent performer
- ✓ Approved for distilling
- ✓ Good disease ratings
- ✓ Wide sowing window and excels when drilled late
- ✓ Excellent second wheat performance



RGT Bairstow.
Recommended List
2022/23.

+ Call us on **01799 533700**,
or visit us at ragtseeds.co.uk



think
SOLUTIONS
think RAGT

* Results base on yield performance across all UK regions.

WINTER WHEAT GROUP 4 (SOFT)

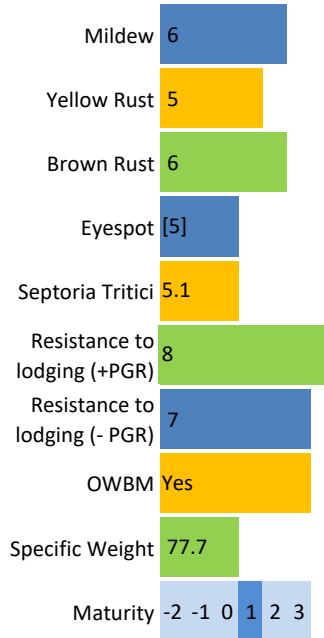
LG SPOTLIGHT (SCRIBE X HORATIO)

LG Spotlight is a high yielding wheat which has given very consistent performance on farm over the last few years.

Exceptional grain quality - its good resistance to sprouting means it holds onto its HFN well in the field during challenging harvests.

LG Spotlight is tall but very stiff strawed. A reasonable disease package but needs watching for Yellow Rust.

In our opinion, LG Spotlight has been overshadowed by LG Skyscraper since making the RL in 2019 and is an under-valued variety on the market. Whilst it needs looking after for yellow rust, its on farm consistency and superb grain quality is hard to



REGION	YIELD
UK	102
EAST	101
WEST	103
NORTH	101
Untreated yield	77
Light soils	101
Heavy soils	102
First Cereal	102
Second Cereal	101


WHEAT



LG SPOTLIGHT

WINTER WHEAT

“QUALITY, QUALITY, QUALITY”

“DON’T MISS THIS”

“GROUNDBREAKING”









LG SPOTLIGHT

Soft feed wheat, with exceptional grain security

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lgseeds.co.uk/lg-spotlight

* AHDB Recommended List 2022/23

Tel: 01472 371471
lgseeds.co.uk enquiries@limagrain.co.uk



WINTER WHEAT GROUP 4 (HARD)

CHAMPION (DSV20122 X REFLECTION)

A new wheat in Autumn 2022, Champion is one of the highest yielding wheats on the market.

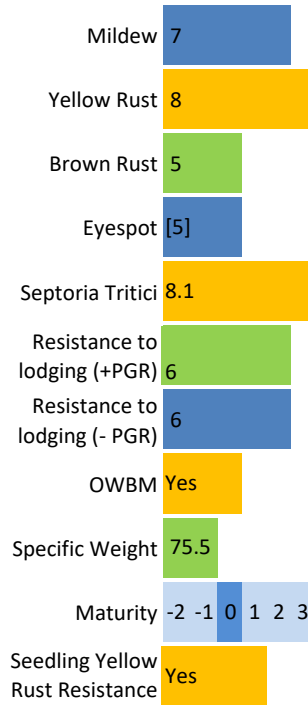
Performs very well on all soil types, particularly heavier land and is also a good second wheat (watch for eyespot in this slot).

Champion is a very clean variety with good disease scores all round.

It is relatively tall (88cm) so a good PGR program is advised and not to be drilled before mid-september.

Its vigorous growth habit makes it competitive against grassweeds.

Champion was a farm favourite for sowing last season and we expect it will be a popular choice again this autumn.



REGION	YIELD
UK	106
EAST	107
WEST	106
NORTH	102
Untreated yield	93
Light soils	106
Heavy soils	107
First Cereal	106
Second Cereal	107

WORLD CHAMPION

THE WHEAT TO BEAT

WHEAT



THE HIGHEST YIELDING WHEAT IN THE WORLD*

DSV CHAMPION GROUP 4 – HARD

The ultimate barn filler with **list topping** yields
 Orange blossom midge resistance
 Robust resistance genetics against yellow rust
 Impressive scores for Septoria tritici



Innovation for your growth

dsv-uk.co.uk

* The highest wheat yield is 17.95 tonnes/ha (39572.97 lbs/ha) and was harvested from 8.2920 ha (20.49 acres) by Tim Lamyman (UK) in Louth, Lincolnshire, UK, on 10 August 2022. Data from Guinness World Records.

WINTER WHEAT GROUP 4 (HARD)

KWS DAWSUM (KWS KERRIN X COSTELLO)

Along with Champion, KWS Dawsum was a very popular variety last autumn with 16% market share and excellent yields.

Many of you will know its parents KWS Kerrin and Costello, combining excellent yield and grain quality as well as its suitability as a second wheat.

Suitable for early drilling from the 7th September onwards.

One of the shorter, stiff strawed varieties (84cm) making it a good choice on heavier land.

With a strong agronomic package, KWS Dawsum is a low risk variety and an excellent barn filler!

		REGION	YIELD
Mildew	8	UK	104
Yellow Rust	9	EAST	103
Brown Rust	7	WEST	105
Eyespot	[6]	NORTH	105
Septoria Tritici	6.4	Untreated yield	95
Resistance to lodging (+PGR)	7	Light soils	105
Resistance to lodging (- PGR)	7	Heavy soils	104
OWBM	No	First Cereal	104
Specific Weight	80.0	Second Cereal	105
Maturity	-2 -1 0 1 2 3		
Seedling Yellow Rust Resistance	Yes		

Now that's a special combination!



KWS DAWSUM

- Exceptional specific weight (80.0 kg/hl)
- Very high yield potential across all regions of the UK
- Super flexible on farm with a wide sowing window



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WINTER WHEAT GROUP 4 (HARD)

GRAHAM (PREMIO X EXPERT)

Graham has been on the RL since 2016 but still has a loyal following on farm due to its consistency.

An excellent first wheat, suitable for early drilling with a very stable disease package and untreated yield of 93%.

Good grain quality and reasonably early to mature.

		REGION	YIELD
Mildew	6	UK	102
Yellow Rust	8	EAST	101
Brown Rust	5	WEST	105
Eyespot	[4]	NORTH	102
Septoria Tritici	6.7	Untreated yield	93
Resistance to lodging (+PGR)	8	Light soils	102
Resistance to lodging (- PGR)	7	Heavy soils	102
OWBM	No	First Cereal	102
Specific Weight	77.6	Second Cereal	102
Maturity	-2 -1 0 1 2 3		
Seedling Yellow Rust Resistance	No		

GLEAM (HEREFORD X KWS KIELDER)

Despite being on the market since 2018, Gleam is still one of the most popular varieties on farm which held a respectable market share of 7% in autumn 2021.

Wide drilling window from 1st September - Mid February.

Gleam offers great flexibility on farm due to its high yields and excellent performance in both the first and second wheat position.

Good disease package with an untreated yield of 84% but needs watching for yellow rust.

		REGION	YIELD
Mildew	7	UK	103
Yellow Rust	5	EAST	103
Brown Rust	6	WEST	104
Eyespot	[5]	NORTH	103
Septoria Tritici	5.7	Untreated yield	84
Resistance to lodging (+PGR)	7	Light soils	103
Resistance to lodging (- PGR)	7	Heavy soils	103
OWBM	Yes	First Cereal	103
Specific Weight	77.3	Second Cereal	103
Maturity	-2 -1 0 1 2 3		
Seedling Yellow Rust Resistance	No		

adaptable

(adj.) able to change in order to suit different conditions



GLEAM adapts to all soils, all regions, all seasons.

Flexible drilling window • High yields • Stable yields



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Email: customer.services@syngenta.com Website: www.syngenta.co.uk



WINTER WHEAT GROUP 4 (HARD)

KWS CRANIUM (KWS CRISPIN X KWS KIELDER)

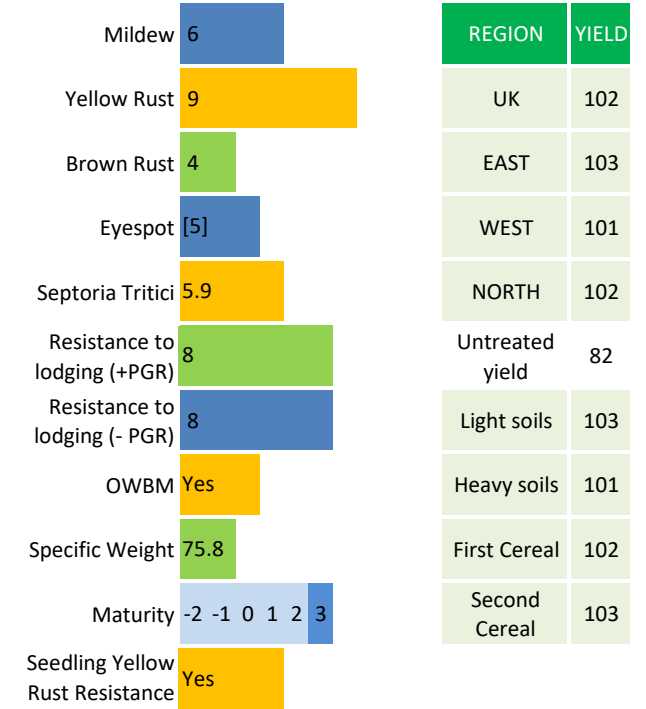
KWS Cranium was added to the RL in for autumn 2021 and should not be overlooked by some of the higher yielding wheats.

With a double 8 for standing, KWS Cranium is the stiffest variety on the RL.

It performs exceptionally well in the later drilled slot - an ideal choice after later harvested crops such as potatoes.

Its fast speed of development and vigorous growth habit makes it very competitive against grassweeds.

A later maturing variety which helps spread the workload at harvest.



The thinking farmer's wheat!



KWS CRANIUM

- Exceptionally stiff strawed
- Outstanding late drilled performance
- Excellent combination of yield, yellow rust and OWBM resistance



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WINTER WHEAT GROUP 4 (HARD)

LG TYPHOON (LG GARUS X LGW88)

LG Typhoon was new to the market last autumn and is an excellent all-rounder which offers a low risk variety to have in the mix on farm.

It's slower growth habit in the autumn makes it suitable for early drilling, and it performs very well in the second wheat position.

LG Typhoon performs particularly well on lighter soils.

With an untreated yield of 92% and a rating of 7.3 for Septoria Tritici, LG Typhoon is a useful variety to have on farm for hard/feed wheat growers.

		REGION	YIELD
Mildew	6	UK	101
Yellow Rust	9	EAST	101
Brown Rust	6	WEST	100
Eyespot	[6]	NORTH	101
Septoria Tritici	7.3	Untreated yield	92
Resistance to lodging (+PGR)	7	Light soils	102
Resistance to lodging (- PGR)	7	Heavy soils	100
OWBM	Yes	First Cereal	100
Specific Weight	77.1	Second Cereal	103
Maturity	-2 -1 0 1 2 3		
Seedling Yellow Rust Resistance	Yes		



READY FOR THE FUTURE



LG TYPHOON WINTER WHEAT

- Consistently High Yielding over Regions & Seasons
- Excellent Disease Resistance
- Suitable for Early Drilling & OWBM Resistant



lgseeds.co.uk/lg-typhoon



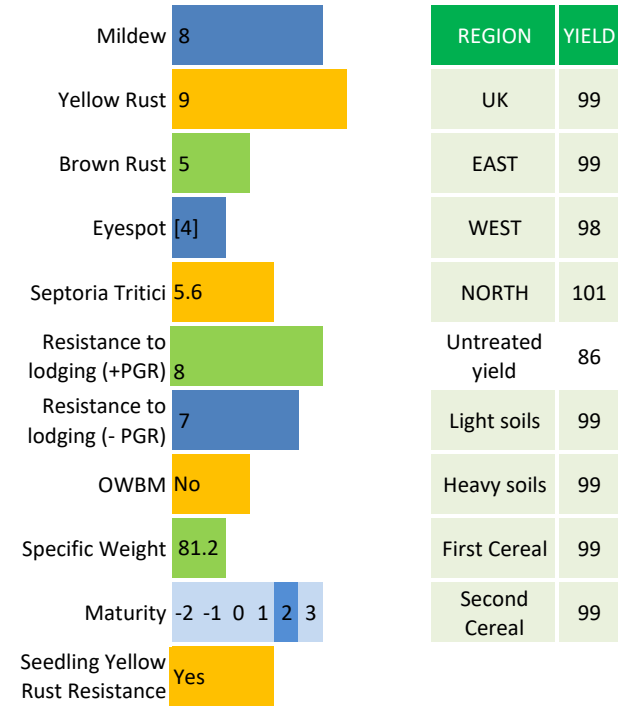
COSTELLO (W151 X TIMARU)

Like Graham, Costello has been on farm since 2015 but still remains a popular choice on farm.

Its solid disease resistance and superb grain quality, has given Costello many loyal growers and strong demand from end users.

Performs well across all soil types and stiff straw.

Whilst the market share of Costello is now diminishing, it still performs very well on farm and we are starting to see it being used in breeding programmes which have produced varieties such as KWS Dawsum and KWS Ultimum.



WINTER OATS

RGT SOUTHWARK

The highest yielding winter oat variety on the AHDB Recommended List.

Offers a good specific weight.

It is a tall strawed variety which needs watching but is early to mature and harvest.

It has very good resistance to the common strains of Crown Rust which contributes to its high untreated yield of 96% but it is susceptible to mildew.

Mildew (1-9)	4	REGION	YIELD
Crown Rust (1-9)	8	Breeder	RAGT
Resistance to Lodging (-PGR)	5	UK yield (% treated control)	104
Straw Length without PGR (cm)	128	Unt. yield (% treated control)	96
Maturity	-2 -1 0 1 2 3	Kernel content (%)	72.6
		Specific Weight (kg/hl)	53.9
		Screenings (2.0mm)	6.0
		Screenings (1.8mm)	N/A

DALGUISE

An early maturing variety with good specific weight and decent grain quality.

It is a tall variety with relatively weak straw so needs careful management.

Dalguise is susceptible to crown rust and mildew - a robust fungicide program is required for it to reach its full potential.

Mildew (1-9)	4	REGION	YIELD
Crown Rust (1-9)	4	Breeder	Senova
Resistance to Lodging (-PGR)	4	UK yield (% treated control)	101
Straw Length without PGR (cm)	127	Unt. yield (% treated control)	84
Maturity	-2 -1 0 1 2 3	Kernel content (%)	70.9
		Specific Weight (kg/hl)	54.7
		Screenings (2.0mm)	3.6
		Screenings (1.8mm)	N/A

CROMWELL

Cromwell is a NEW variety from Senova for Autumn 2023.

It is a Mascani cross which gives it a high specific weight and kernel content.

It has short, stiff straw but needs watching for mildew.

We hope Cromwell will attract demand from the millers, which will give growers a higher yielding option to Mascani but still producing the good grain quality which Mascani has been renowned for.

Mildew (1-9)	3	REGION	YIELD
Crown Rust (1-9)	5	Breeder	Senova
Resistance to Lodging (-PGR)	[8]	UK yield (% treated control)	102
Straw Length without PGR (cm)	103	Unt. yield (% treated control)	86
Maturity	-2 -1 0 1 2 3	Kernel content (%)	74.9
		Specific Weight (kg/hl)	55.3
		Screenings (2.0mm)	5.2
		Screenings (1.8mm)	N/A

MASCANI

Mascani remains the most popular milling oat variety with strong demand from millers.

The highest kernel content of all varieties.

Very low screenings.

Mascani has the best all round disease package of all the husked winter oats.

Mildew (1-9)	6	REGION	YIELD
Crown Rust (1-9)	5	Breeder	Senova
Resistance to Lodging (-PGR)	6	UK yield (% treated control)	95
Straw Length without PGR (cm)	122	Unt. yield (% treated control)	84
Maturity	-2 -1 0 1 2 3	Kernel content (%)	75.7
		Specific Weight (kg/hl)	53.5
		Screenings (2.0mm)	2
		Screenings (1.8mm)	N/A

WINTER RYE

HYBRID WINTER RYE

KWS TAYO

The highest yielding hybrid rye variety on the market.

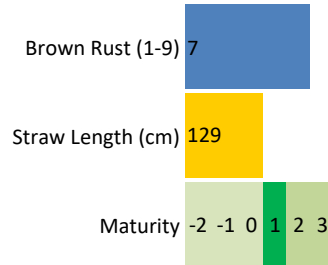
KWS Tayo is a multi-purpose hybrid suitable for AD or grain.

Excellent stem stiffness with high straw yields.

Benefits from the KWS PollenPlus technology to minimise ergot infection.

Good Drought tolerance and high harvest index (grains/ear).

Seed Rates (seeds/m²):
Sept - 200-220 seeds/m²
Oct - 250+ seeds/m²



REGION	YIELD
Breeder	KWS
UK yield (% treated control)	104
Protein (%)	9.1
HFN	267
Specific Weight (kg/hl)	77.0
Wholecrop silage maturity (% DM)	30-40

Join the #ryevolution!



KWS TAYO

- Highest grain yielding rye on the AHDB Descriptive List
- New generation PollenPlus® hybrid with excellent stem stiffness
- Multi-purpose hybrid (AD or grain; feed, flour and distilling)



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THE FUTURE
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HYBRID WINTER RYE

HYBRID WINTER RYE

KWS SERAFINO

High yielding variety offering maximum performance for both wholecrop or grain production.

Multi-purpose variety suitable for both AD and grain.

Benefits from the KWS PollenPlus technology to minimise ergot infection.

Excellent stem stiffness and brown rust resistance.

Seed Rates (seeds/m2):

Sept - 200-220 seeds/m2

Oct - 250+ seeds/m2

Brown Rust (1-9)	7	REGION	YIELD
Straw Length (cm)	131	Breeder	KWS
Maturity	-2 -1 0 1 2 3	UK yield (% treated control)	101
		Protein (%)	9.1
		HFN	269
		Specific Weight (kg/hl)	77.3
		Wholecrop silage maturity (% DM)	30-40

SU PERFORMER

SU Performer has been on the market since 2017 and is an established variety in the market.

It can be grown for either AD or grain production.

Good lodging resistance.

Brown Rust (1-9)	4	REGION	YIELD
Straw Length (cm)	130	Breeder	Saaten Union
Maturity	-2 -1 0 1 2 3	UK yield (% treated control)	100
		Protein (%)	9.2
		HFN	245
		Specific Weight (kg/hl)	77.9
		Wholecrop silage maturity (% DM)	30-40



OILSEED RAPE

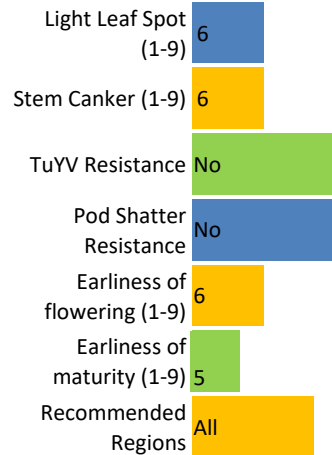
CONVENTIONAL OILSEED RAPE

ACACIA - CONVENTIONAL

Acacia is the most popular conventional variety on the market at present, with good autumn and spring vigour.

It is a Anastasia cross which has attracted many traditional Anastasia growers over the last couple of seasons. Suitable for drilling from end July - mid September.

Consistent performance on farm with good yields and straw strength.



AGRONOMIC DATA	
Breeder	LG
UK Output (%)	101
E/W Output (%)	101
Lodging Resistance	8
Plant Height (cm)	141
Oil Content	45.0%
RL status	2023/24

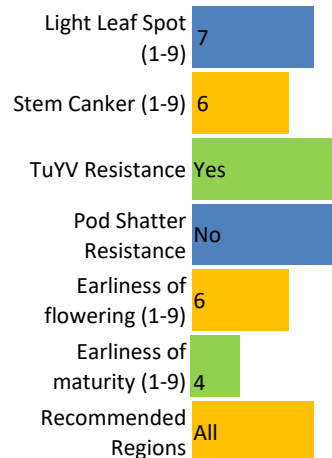
ANNIKA - CONVENTIONAL

Annika was new to the market in Autumn 2022.

It offers growers good yields with a strong disease package and TuYV resistance.

It is suited to earlier drilling than the Acacia, it can be drilled from mid-July through to mid-September.

Relatively early to flower but slightly later to mature with excellent stem stiffness.



AGRONOMIC DATA	
Breeder	LG
UK Output (%)	101
E/W Output (%)	101
Lodging Resistance	8
Plant Height (cm)	143
Oil Content	45.0%
RL status	2023/24



ANYTHING BUT CONVENTIONAL



ACACIA

The UK's most popular conventional



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Limagrain

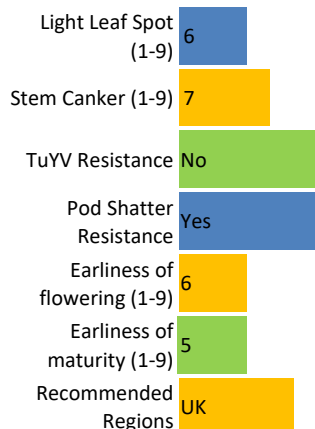
CONVENTIONAL OILSEED RAPE

DK IMPRINT CL - CLEARFIELD

DK Imprint is a clearfield variety with good agronomic characteristics, although there are some other higher yielding options.

Rapid autumn and spring vigour to help grow away from CSFB adult, larvae or any other threats.

Double Phoma and Pod Shatter Resistance.



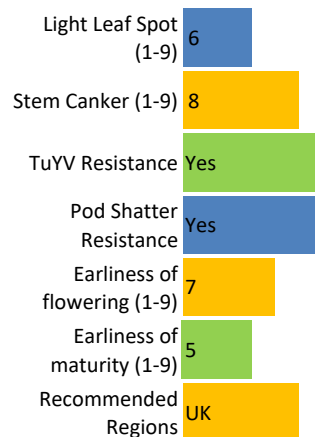
AGRONOMIC DATA	
Breeder	Dekalb
AHDB UK Output (%)	4.78t/ha
Lodging Resistance	8
Plant Height (cm)	153
Oil Content	43.6%
RL status	2023/24

MATRIX CL - CLEARFIELD

Matrix CL is the most popular and highest yielding clearfield variety on the market.

It has good autumn vigour, relatively early to flower and strong lodging resistance.

With pod shatter resistance, RLM7+ resistance to stem canker and TuYV resistance, Matrix CL has an excellent overall agronomic package.



AGRONOMIC DATA	
Breeder	DSV
UK Output (%)	98
E/W Output (%)	99
Lodging Resistance	[8]
Plant Height (cm)	152
Oil Content	45.6%
RL status	2023/24

HYBRID OILSEED RAPE

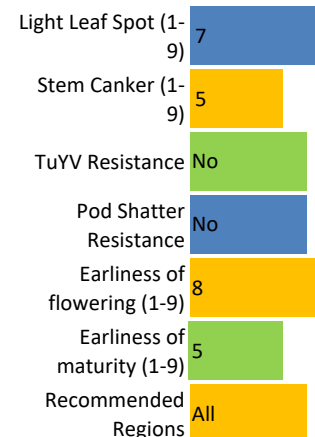
TURING - HYBRID

Turing is NEW for autumn 2023 - it is joint highest for yield with Attica on the AHDB RL for 2023/24.

It is short and stiff with excellent standing power.

It is a very early flowering variety with good resistance to Light Leaf Spot but moderately susceptible to Stem Canker.

Good Verticillium Wilt resistance.



AGRONOMIC DATA	
Breeder	LSPB
UK Output (%)	107
E/W Output (%)	107
Lodging Resistance	[8]
Plant Height (cm)	144
Oil Content	44.3%
RL status	2023/24

ATTICA - HYBRID

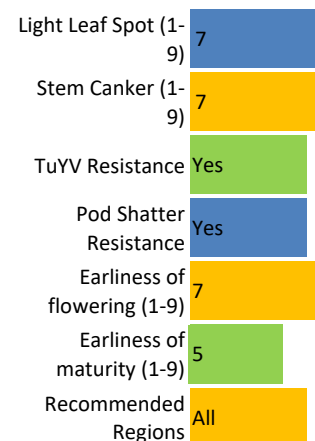
NEW for this autumn, Attica is joint top for gross output alongside Turing.

TuYV, RLM7 and pod shatter resistance. It has good Verticillium Wilt resistance.

Good stem stiffness and lodging resistance.

Early to flower but medium for maturity.

Attica is another solid, all round performer out of the current Limagrain oilseed rape portfolio. It is suitable for drilling from beginning of August through to early September.



AGRONOMIC DATA	
Breeder	LG
UK Output (%)	107
E/W Output (%)	107
Lodging Resistance	[8]
Plant Height (cm)	149
Oil Content	45.3%
RL status	2023/24



COMBINING EXCELLENCE

TURING

CRACK THE YIELD CODE



TURING OILSEED RAPE

#combiningexcellenceinrapeseed

SCAN HERE
FOR INFO



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“THE NEXT BIG THING!”

Ben, Lincolnshire



ATTICA FULLY LOADED HYBRID OSR

LG's Highest Yielding Variety



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Limagrain

OILSEED RAPE

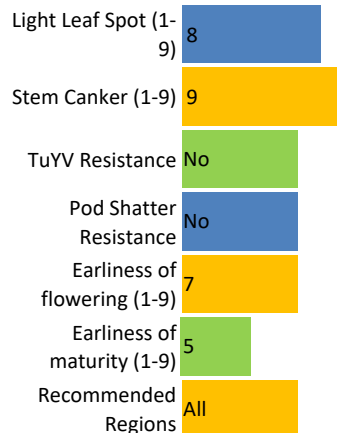
HYBRID OILSEED RAPE

VEGAS - HYBRID

NEW for this autumn, Vegas is a high yielding hybrid with particularly good gross output in the East/West at 106%.

It is an early flowering variety with medium maturity and good stem stiffness.

Excellent all round disease resistance - Vegas has the NEW RlmS phoma resistance gene making it the best variety for stem canker with a rating of 9.



AGRONOMIC DATA

Breeder	LSPB
UK Output (%)	105
E/W Output (%)	106
Lodging Resistance	[8]
Plant Height (cm)	144
Oil Content	45.3%
RL status	2023/24

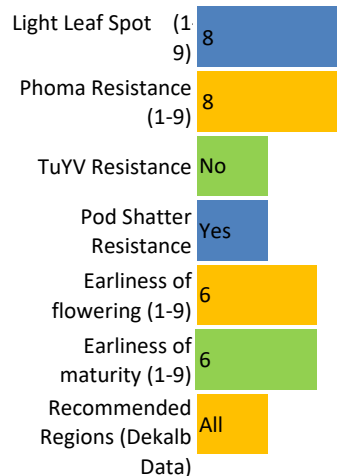
DK EXSTAR - HYBRID

DK Exstar benefits from the Dekalb pod shatter resistance gene and Double Phoma Resistance.

Suitable for early drilling.

Rapid autumn and spring development to combat CSFB and larvae pressure.

Available on establishment scheme. DK Exstar has proven itself on farm over the last few seasons with very consistent performance



AGRONOMIC DATA

Breeder	Dekalb
Dekalb Gross Output 2022	5.68 t/ha
Lodging Resistance	9
Plant Height (cm)	162
Oil Content	45.9%
RL status	No

DK Exstar

Risk buster



OILSEED RAPE



The #DEKALBdifference in OSR

For reliability that really adds up choose DK Exstar

- Class-leading phoma & light leaf spot resistance **8 + 8**
- Exceptional lodging resistance & stem stiffness **9 + 8**
- Ideal autumn and spring growth habit **Rapid + Rapid**

The first choice for early drilling



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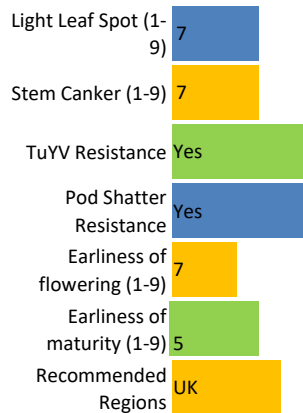
HYBRID OILSEED RAPE

LG AUCKLAND - HYBRID

LG Auckland is a high yielding hybrid variety which was added to the RL in Autumn 2022.

Good autumn vigour and fast to grow away in the spring - can be drilled from early August through to the end of September. It is early to flower and relatively early to mature.

LG Auckland benefits from the fully loaded traits from the Limagrain breeding program - TuYV, pod shatter and RLM7 phoma resistance genes.



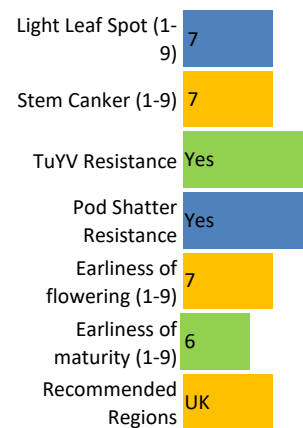
AGRONOMIC DATA	
Breeder	LG
UK Output (%)	106
E/W Output (%)	106
Lodging Resistance	[8]
Plant Height (cm)	150
Oil Content	45.3%
RL status	2023/24

AMBASSADOR - HYBRID

Ambassador has been on the market since 2020 and is now one of the most popular varieties last autumn.

It has excellent autumn and spring vigour suited for drilling from mid August - mid September.

Ambassador benefits from the fully loaded traits from the Limagrain breeding program - TuYV, pod shatter and RLM7 phoma resistance genes.



AGRONOMIC DATA	
Breeder	LG
UK Output (%)	106
E/W Output (%)	106
Lodging Resistance	8
Plant Height (cm)	148
Oil Content	44.8%
RL status	2023/24



DART from DSV – Right on target

DART – A significant step forward in DSV’s reliable, simple to grow, high output oilseed rape varieties.

- High yield and impressive oil content.
- TuYV protection with good tolerance to Verticillium wilt.
- HarvestMax technology to minimise pre harvest seed losses.
- Low biomass variety for early maturity and easy harvest.

Source: AHDB Recommended List (E/W) 2023/24



Innovation for your growth

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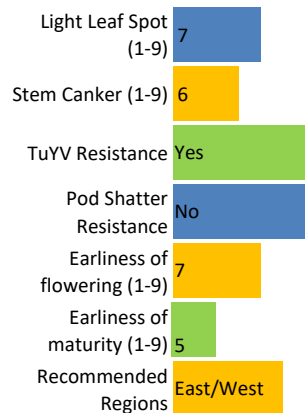
HYBRID OILSEED RAPE

DART - HYBRID

Dart joined the RL in Autumn 2022, it is a high yielding variety with particularly good performance in the East/West region.

Rapid autumn development and strong spring vigour which makes it suitable for later drilling if situations require.

Stiff strawed and good lodging resistance along with TuYV resistance. Dart also benefits from DSV's Harvest Max yield protection traits to reduce seed loss at harvest due to its long, large pod physiology.



AGRONOMIC DATA	
Breeder	DSV
UK Output (%)	102
E/W Output (%)	103
Lodging Resistance	[8]
Plant Height (cm)	145
Oil Content	45.2%
RL status	2023/24

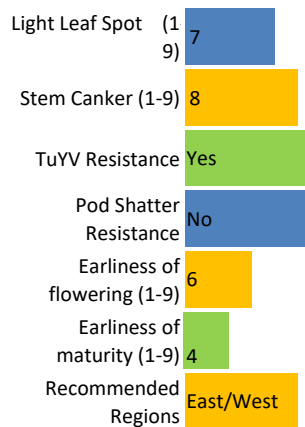
FLEMMING - HYBRID

Flemming was new to the market in autumn 2022 as a hybrid for the East/West region offering high seed yield and oil content.

RLM5 resistance to stem canker and TuYV resistance.

Excellent disease resistance.

Good stem stiffness and resistance to lodging.



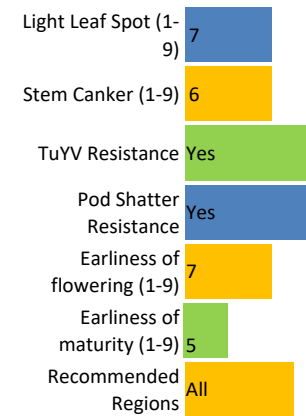
AGRONOMIC DATA	
Breeder	LSPB
UK Output (%)	101
E/W Output (%)	101
Lodging Resistance	[8]
Plant Height (cm)	151
Oil Content	44.5%
RL status	2023/24

AURELIA - HYBRID

Aurelia remains one of the most popular hybrids with very consistent performance on farm and high yields.

Excellent autumn and spring vigour to aid establishment and grow away from early season pest and disease pressure. Suitable for drilling from early August - mid September.

Aurelia benefits from TuYV, pod shatter and RLM7 phoma resistance genes.



AGRONOMIC DATA	
Breeder	LG
UK Output (%)	105
E/W Output (%)	105
Lodging Resistance	8
Plant Height (cm)	145
Oil Content	44.9%
RL status	2023/24

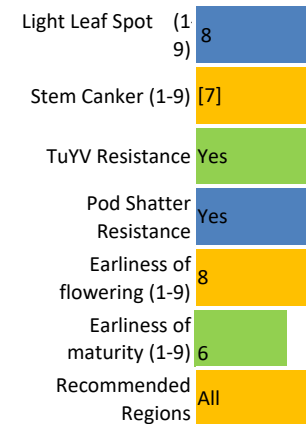
LG AVIRON - HYBRID

LG Aviron is Limagrain's most vigorous variety with exceptional autumn and spring vigour.

Suited for drilling from 2nd week in August - end September.

TuYV, Pod Shatter and RLM7 phoma resistance as well as Limagrain's N-Flex technology.

LG Aviron is early to flower and relatively early to mature.



AGRONOMIC DATA	
Breeder	LG
UK Output (%)	105
E/W Output (%)	105
Lodging Resistance	[8]
Plant Height (cm)	150
Oil Content	44.4%
RL status	2023/24



COMBINING EXCELLENCE

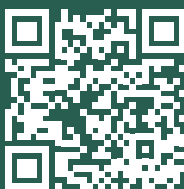
RESISTANCE IS IN THE GENES



**FLEMMING
OILSEED RAPE**

#combiningexcellenceinrapeseed

SCAN HERE FOR INFO



www.lspb.eu

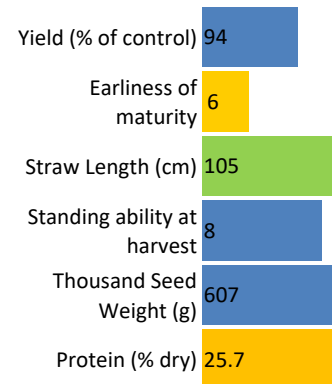
WINTER BEANS

TUNDRA

Despite being on the PGRO descriptive list since 2014, Tundra is a firm favourite for growers wanting to achieve export for human consumption.

A large seed size with a pale hilum.

A short plant with good standing ability.

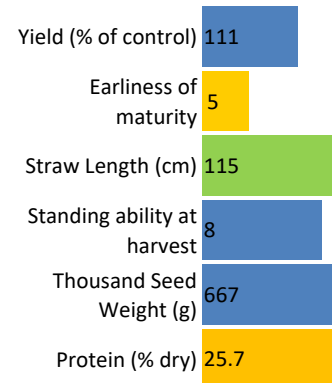


VESPA

Top of the PRGO Descriptive List 2023 for yield.

Slightly later to ripen than Tundra.

Suits both the feed and human consumption market with a good seed size.





The Winter Bean creating a real buzz!

With the highest yields on the PGRO Descriptive List, excellent standing ability and large grain, pale hilum variety Vespa is the perfect choice for your rotation and the feed and export markets.

Winter beans – the perfect fit

Yield benefit for the following wheat crop

Low growing cost

Good break crop gross margin

Good opportunity to control grass weeds

Ready markets for feed and export use

Other Senova winter bean varieties:



Tel 01223 890777 • info@senova.uk.com • @SenovaLtd
www.senova.uk.com

SEED DRESSINGS

SINGLE PURPOSE



Beret Gold – Single purpose dressing for control of a range of seed and soil borne diseases in wheat, barley, oats, rye and triticale.

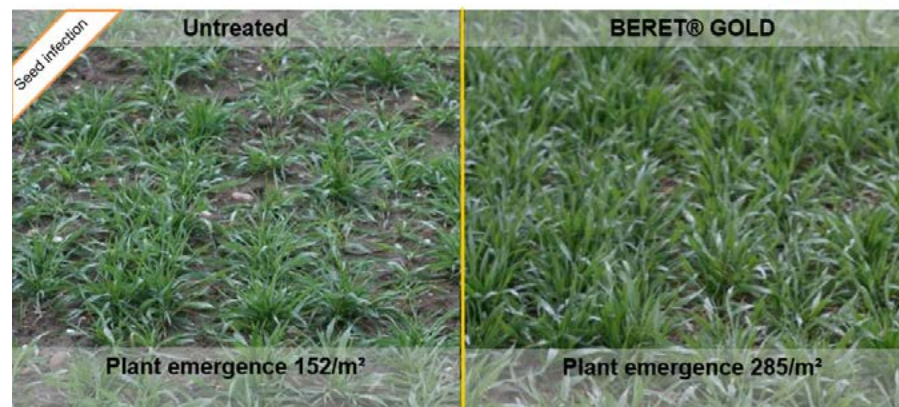
Active Ingredients: Fludioxonil

- Beret Gold is our single purpose dressing for all wheat seed.
- Single purpose treated seed protects from seed borne diseases, reduces the impact of soil-borne pathogens, enhances crop establishment and lays the foundations to maximise crop yield and quality.
- Fludioxonil protects against seedling blight, snow mould, fusarium, foot and root rot, rhizoctonia, Septoria nodorum, bunt, seed and soil-borne common bunt.



The value of a seed treatment

Provides protection from Fusarium infected seed



Source: Syngenta Trial 50% seed infection with *F. graminearum*





Raxil Star – winter barley is a specialist fungicide seed treatment for winter barley (must not be planted between 1 February and 31 August). It protects your crop from a broad spectrum of seed-borne diseases, helping to ensure excellent establishment and improve crop performance and quality. Raxil Star is the best single purpose dressing for winter barley.

- Controls seed-borne net blotch, loose smut, leaf stripe and covered smut
- Reduces Fusarium and microdochium seedling blight and stem-base browning
- Optimises establishment
- Allows retrieval of infected certified seed stocks

For more information on Raxil Star please see www.bayercropscience.co.uk



SPECIALIST DRESSINGS



Vibrance Duo – Winter wheat, winter barley, winter triticale, winter rye, spring barley, spring wheat and spring oats. Vibrance Duo is a fungicide SDHI-based (succinate dehydrogenase inhibitors) seed treatment for better establishment and rooting. Vibrance Duo offers an opportunity to give crops a vibrant start from outstanding control of key diseases, aiding rapid crop establishment with improved rooting.

Vibrance Duo has clear benefits for improving root growth, which combined with its excellent disease control, helps the crop achieve its full genetic potential.

Benefits include:

- Improved scavenging for soil moisture
- Improved uptake of nutrients
- More resilient plants – to stress, pests and diseases
- Maximised prospects for successful over-wintering
- Controls a broad spectrum of diseases that threaten crop establishment including Fusarium, Microdochium, Bunt, Loose Smut and Rhizoctonia
- Faster emergence
- SDHI sprays can still be applied – sedaxane forms a protective zone around the seed, root and stem base in the soil zone
- Low dust-off
- Compatible to be co-applied with Latitude

For further information, please see: www.syngenta.co.uk/vibrance-duo



Kinto Plus – Winter wheat, winter barley, rye, triticale, oats. Active substances: Xemium 33.3g/L, fludioxonil 33.3g/L and triticonazol 33.3g/L

Kinto Plus was a new from BASF product for Autumn 2022, it offers a unique combination of three complimentary active ingredients which gives outstanding control of all major seed and soil-borne diseases which threaten crop establishment and seed quality. Comprehensive and long lasting efficacy against all seed borne seed diseases. Enhanced rooting and germination ensures better crop establishment. Optimal protection against all weather conditions. Securing yield potential.

In our opinion, Kinto Plus on winter barley is worth considering to aid crop emergence and establishment.

For further information on Kinto Plus, please see: www.agrcentre.basf.co.uk

CHANGE YOUR PERSPECTIVE FOCUS ON ROOT HEALTH & ENHANCE ESTABLISHMENT

Now approved for use
on the following crops:

- ✓ Winter wheat
- ✓ Spring wheat
- ✓ Winter barley
- ✓ Spring barley



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Tel: 01223 883400 Fax: 01223 882195 Technical Enquiries Tel: 0800 169 6058 Email: customer.services@syngenta.com Website: www.syngenta.co.uk

VIBRANCE® Duo, ROOTING POWER™ and the SYNGENTA logo are Trademarks of a Syngenta Group Company. VIBRANCE® Duo (MAPP 17838) contains fludioxonil and sedaxane. Use plant protection products safely. Always read the label and product information before use. For further product information including warning phrases and symbols refer to www.syngenta.co.uk March 2021. 11403

SPECIALIST DRESSINGS



Latitude – winter wheat & barley

125 g / litre (11.83% w/w) of Silthiofam. The only specialist take-all seed treatment:

- Maximises yield and quality wherever take-all is a problem
- Increases yield and quality of winter cereals
- Provides facility to drill second wheat earlier
- Improves nutrient and water uptake
- Reduces take all
- Must be co-applied with a single purpose treatment

www.monsanto-ag.co.uk



Signal 300 ES – Winter wheat and winter barley

Active Substances: 300 g/l cypermethrin

Signal 300 ES is an insecticide seed treatment, which by contact and ingestion, gives protection against wheat bulb fly and wireworm.

It is the only seed dressing available for the control of wheat bulb fly and wireworm after the loss of Austral Plus and provides a 'zone of protection' around the seed, improving crop establishment even under the most challenging of pest infestations. Signal 300 ES provides excellent coverage and distribution on the seed and is compatible with a range of fungicide seed treatments.

NUTRITIONAL SEED DRESSINGS

Where do nutritional seed dressings help?

- Where soil or leaf analysis has shown deficiency
- High soil pH
- Soils with high organic matter/receive regular manure applications
- Sandy soils
- Cold/Wet soils

Early season nutrient roles within plants

- Phosphate - Key for root and shoot development.
- Manganese- Essential for chlorophyll synthesis and lignin production.
- Copper – Lignin synthesis and plant respiration.
- Zinc – responsible for the utilisation of auxins which regulate plant growth and helps with disease tolerance.



Manganese Trio - suitable for all cereals, pulses, oilseed rape and maize.

Treating seed with Manganese is the most effective way to eliminate cereals from early season deficiency to aid plant emergence and crop establishment. It also gives flexibility for foliar autumn applications when field conditions are challenging and travelling is an issue.

Manganese Trio Seed Treatment Analysis

- 10% Soluble Manganese (Mn)
- 16.3% Sulphur Trioxide
- 1.0% Copper (Cu)
- 0.5% Zinc (Zn)



Kick Off – suitable for all cereals, pulses, oilseed rape and maize.

Kick Off Seed Treatment Analysis

- 180g/l – Phosphate/Phosphite
- 80g/l – Manganese
- 16g/l – Zinc
- 20g/l – Nitrogen
- 40g/l – Potassium

Kick Off is a phosphate/phosphite based seed treatment which promotes both root and shoot development to aid plant emergence and establishment. Kick Off is suitable for all soil types and is particularly useful in later drilled situations and where seedbed conditions are challenging.

As well as seedbed conditions, soil pH has a big impact on nutrient availability. For example, the Yorkshire Wolds are renowned for their calcareous, chalky soils and naturally have a high soil pH. Subsequently, nutrients such as phosphate, manganese, copper and zinc are easily locked up from plant available forms, even if soil analysis results show adequate indices.

Applying these nutrients to your seed helps to eliminate early season deficiency, enhance plant emergence and build yield potential.



Zest - a phosphite based seed treatment for beans brought to market in 2021. Similar to Kick Off in cereals, it is a phosphite based dressing to aid early rooting. This product contains phosphite, potassium, sulphur, manganese, zinc, amino acids and molybdenum – an important nutrient for successful pollination.





KICK-OFF PLUS

What you need on your seed

CONVERTS A GOOD YIELD INTO A GREAT ONE



NEW UPGRADED SEED TREATMENT WITH INCREASED AMINO ACIDS & VITAMINS

-  Kick-Off Plus aids emergence & healthy growth
-  Encourages root interaction with beneficial soil microbes and fungi, improving nutrient uptake efficiency
-  Increased amino acids + 8 key nutrients including phosphites, manganese & zinc
-  Boosts root biomass and stress tolerance

For further details please speak to your Mortimer's contact

fielder
first for growth

ADVERTORIAL

NUELLO[®] iN: ALWAYS ON Nitrogen Generation

Use to improve crop nitrogen use efficiency to help optimise farm nitrogen programmes

syngenta.



Recommended on Winter barley

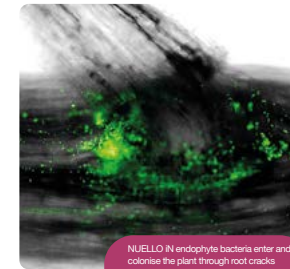
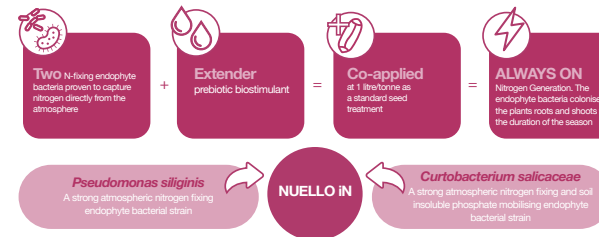
Recommended on Winter wheat

- NUELLO iN is a biological seed treatment containing a unique blend of nitrogen fixing endophyte bacteria that are proven to capture nitrogen directly from the atmosphere
- NUELLO iN endophyte bacteria colonise the plant and supply the crop with ALWAYS ON Nitrogen Generation for the duration of the season
- NUELLO iN enhances crop biomass and root development for improved nutrient scavenging from the soil

Trials have shown NUELLO iN nitrogen benefit equivalent to up to 30 kg N/ha

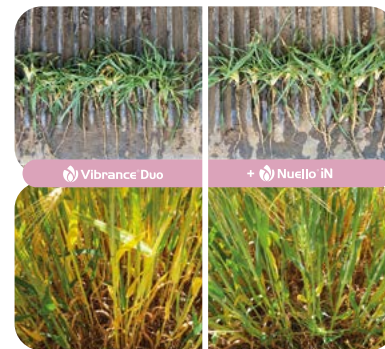
What is NUELLO iN

NUELLO iN (endophytes) + Extender = NUELLO iN Seed Treatment



NUELLO iN endophyte bacteria enter and colonise the plant through root cracks and fix nitrogen from the atmosphere for the duration of the season

NUELLO iN benefit when nutrients become limiting:



- 2022 was an extremely hot and dry season. The main nitrogen timing in both the winter wheat and hybrid barley nitrogen trials at our light land, Newark site was applied during extremely dry April weather limiting nitrogen uptake
- NUELLO iN treated plots displayed clear rooting benefits, clear greening benefits, higher chlorophyll levels and reduced crop stress to extend the grain fill period
- NUELLO iN gave an average yield benefit of 0.5 t/ha in the winter wheat and 0.3 t/ha in the hybrid barley

SY KINGSBARN hybrid barley NUELLO iN rooting benefit assessed February 2022 and clear greening benefits observed June 2022

When to use NUELLO iN

- 1. Complement current nitrogen strategies:** Apply NUELLO iN to complement standard nitrogen applications as an additional source of N to enhance yields. A great insurance policy especially in situations when nutrients become limiting, for example, dry soil conditions limiting nitrogen uptake
- 2. Manage nitrogen limiting situations:** Use NUELLO iN on soil types and in rotational positions where access to nitrogen from the soil may be limited. Trials have shown NUELLO iN has an excellent yield benefit on light/shallow land sites and in second cereals
- 3. If synthetic N input reductions are planned** apply NUELLO iN to help maintain yield targets. Trials have shown NUELLO iN can replace up to 30 kg N/ha*

FIND OUT MORE AT SYNGENTA.CO.UK @SYNGENTAUK

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*Consult a FACTS Qualified Adviser for advice and guidance on nitrogen applications. Trials have shown NUELLO iN can replace up to 30 kg N/ha based on a reduction from the standard 100% nitrogen R2020 recommendation. R2020 recommendations are based on a break-even ratio of 5:1 (cost of fertilizer nitrogen as £/kg N divided by value of grain as £/kg). Recommended not to reduce N in milling wheats to maintain % grain N

Please do not hesitate in contacting Mortimers to arrange a visit to your farm to discuss individual requirements / objectives. Using the best seed treatment available is a sound investment, especially on varieties with specific weaknesses.

SMALL SEEDS

We sell a full range of grass mixtures, game cover and environmental mixes – please get in touch to discuss your requirements.

COMPANION CROPS

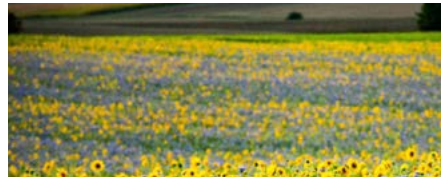


COVER CROPS

GRASS MIXES



GAME COVER



FERTILISERS

To support your growing crops we sell a full range of fertilisers including:

- Nitrogen and Compounds
- Urea Blends
- NPK Blends
- Straights
- Liquids



USEFUL CONTACTS

Stuart Rowley	07887 754790
Jim Wraith	07739 556345
Georgina Beevers	07807 015729
Tom Batten	07586 679326
Lucy Rowley	07932 646284
David Milns	07831 094211



Mortimers

13 Pexton Road, Kelleythorpe Industrial Estate, Driffield, East Yorkshire YO25 9DJ
01377 253314 www.jamesmortimer.co.uk



AGRICULTURAL Laboratory Services



Official DEFRA & Advisory Seed Analysis

- Seed Identification
- Germination – full grow on or rapid tetrazolium viability
- Vigour testing
- Purity
- Thousand grain weight
- Screenings
- Stem Nematode

INDEPENDENT SEED & GRAIN ANALYSIS

Official DEFRA licensed
seed testing station

Tel: 01377 808 105

Unit 13, Pexton Road, Kelleythorpe
Industrial Estate, Drifffield YO25 9DJ

Disease Analysis

- Fusarium
- Loose Smut
- Bunt
- Leaf Stripe
- Ascochyta
- Pea Bacterial Blight

Grain Analysis

- Moisture
- Protein
- Hagberg
- Gluten
- Admixture
- Natural Weight
- Oil content
- Nitrogen
- Infestation
- Analysis of borage, Crambe and other oilseeds

Mycotoxin Analysis

- Don, Zon and Ochratoxin tests

www.agriculturallaboratoryservices.co.uk