

KWS UK

2025 Variety Guide



SEEDING
THE FUTURE
SINCE 1856

KWS



Welcome to the 2025 KWS Variety Guide

We're proud to showcase our diverse crop portfolio of wheat, barley oilseeds, hybrid rye, peas, oats, maize and sugar beet. In addition the information needed to support farmers and advisers to make variety choices based on end use market, regional suitability and the practical aspects of variety management that to maximise productivity on farm is an integral part of this guide.

There's plenty of new and exciting products to look out for with a host additions to Recommended and Descriptive Lists in the last twelve months highlighting the pace of innovation in our breeding pipelines. This is particularly evident with 13 new additions added to the AHDB 2025/26 RL including eight new wheat varieties and four new barleys covering all Groups. Our pages provide detailed information about each variety including key performance metrics and regional performance.

This year we continue with our philosophy of Productivity² which reinforces the importance of production, yield and gross margin in farming. Not only do we confirm our commitment to producing varieties that deliver value but our pages also highlight how KWS varieties are a staple of what we consider to be a Productivity² variety.

As always, we wish you a safe and productive growing season and look forward to seeing you at summer events.



Ben Bishop
Head of KWS UK

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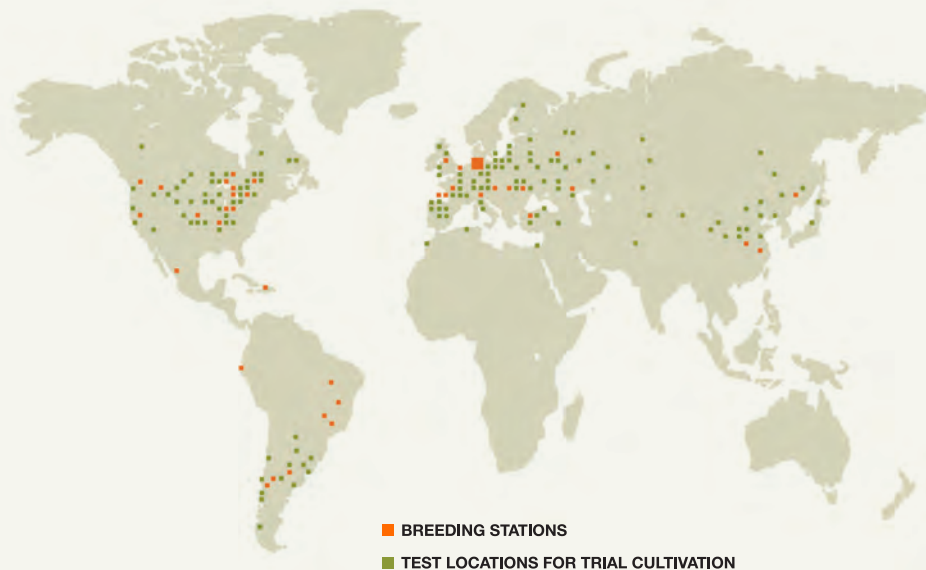
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KWS GROUP

Serving farmers for **over 165 years**

KWS is one of the world's leading seed suppliers, offering innovative solutions to farmers in 70 countries. Focusing on growers' challenges and responding with innovative tools, technology and hybrid performance, KWS provides seed with high-performing genetics supporting today's progressive farmers and producers.



KWS seeds the future

Our high-yield seeds and extensive knowledge have made us a trusted partner for generations of farmers – for generations. In this way, we contribute to solutions for the nutrition of a steadily growing world population. KWS invests almost 20% of its net sales on research. Our portfolio includes 11 out of the 13 most cultivated crops worldwide.



As a subsidiary of the global KWS Group, KWS UK focuses on breeding and supplying seeds for various crops including wheat, barley, maize, beet, oilseed rape, oats, peas and hybrid rye.

KWS UK has been providing growers with innovative new varieties to meet varied end-market needs for over 25 years. Higher yields, superior disease and pest resistance and improved performance in adverse conditions are all key criteria we seek to establish in our product portfolio.

In the UK, we specialise in breeding winter wheat, winter barley and spring wheat while also conducting trials for oilseed rape, spring barley, hybrid rye, maize and beet on behalf of the KWS Group. Our head office and cutting-edge seed production facility are based in Thriplow, Cambridgeshire. Additionally, in the heart of the UK's prime maize-growing region in Gloucestershire, we operate our dedicated maize office and maize demonstration field.

To support our research and development, we cultivate 200 hectares of locally rented land for trials and seed multiplication. Additionally, we operate three regional product development sites where we showcase our leading crop varieties and conduct extensive agronomy trials.



PRODUCTIVITY² SQUARED

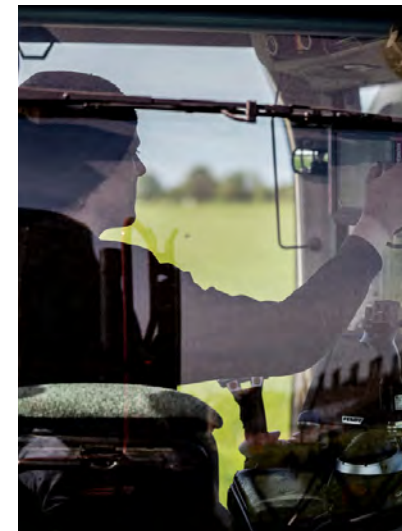
Field to future

What is Productivity² Squared?

Productivity² takes KWS varieties to even higher levels of production potential. Yield and profit-potential are fundamental to farmers' economic success, resilience, competitiveness and ability to sustainably meet the demands of a growing population.

Over the years, our plant breeding efforts have prioritised enhanced disease resistance, physical resilience and reduced input requirements. However, we have never lost sight of the importance of yield and profit-potential to growers. With rising production costs, renewed focus on food security and the ongoing drive for sustainable yield.

Genetics and plant breeding innovation are at the core of future agricultural productivity.



We are committed to identifying and developing the genetic components of yield required to fast-track the super-varieties needed to deliver this.

What does this mean for KWS varieties?

Productivity² underpins a variety's ability to maximise margin through consistent yield, quality and marketability. Alongside breeding for high output at KWS, we also integrate traits that create opportunities for input savings, ensuring the best profit potential for growers.

KWS varieties are designed to maximise margin by offering key advantages, such as:

- Strong disease resistance for more efficient input use.
- Excellent standing power to reduce reliance on PGR's.
- Early harvest capability for improved rotational flexibility and timely cultivations.
- Robust establishment and early vigour to enhance weed competition.

We call these varieties the **'next generation'** varieties. You'll be able to find out more about them throughout this guide.

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WHEAT



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Winter Wheat: a **key player** in UK agriculture

Winter wheat plays a vital role in UK agriculture, underpinning food security and supporting local economies. Each year, UK flour millers process around 5 million tonnes of wheat to produce over 4 million tonnes of flour, with approximately 60% used for bread making. Despite its visibility on supermarket shelves, pre-packed flour accounts for just 4% of the market. Around 5.5% of total flour production is exported annually, while other key consumers include the biscuit and cake industries, starch manufacturers and food ingredient companies (Data source: UK Flour Millers). The remaining wheat crop is used for export and animal feed.

Looking ahead, grain markets in 2025 and beyond are expected to remain volatile. For growers, selecting the right wheat variety has never been more crucial. At KWS, we are committed to delivering genetic diversity through our wheat breeding programmes enabling farmers to optimise yield, grain quality and field performance. By choosing the best combinations, growers can maximise gross margins and secure the profitability of this essential crop within their rotation.

Introducing the next generation of KWS wheats

KWS has introduced seven new winter wheat varieties to the AHDB 2025/26 Recommended List, covering all Groups and sectors while setting new benchmarks for yield, quality and consistency. These latest genetics redefine variety potential within the traditional Group system, with many additions offering unprecedented dual-purpose versatility.



At KWS, our breeding efforts remain dedicated to delivering maximum yield potential and marketability, while integrating superior agronomic traits and robust disease resistance to support growers' profitability. Achieving this requires leveraging a broad genetic base, combining the strengths of UK, German and French parentage to ensure resilience and adaptability in real-world conditions.

These new varieties join established market leaders like KWS Extase and KWS Dawsum, forming a next-generation portfolio designed to help growers navigate future economic and agronomic challenges with confidence.

At a glance: The KWS Winter Wheat Portfolio

Page Number		Year first listed	Treated Yield %	Suitable for early drilling	Speed of Development	Tillering Capacity
UKFM Group 1						
14	KWS Zyatt	17	100	Yes	Medium-Fast	Moderate-High
15	KWS Vibe	25	98	Yes	Moderate-High	Slow
UKFM Group 2						
18	KWS Arnie	25	106	No	Fast	High
20	KWS Equipe	25	103	No	Fast	Low-Moderate
22	KWS Newbie	25	103	Yes	Fast	High
24	KWS Extase	19	102	No	Fast	Moderate
26	KWS Palladium	22	101	Yes	Medium-Fast	Moderate-High
27	KWS Ultimatum	23	102	Yes	Medium	Moderate-High
UKFM Group 3						
28	KWS Solitaire	25	107	Yes	Medium-Fast	Moderate-High
30	KWS Flute	25	106	Yes	Medium	Very High
Soft Group 4						
34	KWS Zealum	23	102	Yes	Slow-Medium	Moderate-High
Hard Group 4						
35	KWS Cranium	21	101	No	Fast	Moderate-High
36	KWS Scope	25	108	Yes	Medium	Moderate-High
38	KWS Dawsum	22	103	Yes	Medium	High

Drilling Recommendations

When planning your cropping strategy, selecting wheat varieties that align with your farm's specific conditions is key to achieving the best performance. The graphic below outlines our diverse wheat portfolio, highlighting optimal sowing windows (orange) and the latest safe sowing dates (grey). While our varieties perform well until the latest safe date, sowing within the optimal window maximises potential. Please note that this graph serves as a general guide. Drilling dates can vary by region, so we recommend referring to our data sheets for specific regional sowing information.



Light Land

For light land types, select varieties that establish well in drier soils, have deep rooting systems, and can make the most of limited moisture availability. Varieties such as **KWS Flute** and **KWS Dawsum** perform very well on light land.

Heavy Land

For heavy land, opt for varieties with robust root systems, excellent disease resistance and resilience in wetter soils, such as newcomers **KWS Arnie** and **KWS Scope**.

Second Wheat Situation

When growing second wheats, selecting varieties with strong disease resistance, deep rooting systems, and good resilience to soil-borne issues like Take-all is crucial for maintaining yield potential. Some of our best-performing varieties for second wheat situations include **KWS Zyatt**, **KWS Dawsum**, **KWS Palladium** or **KWS Vibe**.

The **no-brainer** for
Group 1 growers!



The **field**
good wheat!



KWS ZYATT

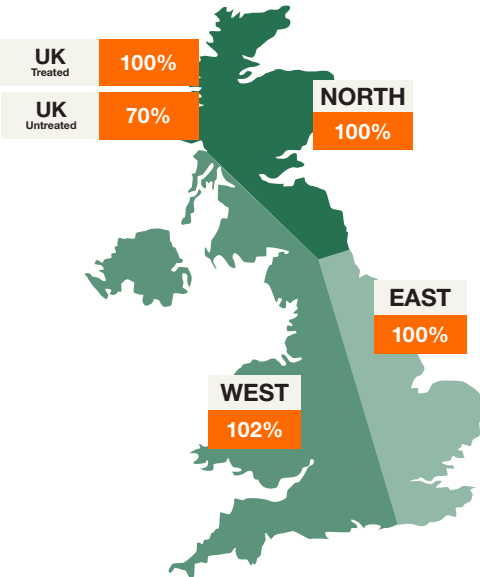
Group 1 Winter Wheat, (KWS Quartz x Hereford)



- Still the UK's highest yielding Group 1 breadmaking wheat with UKP for export
- Excellent second wheat performance
- Good *Septoria* resistance (6.3) and Pch1 eyespot resistance

KWS Zyatt offers top Group 1 yields, strong protein levels, and excellent agronomics. Consistently reliable across sites and seasons, it delivers high-quality grain and proven bakery performance.

Treated Yield By Region



Key Agronomics and Disease Resistance

Disease Resistance		
Mildew		7
Yellow Rust		3
Brown Rust		7
<i>Septoria tritici</i>		6.3
Eyespot		7@
Fusarium ear blight		6
OWBM		-
Agronomic Features		
Resistance to lodging -PGR		8
Resistance to lodging +PGR		8
Ripening (days +/- Skyfall)		0
Grain Quality		
Protein (% milling spec)		12.3
Hagberg Falling Number		259
Specific Weight (kg/hl)		78.7

@ = Believed to carry the Pch1 Rendezvous resistance gene to eyespot

KWS VIBE

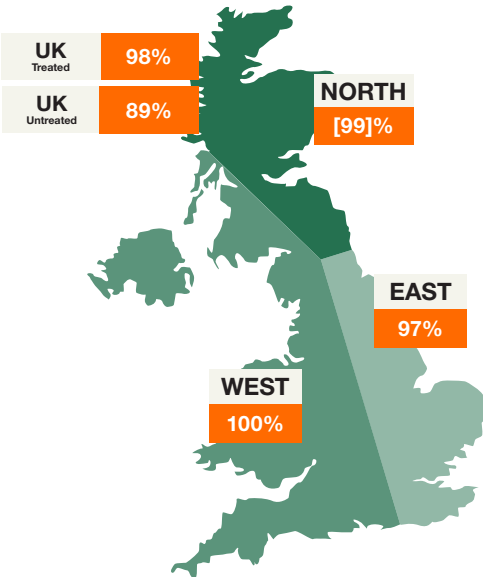
Group 1 Winter Wheat, (Bernstein x KWS Zyatt)



- New high quality breadmaking wheat
- Very high untreated yields thanks to all-round excellent disease resistance
- Short and stiff strawed

Get with the Vibe! KWS Vibe is a premium breadmaking wheat that blends outstanding yield, robust disease resistance and superior grain quality. Offering real innovation and strong gross margins, it's a game-changer for UK milling wheat growers.

Treated Yield By Region



Key Agronomics and Disease Resistance

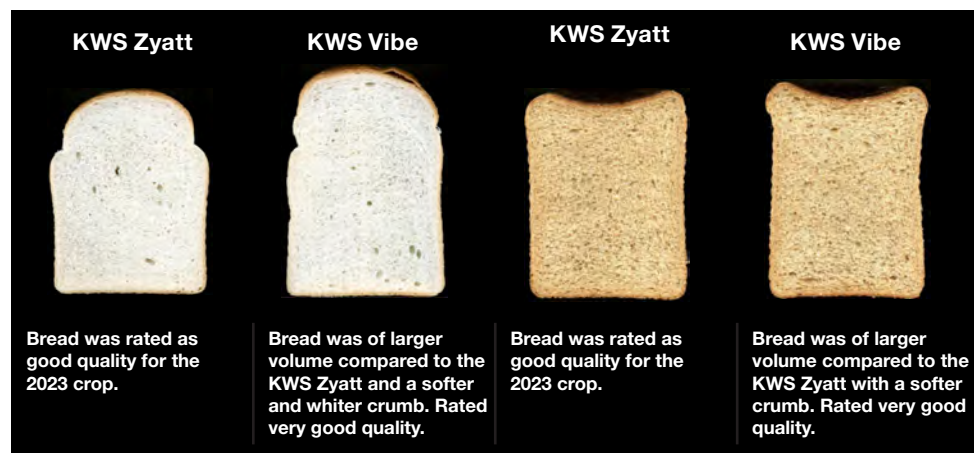
Disease Resistance		
Mildew		[7]
Yellow Rust		8
Brown Rust		6
<i>Septoria tritici</i>		6.6
Eyespot		7@
Fusarium ear blight		6
OWBM		-
Agronomic Features		
Resistance to lodging -PGR		8
Resistance to lodging +PGR		8
Ripening (days +/- Skyfall)		+1
Grain Quality		
Protein (% milling spec)		[13.2]
Hagberg Falling Number		283
Specific Weight (kg/hl)		79.1

@ = Believed to carry the Pch1 Rendezvous resistance gene to eyespot

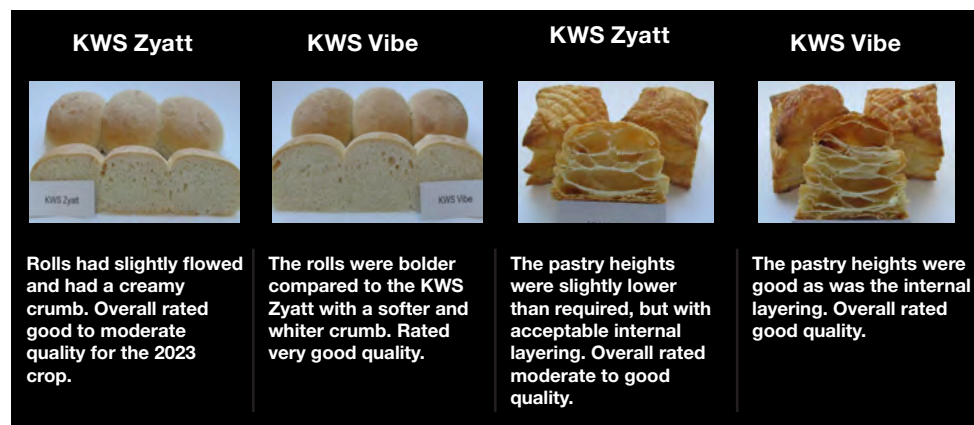
What makes KWS Vibe a useful variety for the UK supply chain?

The photos below highlight KWS Vibe's ability to produce larger loaf volumes compared to KWS Zyatt. Milling trial feedback praised its softer crumb and rated the loaves as very good quality.

KWS Zyatt vs. KWS Vibe Baking Performance



KWS Vibe also created a bolder white roll in comparison to KWS Zyatt, and produced good quality puff pastry.

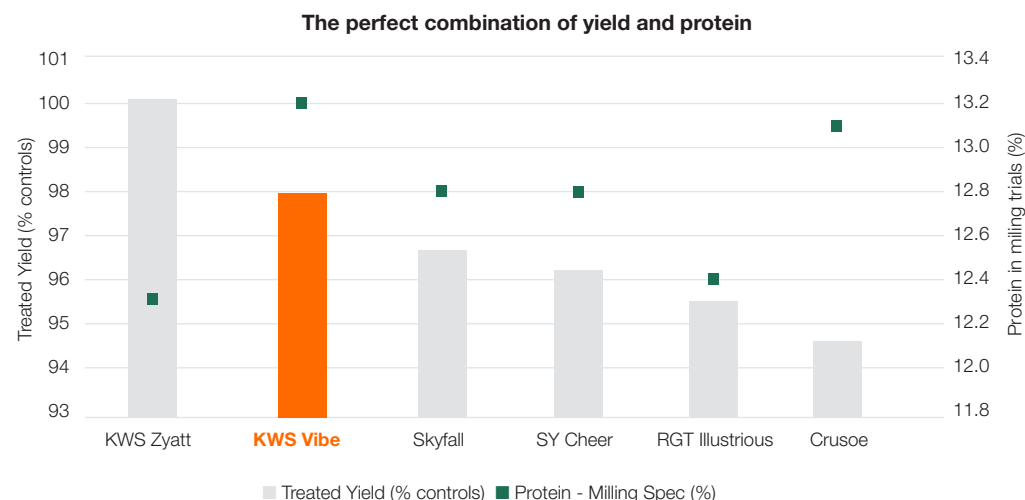


“In baking, the KWS Vibe performed very well in all products and was of better quality than the KWS Zyatt control. KWS Vibe has good gluten strength and very good potential across a wide range of recipe types used in the UK.”

Mark Charlton | Head of Cereals Milling and Baking Science, Allied Technical Centre

What makes KWS Vibe the wheat variety for you?

KWS Vibe is now a Recommended Group 1 variety, consistently achieving Group 1 ratings across two contrasting seasons. With higher protein levels and superior gluten quality than current Group 1 controls, it also surpasses KWS Zyatt in Hagberg Falling Number (283) and specific weight (79.1 kg/hl). This makes KWS Vibe an exciting prospect for the future - a new protein banker for breadmaking growers.



KWS Vibe delivers more with less, thanks to its superior nitrogen use efficiency. In a NIAB trial assessing yield and quality performance, KWS Vibe achieved higher protein levels than KWS Zyatt using the same amount of nitrogen, highlighting its impressive efficiency.



Data Source: KWS trial carried out by NIAB



KWS ARNIE

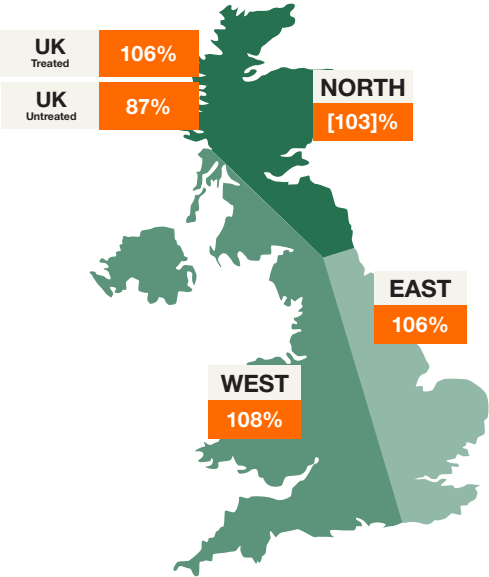
Group 2 Winter Wheat, (KWS Zytatt x KWS Extase)

- Exceptional yield performance, especially in the East (106%) and West (108%)
- Outstanding disease resistances including 7 for *Septoria*
- Best performing bread making variety in the second and more slot

New on the AHDB Recommended List for 2025 drilling, KWS Arnie is the ultimate all-round wheat for growers seeking a powerhouse variety to bulk up their grain heap this autumn. With exceptional yield potential, KWS Arnie sets a new benchmark in its market sector.



Treated Yield By Region

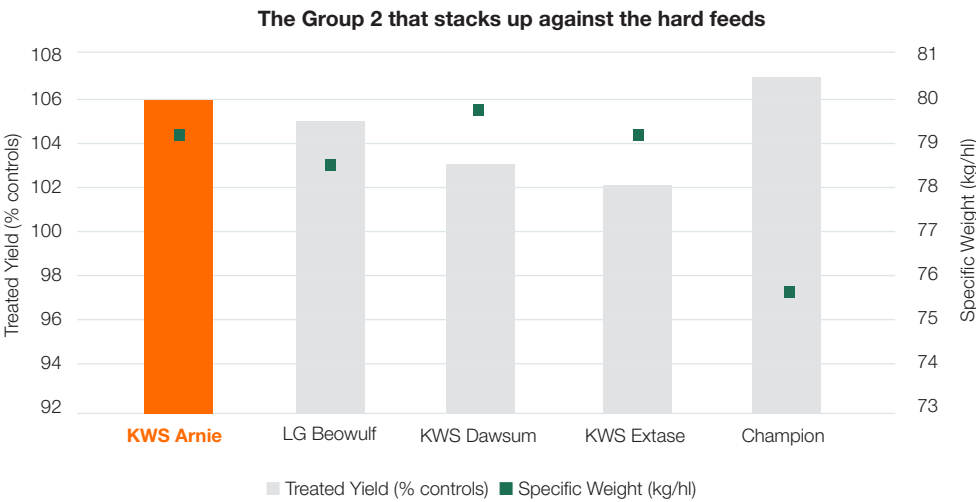


Key Agronomics and Disease Resistance

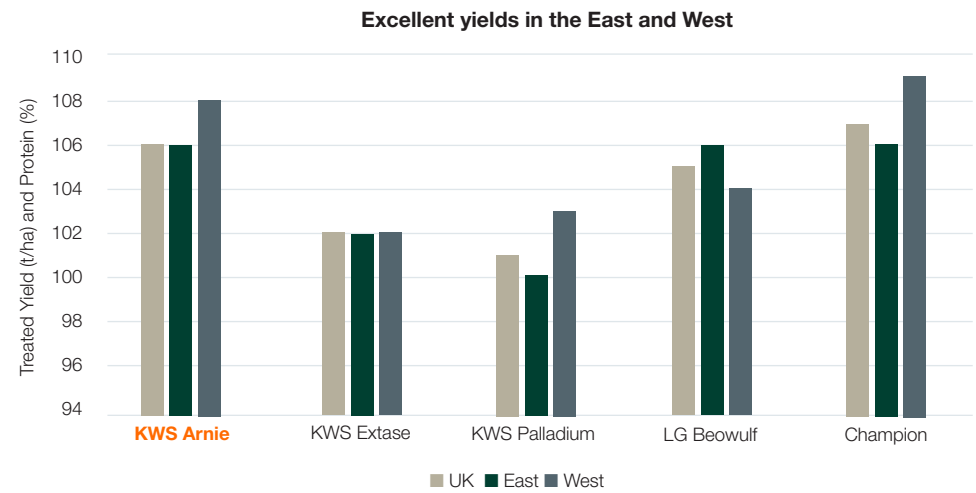
Disease Resistance	
Mildew	[5]
Yellow Rust	7
Brown Rust	6
<i>Septoria tritici</i>	7.0
Eyespot	5
Fusarium ear blight	6
OWBM	-
Agronomic Features	
Resistance to lodging -PGR	8
Resistance to lodging +PGR	7
Ripening (days +/- Skyfall)	0
Grain Quality	
Protein (% milling spec)	[12.1]
Hagberg Falling Number	287
Specific Weight (kg/hl)	79.1

What makes KWS Arnie the wheat variety for you?

KWS Arnie redefines yield potential in its market sector, delivering UK yields 4% higher than KWS Extase. Despite being a Group 2 variety, KWS Arnie holds its own against top-performing hard feed wheats, boasting a treated yield and specific weight on par with market-leading options.



KWS Arnie thrives in key wheat-growing regions, delivering 106% in AHDB East and 108% in the West. Beyond yield, it offers strong disease resistance and a robust plant structure, establishing rapidly in autumn, tillering vigorously and ensuring a resilient stand into spring. KWS Arnie boasts exceptionally stiff straw, with just 2% lodging - with or without PGR - over two seasons, ensuring field reliability and resilience.



Hot on the heels of KWS Extase!

KWS EQUIPE

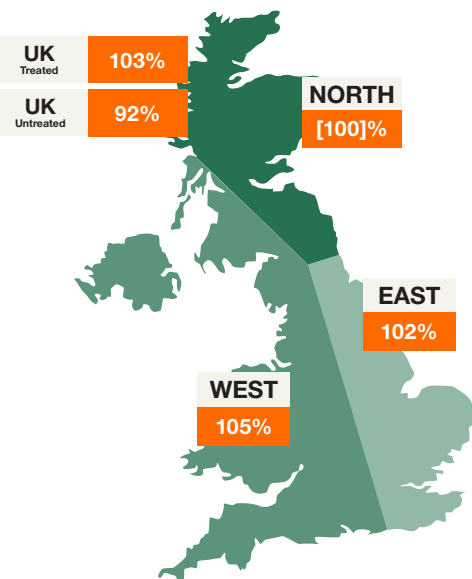
Group 2 Winter Wheat, (KWS Extase x Cheviogon)

- A KWS Extase plant type but even more untreated yield
- Fantastic individual disease scores
- UKFM Group 2 with export opportunities

Following in the footsteps of KWS Extase, our French breeding programme introduces KWS Equipe - offering everything growers love about KWS Extase, but with superior grain quality, higher yields and an even stronger untreated performance.



Treated Yield By Region



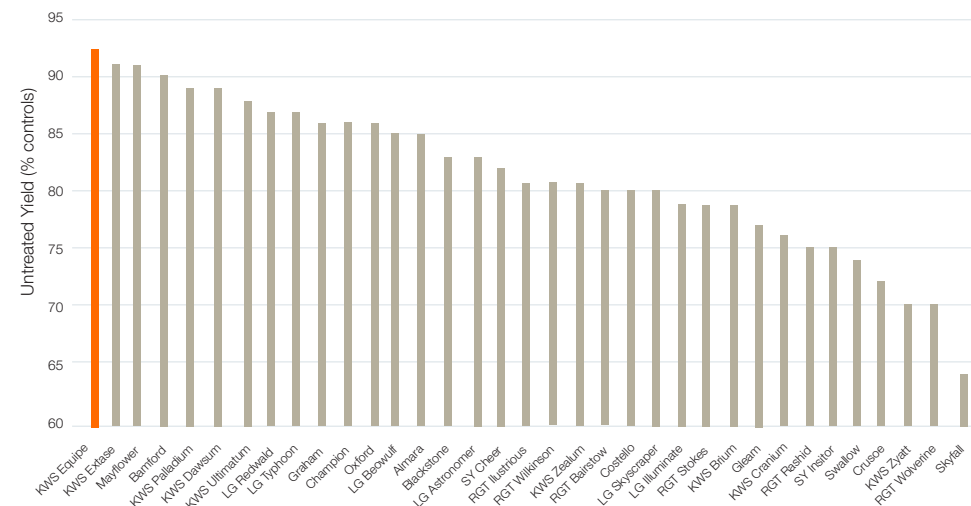
Key Agronomics and Disease Resistance

Disease Resistance		
Mildew		[7]
Yellow Rust		7
Brown Rust		7
Septoria tritici		7.0
Eyespot		4
Fusarium ear blight		6
OWBM		-
Agronomic Features		
Resistance to lodging -PGR		7
Resistance to lodging +PGR		7
Ripening (days +/- Skyfall)		-1
Grain Quality		
Protein (% milling spec)		[12.2]
Hagberg Falling Number		305
Specific Weight (kg/hl)		79.5

What makes KWS Equipe the wheat variety for you?

Much like when KWS Extase was first recommended, KWS Equipe has entered the RL with the highest untreated yield to date. As an Extase cross, it shares many of the same strengths—most notably, its exceptional untreated yield performance.

Outstanding untreated yield performance



When should I drill KWS Equipe?

The ideal drilling window depends on soil type, location and weather conditions, but due to KWS Equipe's early maturity and speed of growth habit, **mid-October** is the optimal drilling window. The graphic below shows the recommended seed rates for your intended sowing slot.

1ST- 3RD WEEK
SEPTEMBER

Not
recommended
to be sown at
this time

KWS Equipe has a vigorous growth habit compared to many UK types.

4TH WEEK
SEP - EARLY OCT

CONDITIONS	SOIL TYPE
Good Seed Bed 300-350	Light 300-325
Poor Seed Bed 350-375	Heavy 325-350

Main drilling window for UK milling wheats.

MID-LATE
OCTOBER

✓

CONDITIONS	SOIL TYPE
Good Seed Bed 350-375	Light 350-375
Poor Seed Bed 375-400	Heavy 350-400

KWS Equipe's early maturity and speed of growth habit makes this an ideal sowing slot for the variety.

LATE OCT -
EARLY NOV

CONDITIONS	SOIL TYPE
Good Seed Bed 350-400	Light 350-375
Poor Seed Bed 400-425	Heavy 400-450

Drilling at this time reduces tillering, so early nitrogen is recommended to maximise numbers.

EARLY NOV -
EARLY DEC

CONDITIONS	SOIL TYPE
Good Seed Bed 425-500	Light 425-475
Poor Seed Bed 500+	Heavy 500+

Potentially tough position for winter crops. Early nitrogen is key to push for a successful crop.

Opening end market opportunities for hard wheat in the North

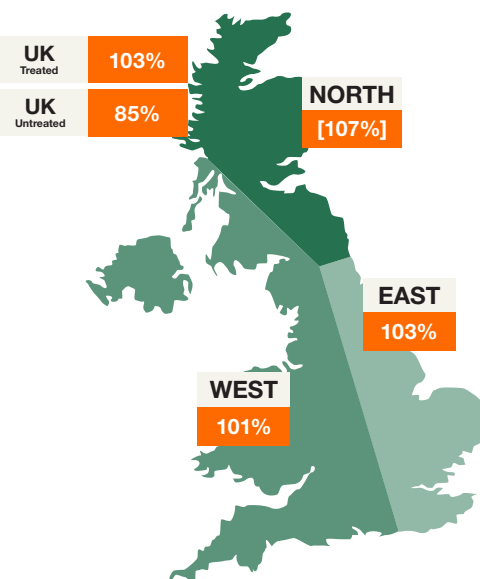
KWS NEWBIE

Group 2 Winter Wheat, (KWS Zyatt x KWS W340)

- UKFM Group 2 with export opportunities
- Excellent yield potential especially in the north ([107%] controls)
- Short strawed with early maturity (0) for a safe harvest

New for 2025 drilling, KWS Newbie is the ultimate all-round wheat for northern growers. In the North, it outperforms established feed favourites like LG Skyscraper (100%) and Gleam (104%), making it a top choice for farmers seeking reliability and high performance.

Treated Yield By Region



Key Agronomics and Disease Resistance

Disease Resistance		
Mildew		[5]
Yellow Rust		9r
Brown Rust		6
<i>Septoria tritici</i>		6.2
Eyespot		5
Fusarium ear blight		6
OWBM		-
Agronomic Features		
Resistance to lodging -PGR		7
Resistance to lodging +PGR		7
Ripening (days +/- Skyfall)		0
Grain Quality		
Protein (% milling spec)		[12.5]
Hagberg Falling Number		305
Specific Weight (kg/hl)		78.4

r = Young plant resistance to yellow rust as shown by UKCPVS tests and RL trial data

What makes KWS Newbie the wheat variety for you?

KWS Newbie not only delivers a yield comparable to feed varieties but also boasts outstanding grain quality, including an impressive HFN (305) and excellent specific weight (78.4kg/hl).



Yellow Rust

Yellow rust is one of the most important wheat diseases in the east, although in recent years, infection has become common across all regions of the UK. Yield losses of 40-50% often occur in untreated susceptible wheat varieties.

What increases the risk of yellow rust?

Several factors can increase the risk of yellow rust, such as growing a susceptible variety. In early-sown crops, there is an increased risk due to exposure to a green bridge from the previous crop and the mild winter weather followed by a humid microclimate. Late-sown crops are also more at risk as the plants are smaller throughout the year.

How can I manage yellow rust?

- Grow a variety with high resistance, including seedling resistance such as **KWS Newbie**
- Remove volunteers to eliminate the green bridge
- Manage nitrogen applications to avoid excessive concentrations in plants
- Apply well timed fungicides

The complete package with *Septoria* protection built in!

KWS EXTASE

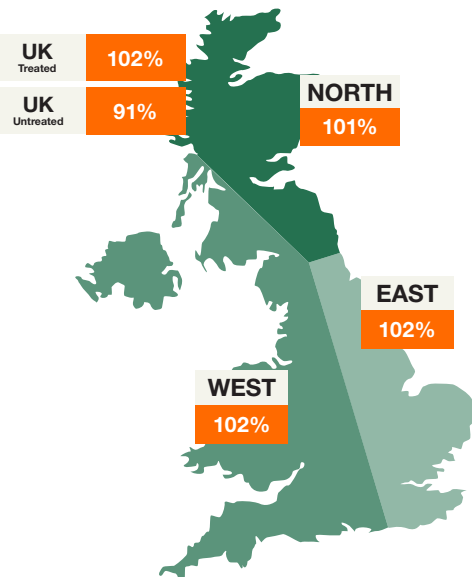
Group 2 Winter Wheat, (Boisseau x Solheio)

- Second highest untreated yield on the Recommended List
- The most complete package in terms of disease resistance and quality on the market
- Exceptional resistance to *Septoria tritici* - the first variety over an 8 on the market

KWS Extase is the best example of the new generation of wheats that combine market value, high yield and outstanding disease resistance. After five years at the top for untreated performance, it now takes second place to its successor, KWS Equipe.



Treated Yield By Region



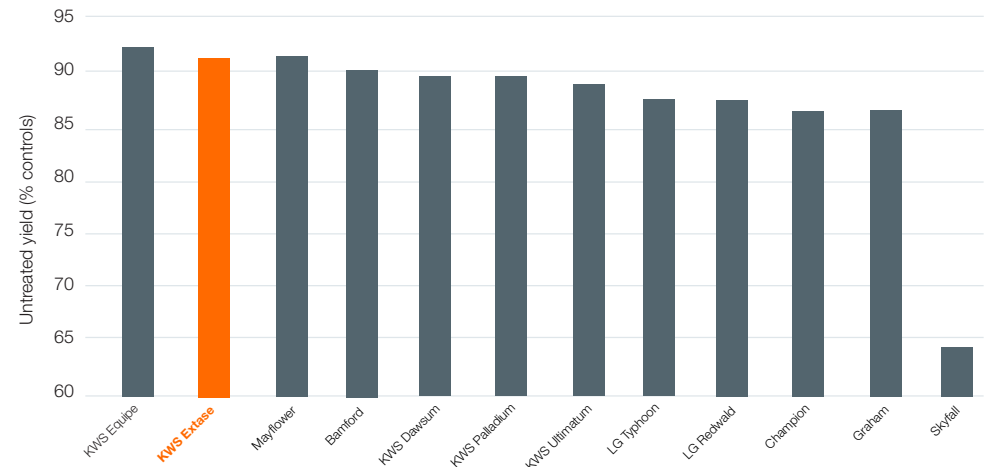
Key Agronomics and Disease Resistance

Disease Resistance	
Mildew	6
Yellow Rust	7
Brown Rust	7
<i>Septoria tritici</i>	7.0
Eyespot	3
Fusarium ear blight	6
OWBM	-
Agronomic Features	
Resistance to lodging -PGR	7
Resistance to lodging +PGR (1-9)	7
Ripening (days +/- Skyfall)	-1
Grain Quality	
Protein (% milling spec)	12.3
Hagberg Falling Number	287
Specific Weight (kg/hl)	79.2

What makes KWS Extase the wheat variety for you?

After five years leading the untreated yield rankings, KWS Extase has been overtaken by its successor, KWS Equipe. However, its exceptional blend of end-market potential, high yield and strong disease resistance ensures it remains a top choice for farmers in 2025 and beyond. With an impressive untreated yield of 91% of controls - the second highest on the Recommended List - it continues to set the standard for reliability and performance.

An impressive untreated yield



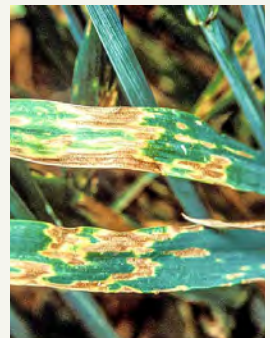
The importance of *Septoria tritici*

Septoria is the most destructive disease in UK wheat. In extreme cases, it has been shown to reduce yield by up to 50%. Modern resistance strategies rely on stacking multiple partial resistance genes, providing cumulative yet durable protection, rather than single major genes.

Septoria still remains one of the most difficult diseases to control effectively due to:

- Long latency period - making it hard to detect early
- Currently poor curative activity of crop protection products

With a *Septoria* score of 7.0, KWS Extase offers opportunities to reduce fungicide costs, especially in lower risk seasons and later drillings. More importantly, it helps deliver effective disease control in high-pressure seasons, when critical fungicide timings may slip.



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



The **ultimate wheat** on-farm and for the market



KWS PALLADIUM

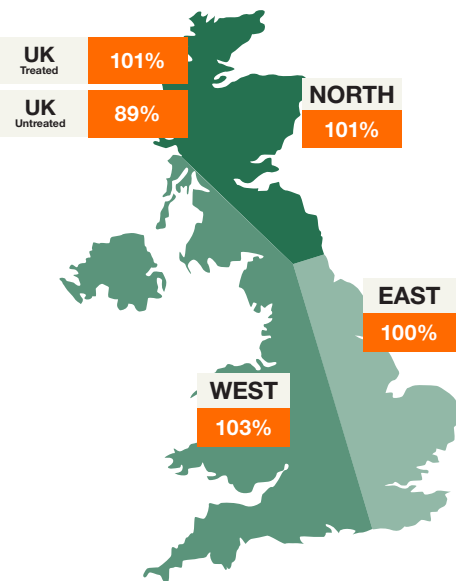
Group 2 Winter Wheat, (KWS Zyatt x KWS Trinity)



- Excellent disease resistance including 7.2 for *Septoria tritici*
- Very high untreated yield
- Short and stiff with early maturity

KWS Palladium is a remarkably clean variety with very good untreated yield potential, thanks to its robust disease resistance. Early maturing, short and stiff-strawed, it offers excellent sprouting resistance, ensuring reliability and security at harvest.

Treated Yield By Region



Key Agronomics and Disease Resistance

Disease Resistance	
Mildew	7
Yellow Rust	9r
Brown Rust	6
<i>Septoria tritici</i>	7.2
Eyespot	6
Fusarium ear blight	6
OWBM	-
Agronomic Features	
Resistance to lodging -PGR	8
Resistance to lodging +PGR	8
Ripening (days +/- Skyfall)	-1
Grain Quality	
Protein (% milling spec)	12.2
Hagberg Falling Number	309
Specific Weight (kg/hl)	77.7

r = Young plant resistance to yellow rust as shown by UKCPVS tests and RL trial data

KWS ULTIMATUM

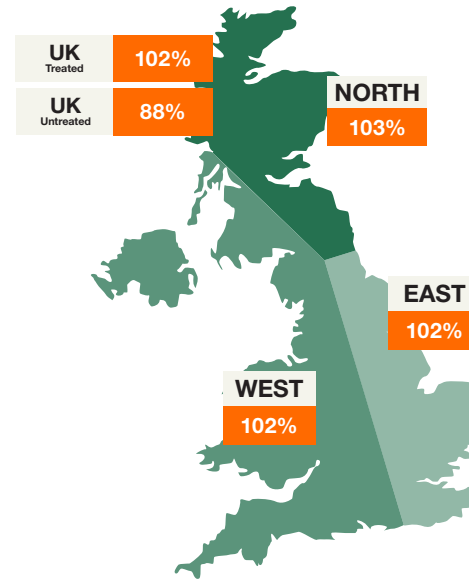
Group 2 Winter Wheat, (KWS Zyatt x Costello)



- 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

KWS Ultimatum is a versatile wheat variety that excels in any region. Its strong sprouting resistance suits wetter western areas, while high yields, market potential and disease resistance make it ideal for the east. Wherever you farm, KWS Ultimatum delivers results.

Treated Yield By Region



Key Agronomics and Disease Resistance

Disease Resistance	
Mildew	7
Yellow Rust	9r
Brown Rust	6
<i>Septoria tritici</i>	6.6
Eyespot	6
Fusarium ear blight	6
OWBM	-
Agronomic Features	
Resistance to lodging -PGR	7
Resistance to lodging +PGR (1-9)	7
Ripening (days +/- Skyfall)	+2
Grain Quality	
Protein (% milling spec)	12.3
Hagberg Falling Number	275
Specific Weight (kg/hl)	79.9

r = Young plant resistance to yellow rust as shown by UKCPVS tests and RL trial data

The foundation for an excellent result

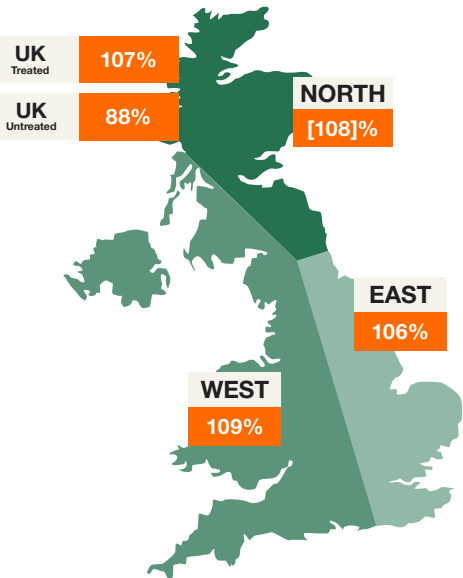
KWS SOLITAIRE

Group 3 Winter Wheat, (LG Sundance x Shabras)

- Market leading combination of grain quality, earliness and disease resistance
- Highest yielding soft wheat – best performances in the West (109%)
- Harnesses all soft markets – Group 3, UKS, distilling and feed

New for drilling autumn 2025, KWS Solitaire offers a top-tier agronomic package with high yields, strong margins and access to all soft wheat markets, from biscuit and distilling to export and feed.

Treated Yield By Region



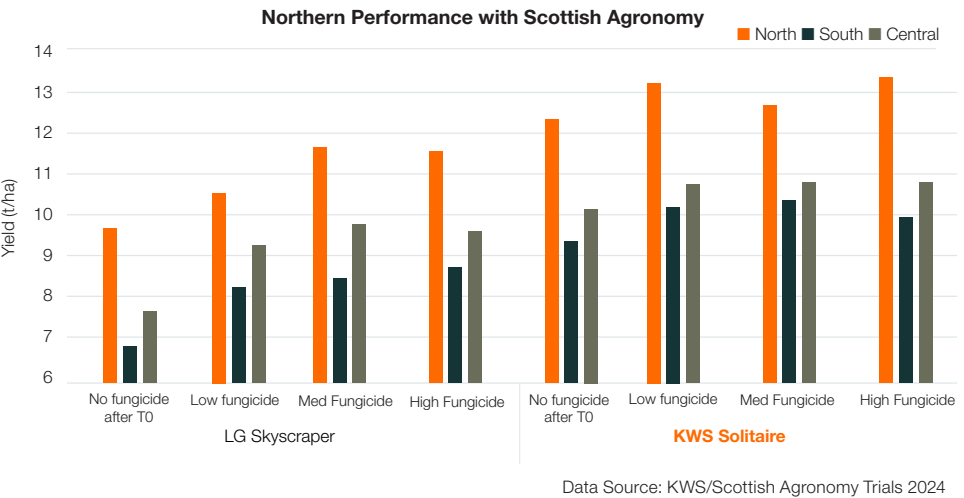
Key Agronomics and Disease Resistance

Disease Resistance	
Mildew	[6]
Yellow Rust	8
Brown Rust	5
<i>Septoria tritici</i>	6.7
Eyespot	4
Fusarium ear blight	6
OWBM	R
Agronomic Features	
Resistance to lodging -PGR	5
Resistance to lodging +PGR (1-9)	6
Ripening (days +/- Skyfall)	+1
Grain Quality	
Protein (% milling spec)	[11.8]
Hagberg Falling Number	179
Specific Weight (kg/hl)	77.1

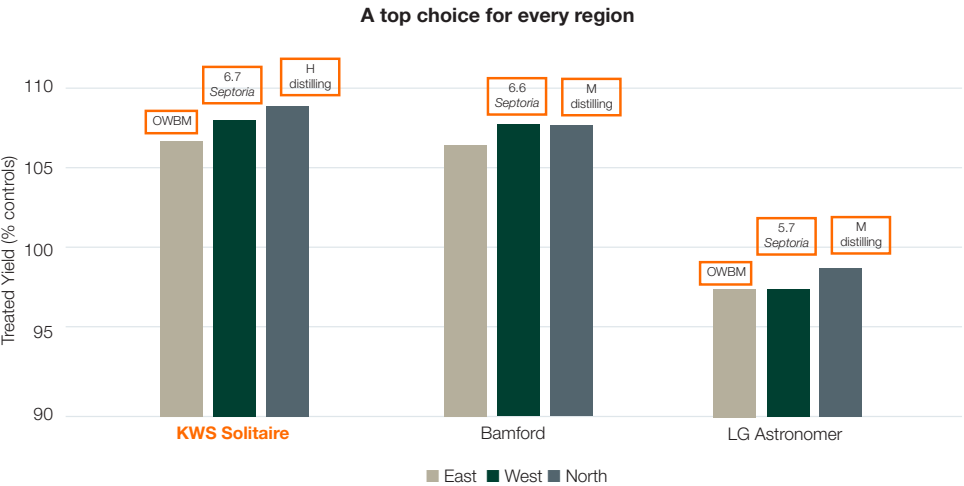
What makes KWS Solitaire the wheat variety for you?

LG Skyscraper has been a key wheat in the North, but its *Septoria* susceptibility and shifting performance make way for better options. KWS Solitaire offers superior disease resistance and yield, providing northern growers with greater stability.

Scottish Agronomy trials show KWS Solitaire outperforming LG Skyscraper, even with minimal fungicide, proving its resilience and cost-effectiveness.



KWS Solitaire is a top choice across all regions. It offers OWBM resistance in the East, strong *Septoria* protection (6.7) in the wetter West, and high distilling quality for strong margins in the North.



Your soft wheat choice for the north!

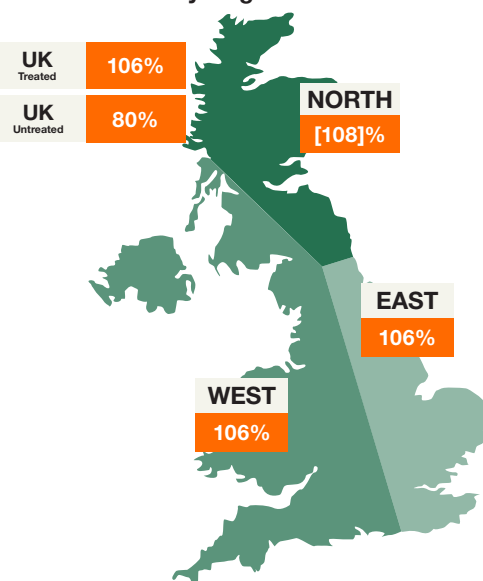
KWS FLUTE

Group 3 Winter Wheat, (Shabras x Elicit)

- Excellent early-sown performance, making it ideal for northern growers
- Excellent second wheat potential with high specific weight and good eyespot (7)
- Harnesses all soft markets – Group 3, UKS, distilling and feed

Introducing KWS Flute, the early-sown specialist from KWS, designed for growers aiming to secure soft wheat contracts for harvest 2025. With strong resilience and adaptability, KWS Flute is an ideal choice for northern growers.

Treated Yield By Region



Key Agronomics and Disease Resistance

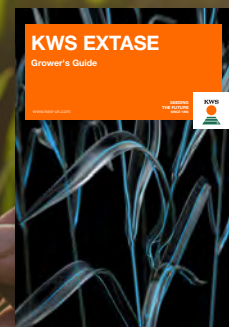
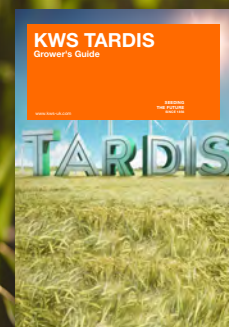
Disease Resistance	
Mildew	[6]
Yellow Rust	6
Brown Rust	5
<i>Septoria tritici</i>	6.2
Eyespot	5
Fusarium ear blight	6
OWBM	R
Agronomic Features	
Resistance to lodging -PGR	6
Resistance to lodging +PGR (1-9)	7
Ripening (days +/- Skyfall)	+1
Grain Quality	
Protein (% milling spec)	[11.9]
Hagberg Falling Number	198
Specific Weight (kg/hl)	78.4

KWS Grower's Guides

Our Grower's Guides are intended to give growers and advisers the latest information to get the most out of their KWS crop this growing season.

They aim to provide sufficient technical information, covering aspects such as varietal characteristics, regional performance and crop management strategies.

Getting started with KWS Cereal varieties is easy...



You can find Grower's Guides for the following varieties on our website:

- KWS Palladium
- KWS Dawsum
- KWS Tardis
- KWS Extase
- KWS Parkin
- KWS Cranium



To download our Grower's Guides, please scan the QR code.



	KWS Zyatt	KWS Vibe	Skyfall	SY Cheer	RGT Illustrious	Crusoe	KWS Arnie	KWS Equipe	KWS Newbie	LG Shergar	KWS Exase	KWS Ultimatum	KWS Palladium	Mayflower	RGT Goldfinch	KWS Solitaire	Bamford	KWS Flute	Alnara	LG Astronomer
End-use group	UKFM Group 1						UKFM Group 2						UKFM Group 3							
Scope of recommendation	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	Sp	UK	UK	UK	N	UK
Variety status	NEW	C					NEW	NEW	NEW	NEW	C				NEW	NEW		NEW		*C
Fungicide-treated grain yield (% treated control)																				
United Kingdom (10.8 t/ha)	100	98	97	96	96	95	106	103	103	102	102	102	101	98	89	107	106	106	98	97
East region (10.7 t/ha)	100	97	97	96	95	94	106	102	103	102	102	102	100	97	87	106	106	106	97	97
West region (11.1 t/ha)	102	100	97	97	97	96	108	105	101	103	102	102	103	100	90	109	107	106	99	97
North region (10.8 t/ha)	100	[99]	96	98	96	94	[103]	[100]	[107]	[105]	101	103	101	98	[91]	[108]	107	[108]	102	98
Untreated grain yield (% treated control)																				
United Kingdom (10.8 t/ha)	70	89	64	82	81	72	87	92	85	87	91	88	89	91	84	88	90	80	85	83
Disease resistance																				
Mildew (1-9)	7	[7]	6	7	6	6	[5]	[7]	[5]	[7]	6	7	7	7	[7]	[6]	6	[6]	6	4
Yellow rust (1-9)	3	8	3	8	8	8	7	7	9	7	7	9	9	9	9	8	7	6	8	9
Yellow rust (young plant)	s	s	s	r	s	s	s	s	r	s	s	r	r	r	s	s	s	s	s	s
Brown rust (1-9)	7	6	8	6	5	3	6	7	6	6	7	6	6	6	9	5	6	5	7	8
Septoria tritici (1-9)	6.3	6.6	5.9	6.0	6.1	6.5	7.0	7.0	6.2	6.7	7.0	6.6	7.2	8.9	6.9	6.7	6.6	6.2	5.8	5.7
Eyespot (1-9)	7@	7@	6@	4	6@	6	5	4	5	5	3	6	6	5@	5	4	6@	5	4	5
Fusarium ear blight (1-9)	6	6	7	7	6	7	6	6	6	6	6	6	6	6	6	6	5	6	6	6
Orange wheat blossom midge	-	-	R	-	-	-	-	-	-	-	-	-	-	-	R	R	-	R	R	R
Agronomic features																				
Resistance to lodging without PGR (1-9)	8	8	9	8	8	8	8	7	7	8	7	7	8	6	3	5	7	6	7	7
Resistance to lodging with PGR (1-9)	8	8	8	7	9	8	7	7	7	8	7	7	8	7	7	6	7	7	8	8
Lodging without PGR (%)	1	1	0	1	1	1	2	3	4	1	2	4	1	4	68	15	2	8	4	2
Lodging with PGR (%)	1	1	2	2	1	2	2	5	5	1	3	2	2	3	3	9	3	4	2	1
Straw length without PGR (cm)	85	88	84	90	90	83	87	94	85	81	91	85	84	88	88	90	89	83	86	88
Straw length with PGR (cm)	76	79	78	83	81	77	81	87	77	76	86	77	79	82	80	83	83	77	80	80
Ripening (days +/- Skyfall)	0	+1	+0	+1	+1	+1	-0	-1	-0	+1	-1	+2	-1	+0	+3	+1	+1	+1	+2	+1
Resistance to sprouting (1-9)	6	-	5	[6]	6	6	-	-	-	-	6	[6]	[6]	[7]	-	-	[5]	-	[6]	7
Main market options (The specific attributes of varieties are different, so, whenever possible, varieties should not be mixed in store)																				
UK bread-making	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-
UK biscuit, cake-making	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	Y	Y	Y
UK distilling quality	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	H	M	M	M	M
ukp bread wheat for export	Y	-	-	-	-	Y	-	[Y]	[Y]	-	Y	Y	-	Y	-	-	-	-	-	-
uks soft wheat for export	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	[Y]	[Y]	[Y]	[Y]	-

	KWS Zyatt KWS Vibe Skyfall SY Cheer RGT Illustrious Crusoe						KWS Arnie KWS Equipe KWS Newbie LG Shergar				KWS Exase KWS Ultimatum KWS Palladium Mayflower RGT Goldfinch					KWS Solitaire Bamford KWS Flute Alnara LG Astronomer				
End-use group	UKFM Group 1						UKFM Group 2									UKFM Group 3				
Grain quality																				
Endosperm texture	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Soft	Soft	Soft	Soft	Soft
Protein content (%)	11.4	11.6	11.5	11.5	11.5	12.0	10.9	11.3	11.0	10.9	11.2	11.1	11.1	11.4	11.5	10.6	10.7	10.7	10.8	11.2
Protein content (%) – milling spec	12.3	[13.2]	12.8	12.8	12.4	13.1	[12.1]	[12.2]	[12.5]	[11.9]	12.3	12.3	12.2	12.6	[13.1]	[11.8]	11.6	[11.9]	12.2	12.4
Hagberg Falling Number	259	283	280	299	260	272	287	305	305	289	287	275	309	299	279	179	247	198	193	241
Specific weight (kg/hl)	78.7	79.1	79.4	79.8	78.3	78.5	79.1	79.5	78.4	80.4	79.2	79.9	77.7	79.2	78.2	77.1	78.7	78.4	77.9	78.2
Chopin Alveograph W	-	[312]	267	[281]	-	250	[233]	[219]	[244]	[299]	208	192	[186]	213	[311]	[101]	108	[102]	102	[101]
Chopin Alveograph P/L	-	[1.0]	1.0	[1.6]	-	0.5	[1.2]	[0.7]	[0.6]	[0.9]	0.7	0.7	[0.7]	0.8	[1.6]	[0.4]	0.5	[0.4]	0.3	[0.4]
Annual treated yield (% control)																				
2020 (10.3 t/ha)	98	-	96	-	97	94	-	-	-	-	100	[103]	[101]	[97]	-	-	-	-	-	99
2021 (11.0 t/ha)	100	-	97	97	94	95	-	-	-	-	102	100	98	95	-	-	104	-	100	97
2022 (11.6 t/ha)	101	98	96	98	96	93	105	102	105	102	102	101	101	97	90	107	106	106	99	97
2023 (11.1 t/ha)	100	97	98	96	96	96	105	102	102	103	101	101	101	98	88	106	106	105	99	97
2024 (10.3 t/ha)	104	102	98	96	97	95	108	104	104	104	104	105	107	105	91	110	109	109	99	97
Rotational position																				
First cereal (11.1 t/ha)	100	98	97	97	96	95	106	103	103	103	102	102	101	98	89	107	106	106	99	97
Second and more (9.9 t/ha)	100	97	98	95	94	94	105	101	103	100	102	101	100	98	87	105	106	107	97	96
Sowing date (most trials were sown in October)																				
Early sown (before 25 Sept) (11.3 t/ha)	[100]	[98]	95	[97]	[100]	[98]	-	-	-	[101]	102	[103]	[99]	102	-	[111]	107	[111]	[100]	99
Late sown (after 1 Nov) (9.5 t/ha)	97	[99]	97	[96]	94	94	[101]	[102]	[103]	[104]	101	101	100	94	[87]	[104]	[104]	[104]	[97]	97
Latest safe-sowing date	End Jan	[End Jan]	End Feb	[End Jan]	End Jan	End Jan	[End Jan]	[End Jan]	[End Jan]	[Mid Feb]	End Jan	End Jan	End Jan	Mid Feb	[End Jan]	[End Jan]	[Mid Feb]	[End Jan]	[Mid Feb]	End Jan
Soil type (about 50% of trials are on medium soils)																				
Light soils (10.3 t/ha)	98	[98]	96	96	95	94	[103]	[101]	[104]	[103]	102	102	100	98	[92]	[105]	106	[107]	[101]	98
Heavy soils (11.3 t/ha)	100	98	97	96	95	94	107	104	103	103	103	101	101	97	88	106	106	106	98	97
Breeder/UK contact																				
Breeder	KWS	KWS	RAGT	SCP	R2n	Lim	KWS	KWS-MR	KWS	-	Mom	KWS	KWS	ElsW	RAGT	KWS	ElsW	KWS	KWS	LimEur
UK contact	KWS	KWS	RAGT	Syn	RAGT	Lim	KWS	KWS	KWS	Lim	KWS	KWS	KWS	Els	RAGT	KWS	Els	KWS	Sen	Lim
Status in RL system																				
Year first listed	17	25	14	24	16	12	25	25	25	25	19	23	22	22	25	25	24	25	24	21
RL status	-	P1	-	P2	-	-	P1	P1	P1	P1	-	-	-	-	P1	P1	P2	P1	P2	*

Resilient, Reliable, Returns. KWS Zealum

has you covered!

The **thinking** **farmer's** wheat!

KWS ZEALUM

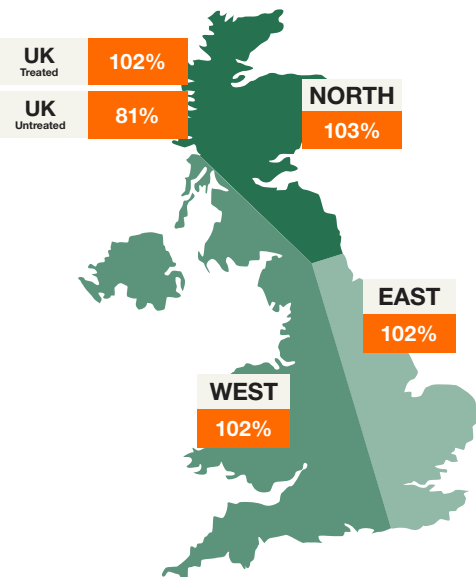
Soft Group 4 Winter Wheat, (KWS Basset x Reflection)



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

KWS Zealum is an exceptionally stiff-strawed, highly versatile soft Group 4 wheat, offering a robust mix of traits that ensure strong performance across diverse and challenging growing conditions.

Treated Yield By Region



Key Agronomics and Disease Resistance

Disease Resistance	
Mildew	6
Yellow Rust	9
Brown Rust	5
<i>Septoria tritici</i>	6.2
Eyespot	5
Fusarium ear blight	7
OWBM	R
Agronomic Features	
Resistance to lodging -PGR	6
Resistance to lodging +PGR	8
Ripening (days +/- Skyfall)	+2
Grain Quality	
Specific Weight (kg/hl)	76.8

KWS CRANIUM

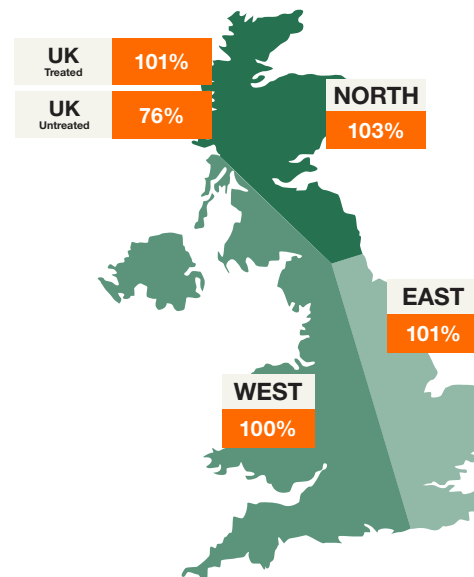
Hard Group 4 Winter Wheat, (KWS Crispin x KWS Kielder)



- Exceptionally stiff-strawed
- The specialist wheat for later drilling
- Excellent combination of yield, yellow rust and OWBM resistance

KWS Cranium is the ultimate risk-management tool for farmers, delivering strong performance across all key factors that impact yield. KWS Cranium thrives in mainstream sowing slots, excelling in late drilling with proven consistency.

Treated Yield By Region



Key Agronomics and Disease Resistance

Disease Resistance	
Mildew	4
Yellow Rust	9r
Brown Rust	5
<i>Septoria tritici</i>	5.7
Eyespot	5
Fusarium ear blight	7
OWBM	R
Agronomic Features	
Resistance to lodging -PGR	7
Resistance to lodging +PGR	8
Ripening (days +/- Skyfall)	+3
Grain Quality	
Specific Weight (kg/hl)	75.8

r = Young plant resistance to yellow rust as shown by UKCPVS tests and RL trial data



HIGH YIELDS ARE IN SIGHT.

KWS SCOPE

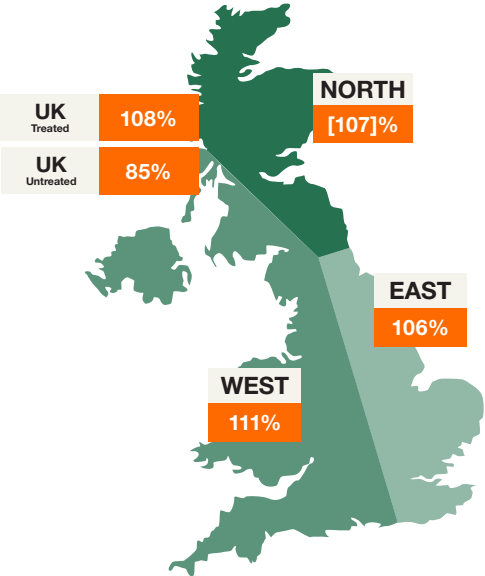
Hard Group 4 Winter Wheat, (Informer x KWS Kinetic)

- Highest yielding variety on the Recommended List
- Hard Group 4 feed wheat with new genetics for UK growers
- Ideal wheat for growers who like short and stiff types like Graham

KWS Scope introduces exciting new genetics to UK growers, with German-bred Informer as one of its parents. KWS Scope builds on the legacy of Informer, offering a shorter, earlier-maturing alternative to Graham.



Treated Yield By Region

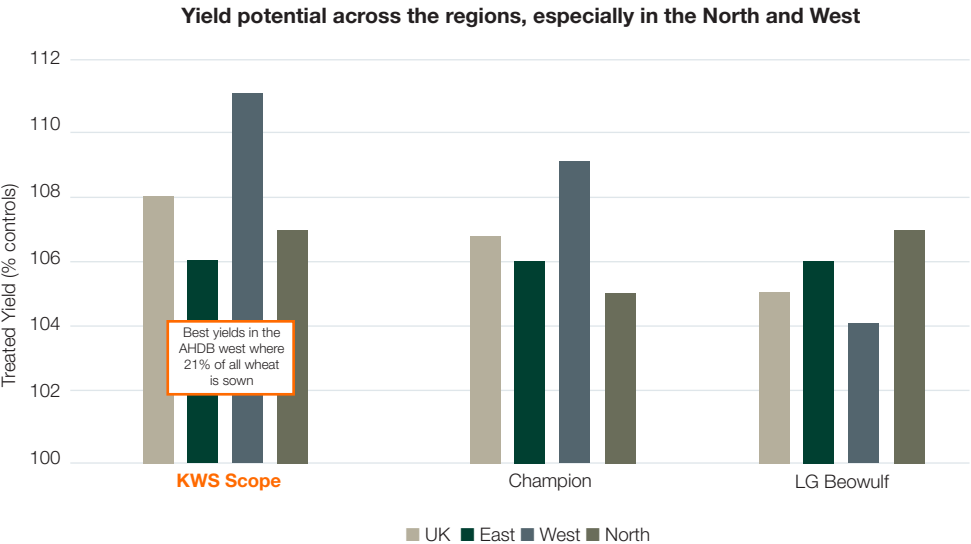


Key Agronomics and Disease Resistance

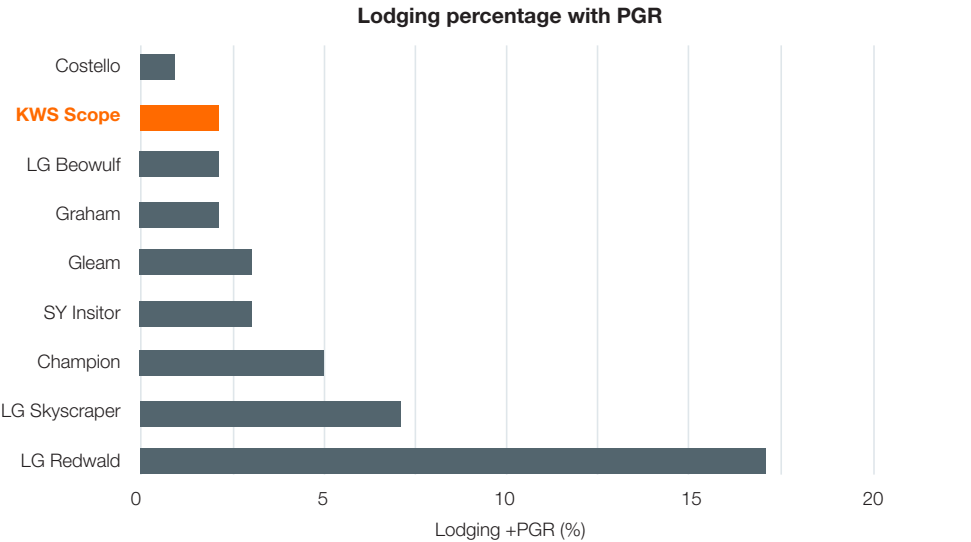
Disease Resistance	
Mildew	[6]
Yellow Rust	7
Brown Rust	6
<i>Septoria tritici</i>	6.5
Eyespot	4
Fusarium ear blight	6
OWBM	R
Agronomic Features	
Resistance to lodging -PGR	8
Resistance to lodging +PGR	8
Ripening (days +/- Skyfall)	+1
Grain Quality	
Specific Weight (kg/hl)	78.9

What makes KWS Scope the wheat variety for you?

Regionally, KWS Scope excels particularly in the West, where it reaches 111% of control yields. In the North, it maintains a strong performance with yields at [107]% of controls.



The graph below shows KWS Scope's performance when grown with PGR. As you can see, looking at its lodging scores against other Hard and Soft Group 4's, there is a real advantage to KWS Scope's short and stiff straw, making it easy to manage on farm.



Now that's a special combination!



KWS DAWSUM

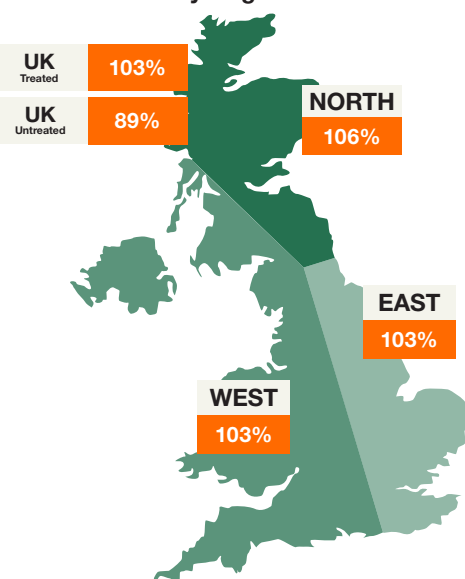
Hard Group 4 Winter Wheat, (KWS Kerrin x Costello)



- Exceptional specific weight (79.9 kg/hl)
- High yield potential across all regions of the UK
- Super flexible on-farm with a wide sowing window

Awesome Dawsum – the ultimate barn-filler with exceptional grain quality, boasting one of the highest specific weights on the market today. A truly special combination of yield, grain quality and disease resistance with top performance across any place in the rotation.

Treated Yield By Region



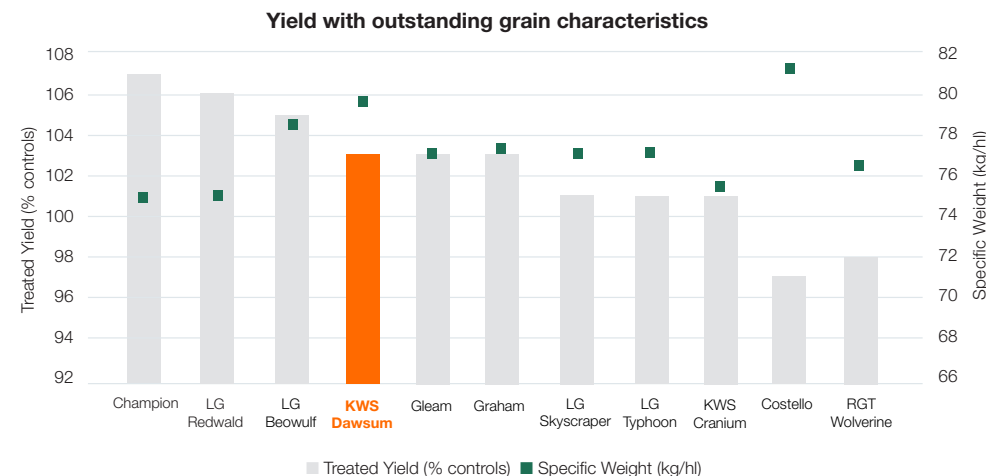
Key Agronomics and Disease Resistance

Disease Resistance	
Mildew	8
Yellow Rust	9r
Brown Rust	7
<i>Septoria tritici</i>	6.3
Eyespot	5
Fusarium ear blight	7
OWBM	-
Agronomic Features	
Resistance to lodging -PGR	8
Resistance to lodging +PGR	7
Ripening (days +/- Skyfall)	+1
Grain Quality	
Specific Weight (kg/hl)	79.9

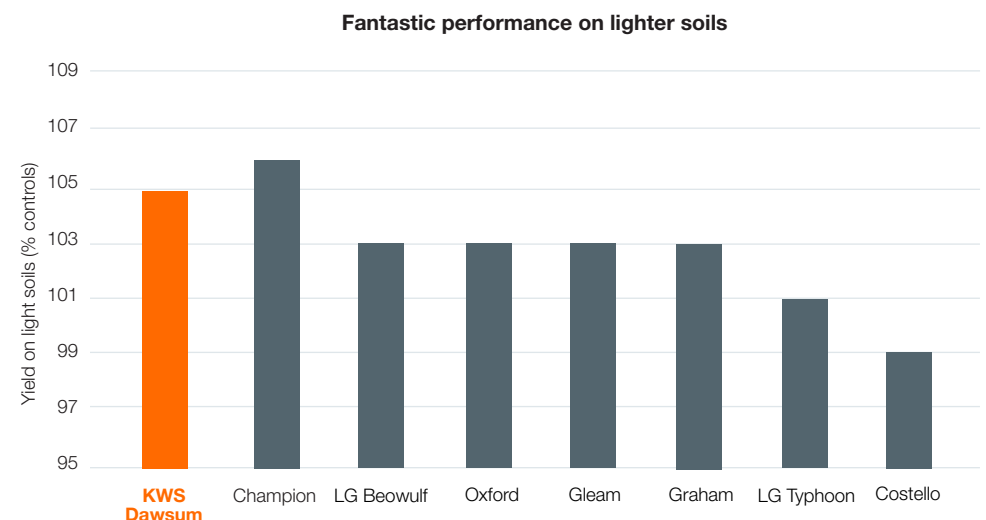
r = Young plant resistance to yellow rust as shown by UKCPVS tests and RL trial data

What makes KWS Dawsum the wheat variety for you?

KWS Dawsum consistently delivers impressive yields across the rotation—whether drilled early (105%), at the mainstream timing (103%), or late (103%). Combine this with its highly marketable grain, and you have a truly “D-awsome” variety that deserves a spot on every farm this season!



Thanks to its robust rooting system, KWS Dawsum is a reliable, high-yielding choice for light land, especially where drought resilience and grain quality are priorities.



	LG Redwold	RGT Hexton	KWS Zealium	Blackstone	RGT Bairstow	LG Skyscraper
End-use group	Soft Group 4					
Scope of recommendation	E&W	UK	N	UK	N	UK
Variety status		NEW				C
Fungicide-treated grain yield (% treated control)						
United Kingdom (10.8 t/ha)	106	105	102	102	101	101
East region (10.7 t/ha)	106	105	102	102	101	102
West region (11.1 t/ha)	108	104	102	101	101	100
North region (10.8 t/ha)	107	[111]	103	104	102	100
Untreated grain yield (% treated control)						
United Kingdom (10.8 t/ha)	87	80	81	83	80	80
Disease resistance						
Mildew (1-9)	5	[6]	6	6	6	7
Yellow rust (1-9)	7	7	9	9	8	7
Yellow rust (young plant)	s	s	s	r	s	s
Brown rust (1-9)	7	5	5	6	6	5
Septoria tritici (1-9)	6.3	6.7	6.2	5.9	5.7	5.0
Eyespot (1-9)	4	4	5	5	4	5
Fusarium ear blight (1-9)	6	6	7	8	6	6
Orange wheat blossom midge	R	R	R	R	R	R
Agronomic features						
Resistance to lodging without PGR (1-9)	4	7	6	8	6	6
Resistance to lodging with PGR (1-9)	5	7	8	7	7	6
Lodging without PGR (%)	20	2	5	1	7	6
Lodging with PGR (%)	17	3	2	2	4	7
Straw length without PGR (cm)	93	88	89	91	90	92
Straw length with PGR (cm)	88	81	82	83	82	83
Ripening (days +/- Skyfall)	+2	+2	+2	+2	+2	+0
Resistance to sprouting (1-9)	[5]	-	[6]	[7]	[6]	6
Main market options (The specific attributes of varieties are different, so, whenever possible, varieties should not be mixed in store)						
UK bread-making	-	-	-	-	-	-
UK biscuit, cake-making	-	-	-	-	-	-
UK distilling quality	M	M	M	M	H	M
ukp bread wheat for export	-	-	-	-	-	-
uks soft wheat for export	-	[Y]	-	-	-	-

	LG Redwold	RGT Hexton	KWS Zealium	Blackstone	RGT Bairstow	LG Skyscraper
End-use group	Soft Group 4					
Grain quality						
Endosperm texture	Soft	Soft	Soft	Soft	Soft	Soft
Protein content (%)	10.5	10.4	10.4	10.7	10.6	10.8
Protein content (%) – milling spec	11.6	[11.3]	11.6	11.7	11.7	11.9
Hagberg Falling Number	154	236	206	295	227	205
Specific weight (kg/hl)	75.7	77.0	76.8	78.6	76.6	77.1
Chopin Alveograph W	-	[98]	[68]	128	-	-
Chopin Alveograph P/L	-	[0.5]	[0.3]	0.5	-	-
Annual treated yield (% control)						
2020 (10.3 t/ha)	[106]	-	[103]	-	[103]	102
2021 (11.0 t/ha)	106	-	101	102	101	101
2022 (11.6 t/ha)	107	105	103	103	102	102
2023 (11.1 t/ha)	105	106	102	102	102	100
2024 (10.3 t/ha)	110	109	103	101	99	98
Rotational position						
First cereal (11.1 t/ha)	106	105	102	102	101	101
Second and more (9.9 t/ha)	107	108	104	101	102	102
Sowing date (most trials were sown in October)						
Early sown (before 25 Sept) (11.3 t/ha)	[104]	[[111]]	105	101	100	101
Late sown (after 1 Nov) (9.5 t/ha)	104	[[103]]	[[103]]	[104]	104	102
Latest safe-sowing date	Mid Feb	[[End Jan]]	End Jan	[End Feb]	End Feb	End Jan
Soil type (about 50% of trials are on medium soils)						
Light soils (10.3 t/ha)	106	[107]	102	103	103	101
Heavy soils (11.3 t/ha)	106	105	102	101	101	101
Breeder/UK contact						
Breeder	LimEur	RAGT	KWS	ElsW	RAGT	LimEur
UK contact	Lim	RAGT	KWS	Els	RAGT	Lim
Status in RL system						
Year first listed	23	25	23	24	22	19
RL status	-	P1	-	P2	-	-

	KWS Scope	Champion	LG Beowulf	SY Insitor	Oxford	Gleam	KWS Dawsum	Graham	KWS Cranium	LG Typhoon	RGT Wolverine	Costello
End-use group	Hard Group 4											
Scope of recommendation	UK	UK	UK	N	E&W	UK	UK	UK	UK	UK	Sp	UK
Variety status	NEW				*	C			*		*	*
Fungicide-treated grain yield (% treated control)												
United Kingdom (10.8 t/ha)	108	107	105	105	104	103	103	103	101	101	98	97
East region (10.7 t/ha)	106	106	106	105	104	103	103	102	101	101	97	98
West region (11.1 t/ha)	111	109	104	104	105	103	103	105	100	101	99	96
North region (10.8 t/ha)	[107]	105	107	107	102	104	106	104	103	103	98	99
Untreated grain yield (% treated control)												
United Kingdom (10.8 t/ha)	85	86	85	75	86	78	89	86	76	87	70	80
Disease resistance												
Mildew (1-9)	[6]	5	6	7	5	6	8	6	4	6	5	8
Yellow rust (1-9)	7	8	9	3	9	5	9	7	9	9	5	9
Yellow rust (young plant)	s	r	r	s	r	s	r	s	r	r	s	r
Brown rust (1-9)	6	5	4	5	6	6	7	5	5	6	7	5
Septoria tritici (1-9)	6.5	7.6	6.6	6.5	6.5	5.7	6.3	6.5	5.7	7.2	6.0	5.7
Eyespot (1-9)	4	4	6	5	5	5	5	4	5	5	6	5
Fusarium ear blight (1-9)	6	6	6	7	6	6	7	6	7	6	6	7
Orange wheat blossom midge	R	R	R	R	R	R	-	-	R	R	-	-
Agronomic features												
Resistance to lodging without PGR (1-9)	8	7	8	6	8	7	8	7	7	7	7	8
Resistance to lodging with PGR (1-9)	8	7	8	7	7	7	7	8	8	7	7	8
Lodging without PGR (%)	2	3	1	5	2	2	2	3	2	2	3	1
Lodging with PGR (%)	2	5	2	3	2	3	2	2	2	2	3	1
Straw length without PGR (cm)	89	88	88	94	85	87	84	89	89	86	86	84
Straw length with PGR (cm)	80	81	80	83	79	78	77	81	82	79	79	76
Ripening (days +/- Skyfall)	+1	+0	+2	+1	+2	-0	+1	-1	+3	+2	+2	+2
Resistance to sprouting (1-9)	-	[6]	[6]	5	[6]	6	[6]	7	6	[5]	6	6
Main market options (The specific attributes of varieties are different, so, whenever possible, varieties should not be mixed in store)												
UK bread-making	-	-	-	-	-	-	-	-	-	-	-	-
UK biscuit, cake-making	-	-	-	-	-	-	-	-	-	-	-	-
UK distilling quality	-	-	-	-	-	-	-	-	-	-	-	-
ukp bread wheat for export	-	-	-	-	-	-	-	-	-	-	-	-
uks soft wheat for export	-	-	-	-	-	-	-	-	-	-	-	-

	KWS Scope	Champion	LG Beowulf	SY Insitor	Oxford	Gleam	KWS Dawsum	Graham	KWS Cranium	LG Typhoon	RGT Wolverine	Costello
End-use group	Hard Group 4											
Grain quality												
Endosperm texture	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard
Protein content (%)	10.4	10.7	10.9	10.3	10.9	10.6	10.7	10.8	10.7	10.6	10.5	11.2
Protein content (%) – milling spec	[11.3]	11.9	12.2	11.2	12.2	11.5	11.7	11.8	11.6	11.8	11.5	12.2
Hagberg Falling Number	247	246	253	272	211	221	310	278	293	165	279	330
Specific weight (kg/hl)	78.9	75.6	78.5	78.8	76.2	77.1	79.9	77.8	75.8	77.4	76.3	81.3
Chopin Alveograph W	-	-	-	-	-	-	-	-	-	-	-	-
Chopin Alveograph P/L	-	-	-	-	-	-	-	-	-	-	-	-
Annual treated yield (% control)												
2020 (10.3 t/ha)	-	[105]	-	103	[105]	103	[105]	102	104	[102]	101	99
2021 (11.0 t/ha)	-	106	106	105	102	104	103	103	99	100	94	99
2022 (11.6 t/ha)	106	106	105	105	102	103	103	103	102	98	101	98
2023 (11.1 t/ha)	107	106	106	106	105	104	104	102	102	101	100	98
2024 (10.3 t/ha)	111	111	105	107	105	103	103	107	100	107	95	94
Rotational position												
First cereal (11.1 t/ha)	108	107	106	105	104	103	103	103	101	101	98	98
Second and more (9.9 t/ha)	106	107	105	107	105	103	103	101	102	102	97	96
Sowing date (most trials were sown in October)												
Early sown (before 25 Sept) (11.3 t/ha)	[[110]]	108	105	[107]	105	103	105	103	[102]	103	100	99
Late sown (after 1 Nov) (9.5 t/ha)	[[104]]	106	[106]	102	104	103	103	100	102	102	98	99
Latest safe-sowing date	[[End Jan]]	Mid Feb	[Mid Feb]	End Jan	Mid Feb	Mid Feb	End Jan	End Jan	Mid Feb	End Jan	End Jan	End Jan
Soil type (about 50% of trials are on medium soils)												
Light soils (10.3 t/ha)	[105]	106	103	107	103	103	105	103	103	101	97	99
Heavy soils (11.3 t/ha)	107	108	106	104	105	103	103	103	101	101	98	96
Breeder/UK contact												
Breeder	KWS	DSV	LimEur	SyP	DSV	SyP	KWS	SyP	KWS	LimEur	R2n	KWS
UK contact	KWS	DSV	Lim	Syn	DSV	Syn	KWS	Syn	KWS	Lim	RAGT	Sen
Status in RL system												
Year first listed	25	22	24	20	23	18	22	16	21	22	21	15
RL status	P1	-	P2	-	*	-	-	-	*	-	*	*

KWS GREBE (KWS W461)

AHDB
CANDIDATE

NEW

Details		
Group Potential Group 2	Year Listed Candidate	UK Treated Yield 105%
Comments		
<p>KWS Grebe is a very exciting potential addition to the Group 2 market. It is high-yielding with OWBM, which will be a real benefit to those quality wheat growers where previously the sector has lacked in varieties with OWBM resistance. Not only is it a good potential Group 2, it also has yields knocking on the door of the Group 4's. It will be a real asset for farmers for drilling 2026.</p> <p>KWS Grebe offers a good untreated yield performance that growers have come to expect in the Group 2 sector with an 8 for Yellow Rust and 7 for <i>Septoria</i>. With a similar quality package to leading Group 2 KWS Extase, it also has great end-market potential but in more of a UK type with short and stiff straw.</p>		
Data source: ADHB Candidate List for Harvest 2025		

KWS IMRIE (KWS W457)

AHDB
CANDIDATE

NEW

Details		
Group Potential Group 2	Year Listed Candidate	UK Treated Yield 104%
Comments		
<p>KWS Imrie is a very exciting potential addition to the Group 2 market. It has good untreated yield, especially in the West and North. This variety offers a very good grain package with a specific weight of 79.0kg/hl and decent protein (11.2% in all trials) which will open up market opportunities.</p> <p>It has been rated potential UKFM Group 2 in NL1 and NL2 testing with similar analytical quality to the Skyfall control, only with slightly lower water absorption. KWS Imrie also has strong untreated yields, made up of a 6.6 for <i>Septoria</i> and PCH1 resistance.</p>		
Data source: ADHB Candidate List for Harvest 2025		

Harvest 2025 Winter Wheat Candidates

We have an incredibly strong pipeline with a broad range of varieties in NL1 and NL2 and no less than 5 wheat varieties currently on the candidate list for possible RL inclusion at the end of 2025.

KWS AINTREE (KWS W466)

AHDB
CANDIDATE

NEW

Details		
Group Potential Group 4	Year Listed Candidate	UK Treated Yield 112%
Comments		
<p>KWS Aintree, first out of the blocks, is an extremely exciting potential Group 4 barn filler. You won't need a photo finish for this one as it's way ahead of the competition. This variety has had consistently high yields in both 2023 (111%) and 2024 (112%). It also has good untreated yields (86%), like those of KWS Extase.</p> <p>It's a taller type, so is not suitable for very early drilling. However, being a Skyfall cross, later drilling opportunities could be very useful on-farm. KWS Aintree could work as a very good on-farm partner to the likes of KWS Dawsum, with that added benefit of OWBM and better later-drilled performance.</p>		
Data source: ADHB Candidate List for Harvest 2025 and 2 Year NL dataset (H2023 and 2024)		

KWS FOWLMERE (KWS W460)

AHDB
CANDIDATE

NEW

Details		
Group Potential Group 4	Year Listed Candidate	UK Treated Yield 109%
Comments		
<p>KWS Fowlmere is a home-grown wheat from our breeding field trials in Fowlmere, and a potential Group 4 winter wheat. With consistently high yields over the past 4 years, it's an excellent barn filling choice with outstanding grain quality including one of the highest specific weights on the market (80.0 kg/hl).</p> <p>With a -2 for maturity, this give a lot more flexibility on-farm, offering the ability for growers to schedule harvest pressures to ensure a safe harvest. KWS Fowlmere also boasts a fantastic untreated yield ([86])%.</p>		
Data source: ADHB Candidate List for Harvest 2025		

KWS MAXIMISE (KWS W468)

AHDB
CANDIDATE

NEW

Details		
Group Potential Group 4	Year Listed Candidate	UK Treated Yield 108%
Comments		
<p>If you're wanting to make the most out of your grain heap for harvest 2026 then KWS Maximise could be the hard Group 4 winter wheat for you. With consistent high yields over contrasting seasons, it will be a reliable choice on-farm.</p> <p>With very competitive untreated yields (77%) including a 7 for <i>Septoria</i> and a 9 for yellow rust, it stands out among the current competition. This variety is super short and still with 0% lodging in both treated and untreated PGR trials. It also boasts a decent grain package, making it potentially suitable for other grain markets.</p>		
Data source: ADHB Candidate List for Harvest 2025		

Spring Wheat

Today, on the back of significant plant breeding progression, spring wheat is coming back on the agenda for many UK growers thanks to its benefits as a management tool in crop rotation, workload reduction, lower input costs, and effective grass weed control, particularly blackgrass. New varieties are robust, flexible and profitable, with yields and physical grain qualities matching many of their late-sown winter wheat rivals.

The importance of variety choice

In an ideal world, every crop would be drilled into perfect autumn seedbeds. However, when conditions aren't favourable, there comes a point where waiting until spring is the better option. In these situations, spring vigour is crucial. Varieties like **KWS Harsum** and **KWS Alicium** offer strong early growth, helping them compete effectively with weeds while also providing solid disease resistance and OWBM protection.

Grain quality and marketability are equally important. Group 2 varieties like **KWS Beziue** bring additional marketing opportunities, which can significantly boost the overall gross margin of these crops.

5 top tips for spring wheat success

Successfully growing spring wheat requires careful planning and agronomic management to maximise yield, quality and profitability. Here are the key management tips:

- 1. Early and effective seedbed preparation;** drill into a fine, firm seedbed with good soil moisture.
- 2. Maintain good slug control** and consolidate the seedbed well after sowing.
- 3. Use correct seed rates;** sow at 400-450 seeds/m² as a rule – 500 seeds/m² on bad black-grass ground.
- 4. Optimise nutrient management;** beyond the standard N, P and K applications, growers can achieve a strong return by applying sulphur annually in areas where deficiencies exist.
- 5. Keep on top of growth regulation;** achieving a timely application will allow the crop to focus its resources on the grain rather than the straw.



KWS HARSUM

Group 1 Spring Wheat, (KWS Sywell x KWS Scirocco)

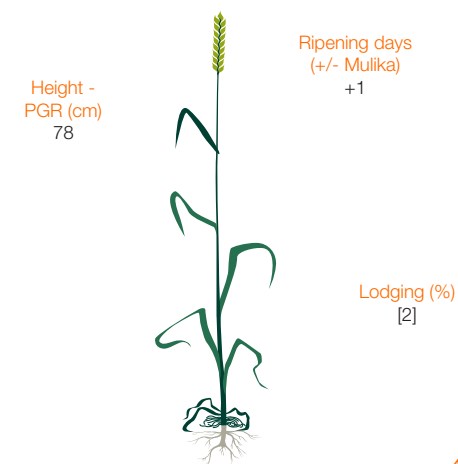
- Joint highest yielding Group 1 spring wheat on the 2025/26 Recommended List
- Group 1 quality fully approved by the UK Flour Millers
- OWBM resistance

Building on the success of KWS Ladum, KWS Harsum advances breeding progress by combining top yields with midge resistance. Confirmed as a Group 1 wheat by UK Flour Millers (Dec 2022), it produces similar grain to established variety Mulika, but with the added benefit of good gluten quality and baking performance, consistent across a range of challenging seasons.

Disease Resistance and Grain Quality

Yield	
Fungicide-treated (%)	101
Disease Resistance	
Mildew	[7]
Yellow Rust	7
Brown Rust	5
<i>Septoria tritici</i>	6
OWBM	R
Grain Quality	
Protein Content (%)	12.8
Hagberg Falling Number	325
Specific Weight (kg/hl)	78.9

Agronomic Features





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



Play the **Group 2 game** on your farm this season!

KWS LADUM

Group 1 Spring Wheat, (KWS Sywell x KWS Talland)



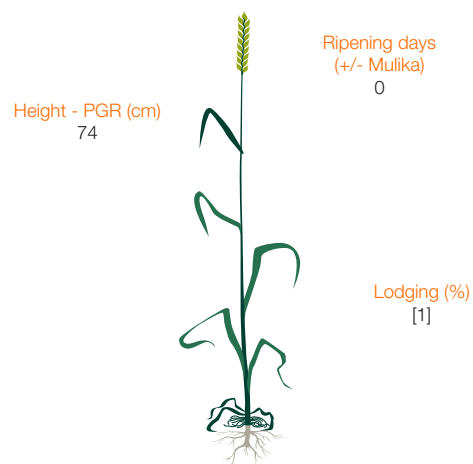
- UK spring yield 5% ahead of Mulika
- Excellent disease package including a 6 for *Septoria*
- Short and stiff

KWS Ladum delivers exceptional milling and baking quality, combined with impressive yield potential. Boasting outstanding grain quality, it holds full approval from UK Flour Millers. With a robust disease resistance package, short and stiff straw and early maturity, KWS Ladum offers both reliability and performance. This variety is a strong contender to add value to the quality wheat slot in your rotation this season.

Disease Resistance and Grain Quality

Yield	
Fungicide-treated (%)	99
Disease Resistance	
Mildew	[7]
Yellow Rust	7
Brown Rust	6
<i>Septoria tritici</i>	6
OWBM	-
Grain Quality	
Protein Content (%)	13.4
Hagberg Falling Number	324
Specific Weight (kg/hl)	78.5

Agronomic Features



KWS BEZIQUE

Group 2 Spring Wheat, (16-15 x KWS Chilham)



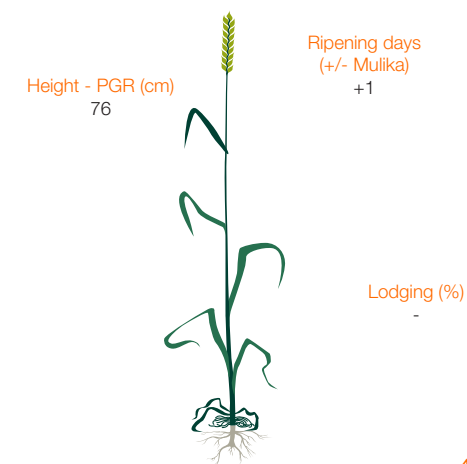
- Joint highest yielding spring breadmaking wheat on the 2025/26 Recommended List
- Good grain quality with an outstanding specific weight (79.2kg/hl)
- Excellent all-round disease package including OWBM resistance

KWS Bezique offers growers Group 2 quality in an easy to grow package. KWS Bezique is a shorter-strawed spring wheat and is later-maturing type to help spread workloads at harvest. It has good grain characteristics combined with excellent water absorption for a Group 2. Overall bake performance has been in-line with spring wheat Group 2's to date.

Disease Resistance and Grain Quality

Yield	
Fungicide-treated (%)	104
Disease Resistance	
Mildew	[8]
Yellow Rust	7
Brown Rust	6
<i>Septoria tritici</i>	[6]
OWBM	R
Grain Quality	
Protein Content (%)	12.9
Hagberg Falling Number	318
Specific Weight (kg/hl)	79.2

Agronomic Features





Quality meets excellence



The Group 2 with OWBM and market opportunity

KWS ALICIUM

Group 2 Spring Wheat, (KWS 13-21 x Astrid)

- High-yielding spring breadmaking wheat
- Superb grain quality including outstanding specific weight (80.6kg/hl)
- OWBM resistance

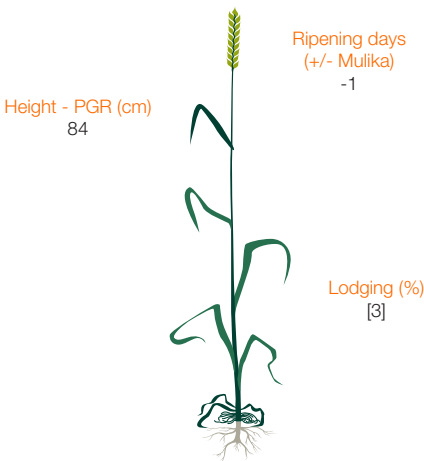
KWS Alicium brings something new on-farm and in the mill with high quality German wheat in its parentage. It produces the best combination of grain characteristics on the current Recommended List, with high protein, excellent HFN and outstanding specific weight. In the field, KWS Alicium has exceptionally high yield performance, producing yields just behind commercialised feed spring varieties.



Disease Resistance and Grain Quality

Yield	
Fungicide-treated (%)	104
Disease Resistance	
Mildew	[8]
Yellow Rust	7
Brown Rust	6
<i>Septoria tritici</i>	6
OWBM	R
Grain Quality	
Protein Content (%)	13.2
Hagberg Falling Number	341
Specific Weight (kg/hl)	80.6

Agronomic Features



KWS COCHISE

Group 2 Spring Wheat (Ashby x Lapis)

- Consistent, reliable, dependable
- UKFM Group 2 with added value opportunities
- OWBM resistance

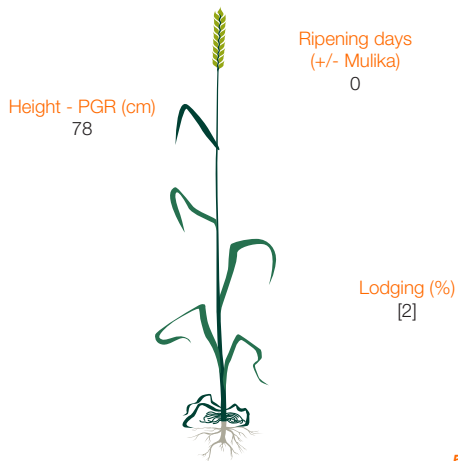
KWS Cochise is a tried and tested high-yielding spring breadmaking wheat. A high-performing spring wheat, KWS Cochise has good grain quality with a high specific weight and good protein content to serve milling contracts. In the field, the variety is tall but stiff-strawed with a solid disease profile, including the added benefits of OWBM resistance and resistance to Soil Borne Wheat Mosaic Virus.



Disease Resistance and Grain Quality

Yield	
Fungicide-treated (%)	99
Disease Resistance	
Mildew	8
Yellow Rust	4
Brown Rust	7
<i>Septoria tritici</i>	6
OWBM	R
Grain Quality	
Protein Content (%)	13.4
Hagberg Falling Number	265
Specific Weight (kg/hl)	79.0

Agronomic Features



High yielding spring feed wheat

KWS FIXUM

Group 4 Spring Wheat, (KWS Cochise x KWS Westfield)

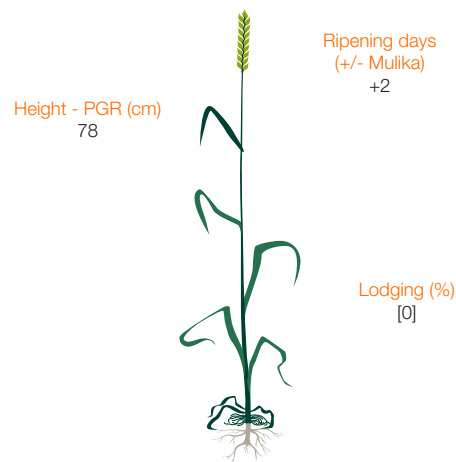
- Very high-yielding spring feed wheat
- Good all-round disease package
- Consistent over different sites and spring seasons

KWS Fixum is a high-yielding spring wheat that when recommended in 2022, reset the yield bar for spring feed wheats. It is super stiff-strawed and later to mature. During its testing over very different spring seasons, KWS Fixum has delivered consistently high yields no matter the weather conditions under which it has been grown. Couple this good grain quality and disease profile, and you have an attractive package to add tonnes of grain to the feed wheat heap.

Disease Resistance and Grain Quality

Yield	
Fungicide-treated (%)	104
Disease Resistance	
Mildew	[8]
Yellow Rust	6
Brown Rust	7
<i>Septoria tritici</i>	6
OWBM	-
Grain Quality	
Specific Weight (kg/hl)	77.9

Agronomic Features



Spring Wheat Recommended List 2025

	STR Pace	KWS Harsum	KWS Ladum	Nissaba	Mulika	KWS Bezique	KWS Alicium	WPB Mylo	KWS Cochise	Everlong	WPB Fraser	Ophelia	KWS Fixum
End-use group	UKFM Group 1					UKFM Group 2				Hard Group 4			
Scope of recommendation	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK
Variety status	NEW	C				NEW		C			NEW	NEW	
UK yield as % control (spring sowing)													
Fungicide-treated (7.5 t/ha)	101	101	99	94	94	104	104	102	99	105	105	104	104
Disease resistance													
Mildew (1-9)	[8]	[7]	[7]	[5]	6	[8]	[8]	[8]	8	[8]	[8]	[8]	[8]
Yellow rust (1-9)	5	7	7	5	6	7	7	9	4	7	8	6	6
Brown rust (1-9)	7	5	6	9	7	6	6	8	7	7	5	6	7
Septoria tritici (1-9)	[6]	6	6	6	6	[6]	6	7	6	6	[6]	[6]	6
Orange wheat blossom midge	-	R	-	R	R	R	R	-	R	-	-	-	-
Agronomic features (spring sowing)													
Lodging with PGR (%)	-	[2]	[1]	[2]	[4]	-	[3]	[1]	[2]	[20]	-	-	[0]
Straw length without PGR (cm)	80	78	74	76	79	76	84	73	78	79	79	78	78
Ripening (days +/- Mulika)	-1	+1	0	+2	0	+1	-1	+2	+0	-1	+0	-1	+2
Grain quality (spring sowing)													
Endosperm texture	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard
Protein content (%)	13.0	12.8	13.4	13.5	13.9	12.9	13.2	12.9	13.4	12.9	12.5	12.0	12.9
Hagberg Falling Number	303	325	324	312	327	318	341	301	265	330	232	267	241
Specific weight (kg/hl)	81.2	78.9	78.5	77.3	77.8	79.2	80.6	77.6	79.0	80.9	75.8	80.3	77.9
Annual treated yield (% control, spring sowing)													
2020 (6.5 t/ha)	-	[100]	[97]	[95]	[93]	-	[100]	-	[100]	-	-	-	[107]
2021 (7.8 t/ha)	-	103	100	94	93	-	103	101	98	103	-	-	104
2022 (7.3 t/ha)	101	98	100	91	96	104	104	100	97	108	104	105	104
2023 (6.9 t/ha)	[105]	[99]	[97]	[96]	[94]	[102]	[106]	[104]	[100]	[106]	[107]	[104]	[100]
2024 (8.8 t/ha)	[98]	[104]	[98]	[95]	[91]	[106]	[105]	[103]	[101]	[103]	[103]	[103]	[104]
Breeder/UK contact													
Breeder	Str	KWS	KWS	BA	BA	KWS	KWS-Gmbh	WPB	KWS	SE	WPB	-	KWS
UK contact	AgV	KWS	KWS	BA	Sen	KWS	KWS	NPZU	KWS	COPE	Lim	Els	KWS
Status in RL system													
Year first listed	25	23	22	22	11	25	23	24	17	24	25	25	22
RL status	P1	-	-	-	-	P1	-	P2	-	P2	P1	P1	-

BARLEY



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Winter Barley

Winter barley plays a vital role in many farm rotations, offering an early entry point for oilseed rape and serving as a valuable home-grown source of both grain and straw, especially for livestock operations. It's increasingly important in the more diversified crop rotations being adopted and helps distribute management tasks and workload more evenly across the growing season, which is particularly beneficial in wheat-dominated systems.

4 reasons for growing winter barley

- 1. Management benefits;** with optimal sowing from mid-September to mid October, winter barley spreads autumn workloads and continues to benefit spring operations, with spray timings (T0, T1, T2) occurring 2–3 weeks earlier than winter wheat, helping to spread tasks more evenly.
- 2. Allows for earlier harvesting;** harvesting winter barley early can help avoid late-season weather challenges and opens valuable early marketing opportunities easing harvest cash flow. As the first new-season cereal, it often finds diverse markets and off-combine export options, depending on the region.
- 3. Facilitates early oilseed rape establishment;** for many growers, winter barley remains hard to replace in the rotation. The early harvest opens up opportunities to plant OSR early. Early and vigorous establishment of OSR can help the plant to withstand pressures from CSFB and other pests.
- 4. New variety introductions will bring yield progression;** KWS continue to invest heavily in barley breeding, with new market introductions of innovative traits such as BYDV tolerance in recent years. 2025 sees KWS' first hybrid barley, **Inys**, added to the Recommended List as the highest-yielding winter barley, and **KWS Valencis**, the highest-yielding conventional barley.

Introducing hybrid barley to our portfolio

Launching hybrid barley marks a major milestone for us, as it broadens our offering to farmers. Hybrid barley delivers higher yields, greater resilience and features a unique plant structure. With deeper roots for improved nutrient and moisture uptake, stronger anchorage and increased biomass, both above and below ground, it can compete against and suppress grassweeds.

Our first variety, **Inys**, has joined the 2025/26 Recommended List as the highest-yielding winter barley with 109% of controls. With a strong pipeline, we're excited to introduce more varieties to the market in the coming years that meet the demands of UK farmers.

THE WINTER WARRIOR.

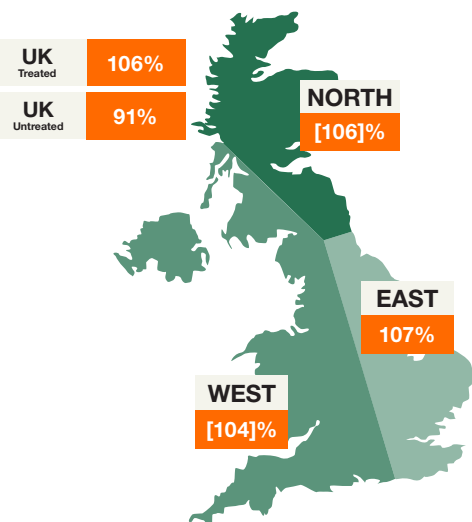
KWS VALENCIS

2-Row Winter Barley - Feed, (KWS Tardis x KWS Caribou)

- Highest-yielding conventional winter barley on the Recommended List
- Excellent yield consistency over different trialling years
- Very good all round disease resistance profile

Joining the 2025/26 Recommended List as the highest-yielding conventional barley, KWS Valencis maintains KWS feed winter barley's renowned performance, backed by its reliable KWS Tardis parentage.

Treated Yield By Region



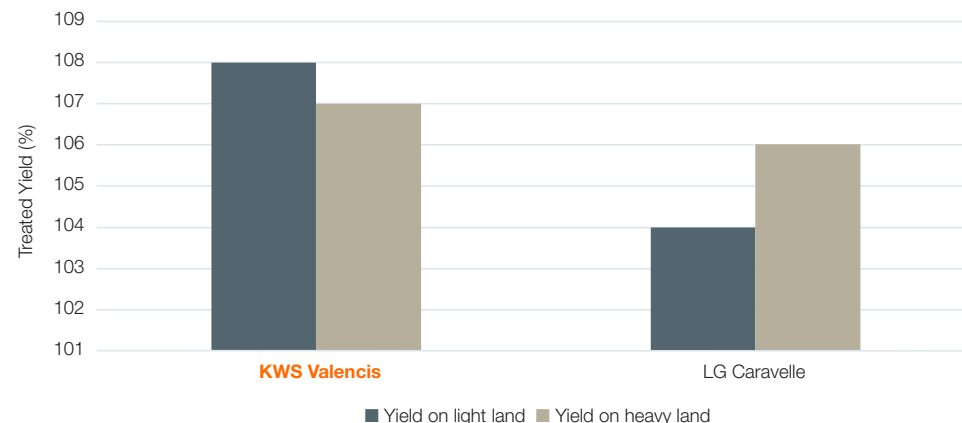
Key Agronomics and Disease Resistance

Disease Resistance	
Mildew	6
Brown Rust	7
Rhynchosporium	6
Net Blotch	6
Agronomic Features	
Resistance to lodging -PGR (1-9)	[6]
Resistance to lodging +PGR (1-9)	8
Brackling (%)	8
Ripening (+/ KWS Orwell)	0
Grain Quality	
Specific Weight (kg/hl)	69.8
Screenings (% through 2.25mm)	2.1
Screenings (% through 2.5mm)	6.1

What makes KWS Valencis the winter barley variety for you?

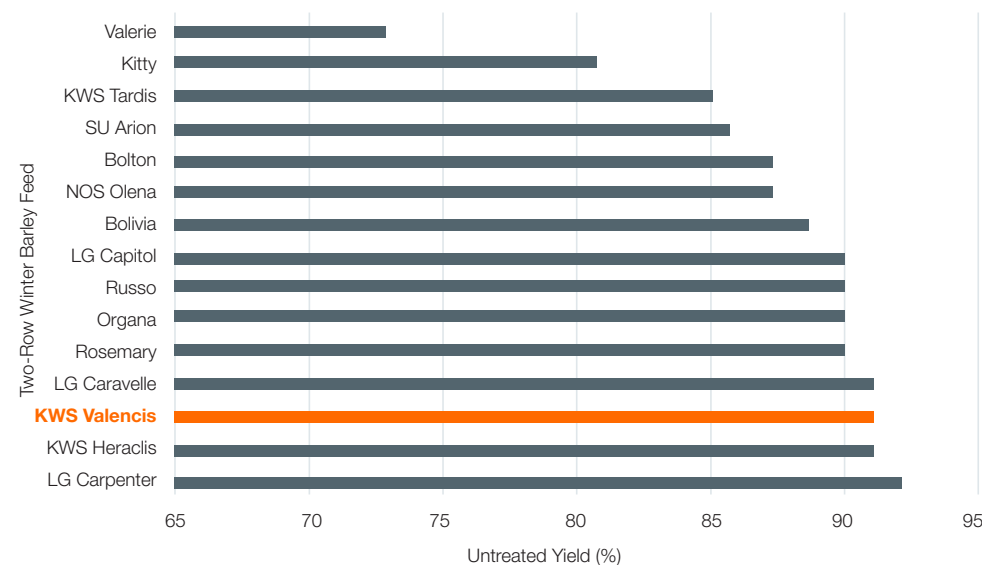
KWS Valencis outperforms LG Caravelle on both light land and heavy soils, demonstrating exceptional adaptability across diverse farm conditions. Its reliable performance is further reinforced by consistent results across contrasting trialling years, with yields varying by no more than 1% over the past three seasons.

Yield Performance on Light Land vs. Heavy Land



KWS Valencis has the second highest untreated yield on the Recommended List, at 91% of controls, which gives it real versatility in a number of production systems.

Untreated Yield (%)





The **next step**
in yield and field
performance from
the KWS 2-row
stable weight

KWS HERACLIS

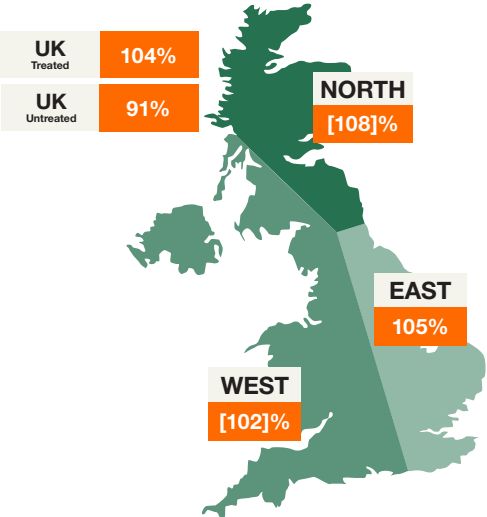
2-Row Winter Barley - Feed, (KWS Tardis x Paloma)

- Very good yield potential, especially in the north
- Good resistance to lodging and low levels of brackling
- Excellent untreated yield

New to the 2-row feed winter barley sector is KWS Heraclis, recommended in the North, where we have seen it perform at its best. It has a very good combination untreated yield, field performance and grain quality that you've come to expect as standard from KWS.



Treated Yield By Region

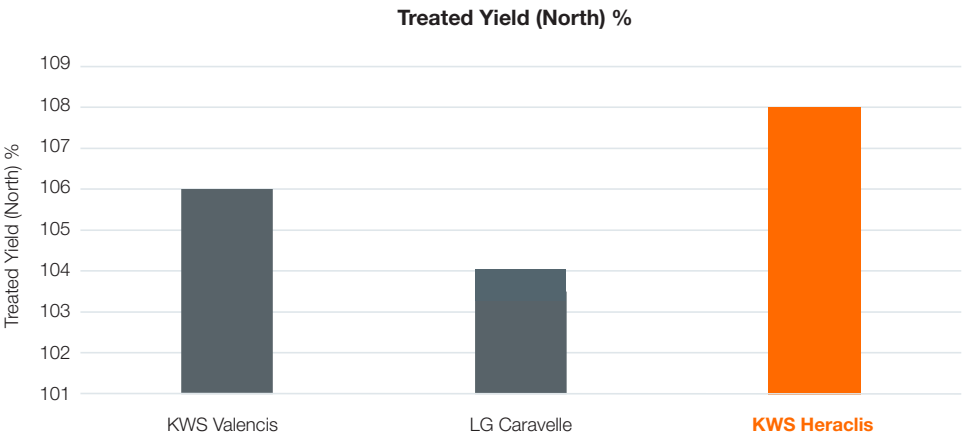


Key Agronomics and Disease Resistance

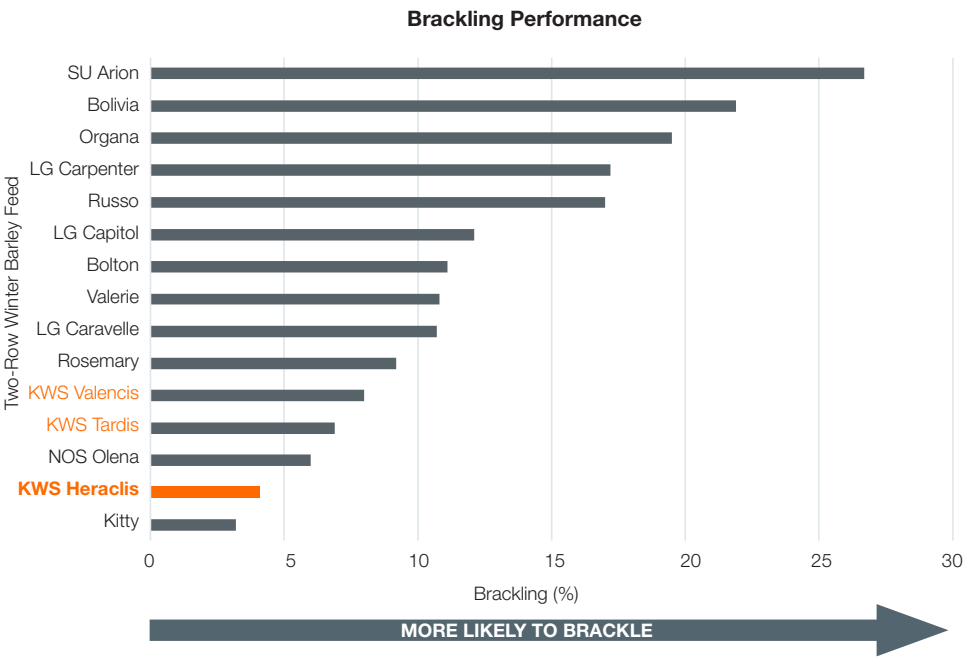
Disease Resistance	
Mildew	6
Brown Rust	7
Rhynchosporium	5
Net Blotch	5
Agronomic Features	
Resistance to lodging -PGR (1-9)	[7]
Resistance to lodging +PGR (1-9)	8
Brackling (%)	4
Ripening (+/- KWS Orwell)	0
Grain Quality	
Specific Weight (kg/hl)	69.4
Screenings (% through 2.25mm)	2.3
Screenings (% through 2.5mm)	6.7

What makes KWS Heraclis the winter barley variety for you?

KWS Heraclis has been added to the Recommended List for the North where it achieves a yield of [108%] of control. It has a good all-round disease package, respectable grain quality and stiff straw, reducing the lodging potential.



KWS Heraclis has one of the lowest brackling percentages on the Recommended List, minimising losses due to damaged stems, ultimately giving growers reassurance of harvesting.



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

TARDIS

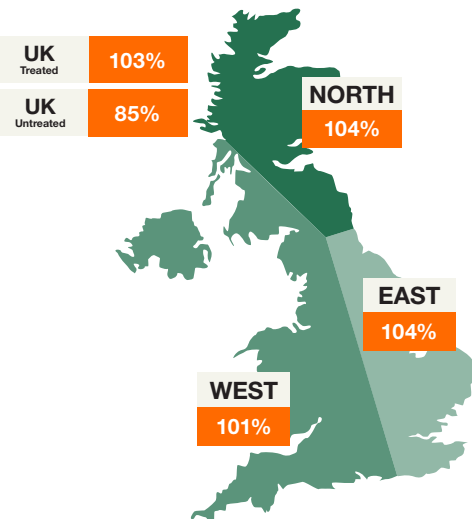
KWS TARDIS

2-Row Winter Barley - Feed, (11-12 x KWS Orwell)

- Excellent yield consistency over different trialling years
- Very good grain quality with a specific weight of 70.1kg/hl
- Stiff straw with twin 8s for resistance to lodging

KWS Tardis, the 2-row winter feed variety that has become a firm favourite. On farm, KWS Tardis has it all – yields, stem stiffness, grain quality, performance across the rotation and a good disease package. This makes it the ultimate reliable and consistent winter barley.

Treated Yield By Region

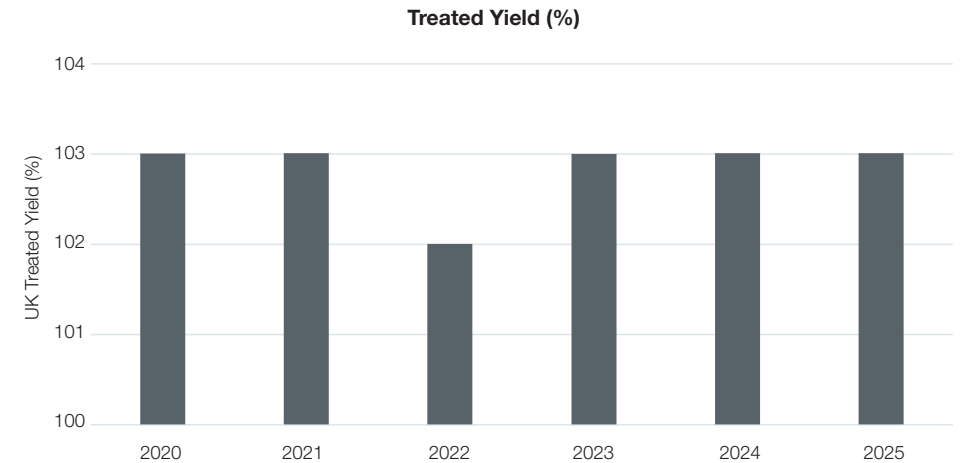


Key Agronomics and Disease Resistance

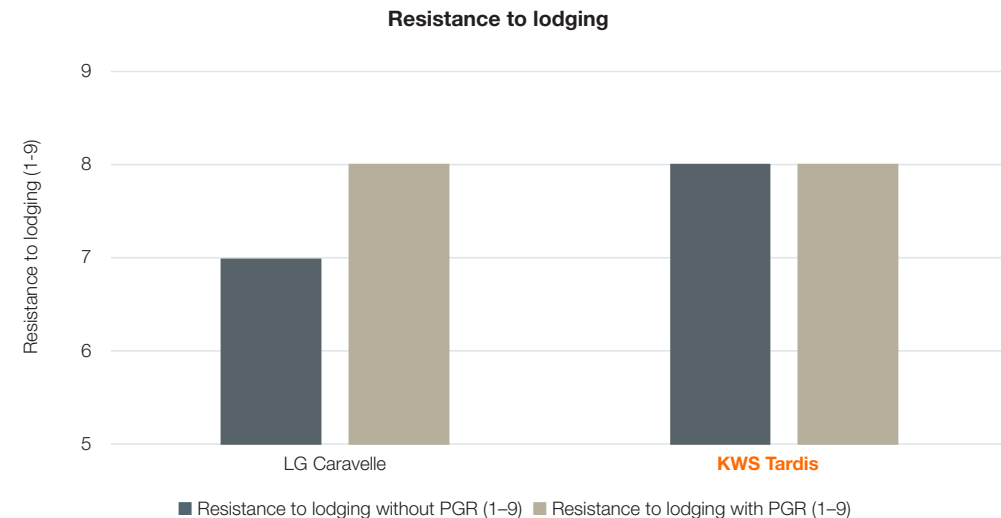
Disease Resistance	
Mildew	5
Brown Rust	6
Rhynchosporium	6
Net Blotch	6
Agronomic Features	
Resistance to lodging -PGR (1-9)	8
Resistance to lodging +PGR (1-9)	8
Brackling (%)	7
Ripening (+/- KWS Orwell)	0
Grain Quality	
Specific Weight (kg/hl)	70.1
Screenings (% through 2.25mm)	1.9
Screenings (% through 2.5mm)	5.5

What makes KWS Tardis the winter barley variety for you?

KWS Tardis has shown very consistent yields over very different trialling years, proving it to be a safe and reliable choice on-farm, performing well whatever the season throws at it.



KWS Tardis is a taller-strawed conventional barley with excellent straw strength. The variety boasts twin 8's for resistance to lodging (with and without PGR). This is the joint highest rating of any winter barley on the Recommended List, reinforcing its reputation for reliability and agronomic strength.



Winter Barley Recommended List 2025/26, Two Row Feed
Page 1

	KWS Valencis	LG Caravelle	LG Capitot	Russo	NOS Olena	KWS Heracles	Kitty	Rosemary	SU Arion	KWS Tardis	Bolivia	Bolton	Organa	LG Carpenter	Valerie
End-use group	Two-row feed														
Scope of recommendation	UK	UK	UK	E	UK	N	UK	N	E&N	UK	UK	UK	UK Sp	E&W Sp	UK
Variety status	NEW			NEW	NEW	NEW	NEW	NEW	NEW	C	*		NEW	NEW	
Fungicide-treated grain yield (% treated control)															
United Kingdom (9.6 t/ha)	106	106	106	106	106	104	104	104	104	103	103	102	102	102	99
East region (9.4 t/ha)	107	107	107	108	106	105	104	106	107	104	104	104	105	104	99
West region (9.6 t/ha)	[104]	105	[104]	[105]	[103]	[102]	[102]	[100]	[99]	101	100	101	[100]	[101]	97
North region (10.4 t/ha)	[106]	104	105	[103]	[108]	[108]	[108]	[106]	[105]	104	103	101	[100]	[97]	100
Untreated grain yield (% treated control)															
United Kingdom (9.6 t/ha)	91	91	90	90	87	91	81	90	86	85	88	87	90	92	73
Disease resistance															
Mildew (1–9)	6	7	6	5	6	6	6	5	8	5	8	6	6	6	7
Brown rust (1–9)	7	7	7	6	6	7	5	7	6	6	8	7	7	7	4
Rhynchosporium (1–9)	6	6	6	5	6	5	7	6	6	6	6	5	7	7	6
Net blotch (1–9)	6	6	5	6	6	5	6	6	7	6	6	6	5	7	6
BaYMV2	-	-	-	-	-	-	R	-	-	-	-	-	-	-	R
BYDV	-	-	-	-	-	-	-	-	-	-	-	-	To	To	-
WDV	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Agronomic features															
Resistance to lodging without PGR (1–9)	[6]	7	7	[7]	[6]	[7]	[8]	[5]	[7]	8	7	8	[6]	[5]	8
Resistance to lodging with PGR (1–9)	8	8	7	7	8	8	8	7	6	8	7	8	7	6	8
Lodging without PGR (%)	[11]	4	4	[9]	[12]	[5]	[2]	[30]	[8]	2	8	2	[19]	[30]	3
Lodging with PGR (%)	1	2	3	3	1	1	1	2	4	1	2	1	3	6	1
Straw length without PGR (cm)	93	91	88	92	92	89	94	98	92	93	91	92	106	97	92
Straw length with PGR (cm)	88	85	84	88	86	85	86	88	89	85	88	84	99	93	87
Brackling (%)	8	11	12	17	6	4	3	9	27	7	22	11	20	17	11
Ripening (days +/- KWS Orwell)	0	0	0	0	0	0	2	1	0	0	0	0	0	0	-1

Winter Barley Recommended List 2025/26, Two Row Feed
Page 2

	KWS Valencis	LG Caravelle	LG Capitot	Russo	NOS Olena	KWS Heracles	Kitty	Rosemary	SU Arion	KWS Tardis	Bolivia	Bolton	Organa	LG Carpenter	Valerie
End-use group	Two-row feed														
Main market options															
MBC malting approval for brewing use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grain quality															
Specific weight (kg/hl)	69.8	71.4	69.9	69.9	69.6	69.4	72.7	69.1	68.8	70.1	69.9	69.4	69.6	70.3	70.6
Screenings (% through 2.25 mm)	2.1	1.8	2.0	1.9	2.1	2.3	1.7	2.6	1.5	1.9	1.5	1.7	2.2	1.9	1.1
Screenings (% through 2.5 mm)	6.1	5.1	5.9	5.5	6.1	6.7	4.4	8.5	4.1	5.5	3.9	5.1	5.9	5.7	2.7
Nitrogen content (%)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Malting quality															
Hot water extract (l deg/kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual treated yield (% control)															
2020 (9.3 t/ha)	-	107	-	-	-	-	-	-	-	103	104	104	-	-	99
2021 (9.8 t/ha)	-	104	105	-	-	-	-	-	-	103	101	101	-	-	98
2022 (9.9 t/ha)	105	106	106	105	106	106	105	105	104	102	105	102	102	102	100
2023 (10.0 t/ha)	105	104	105	105	105	104	106	104	104	103	102	101	100	101	100
2024 (9.8 t/ha)	106	105	105	104	106	104	103	103	102	103	101	101	101	99	98
Soil type (about 50% of trials are medium soils)															
Light soils (9.8 t/ha)	[108]	104	105	[104]	[109]	[105]	[106]	[106]	[107]	103	104	103	[97]	[98]	100
Heavy soils (9.0 t/ha)	[107]	106	[110]	[105]	[106]	[106]	[104]	[105]	[105]	106	104	105	[103]	[105]	100
Breeder/UK contact															
Breeder	KWS	LimEur	Lim	NS	NS	KWS	Bre	Ack	Nord	KWS	NS	Ack	NS	LimEur	Bre
UK contact	KWS	Lim	Lim	Agr	Sen	KWS	Sen	ElsAck	SU	KWS	Agr	ElsAck	Sen	Lim	Sen
Status in RL system															
Year first listed	25	23	24	25	25	25	25	25	25	21	23	21	25	25	19
RL status	P1	-	P2	P1	P1	P1	P1	P1	P1	-	*	-	P1	P1	-



The first hybrid barley from KWS

INYS

INYS

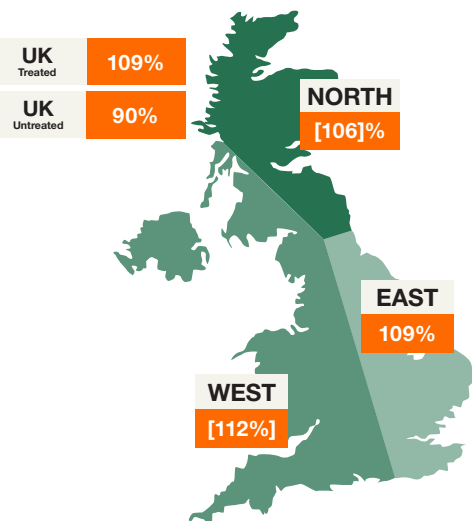
Hybrid 6 Row Winter Barley - Feed



- Highest-yielding barley on the Recommended List at 109% of controls
- Lowest brackling percentage (7%) of all hybrid barleys on the Recommended List
- Only hybrid barley to have twin 8's for lodging, both with and without a PGR

Inys is the first 6-row hybrid from KWS and was added to the 2025/26 Recommended List as the highest yielding winter barley. Inys is a step up in yield from all current hybrid barley varieties, and also has a very good all-round disease profile and a great agronomic package, with excellent straw strength and very low brackling.

Treated Yield By Region



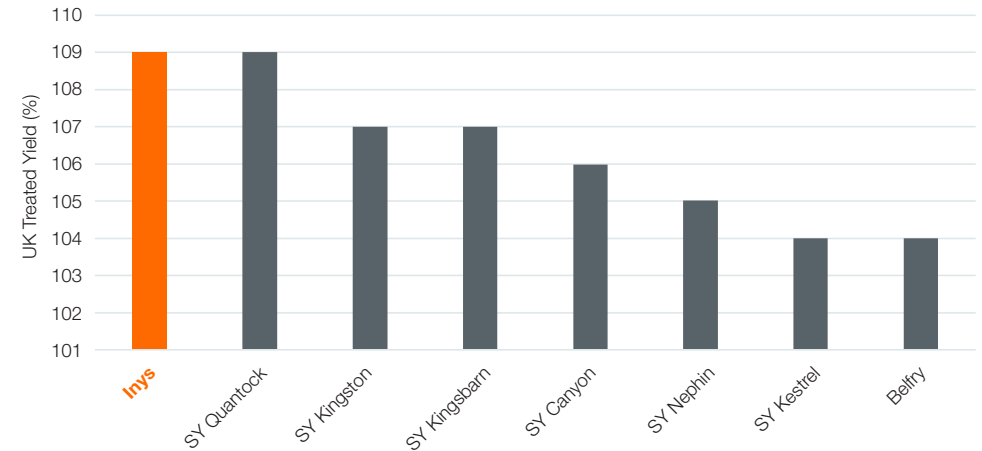
Key Agronomics and Disease Resistance

Disease Resistance	
Mildew	7
Brown Rust	6
Rhynchosporium	6
Net Blotch	5
Agronomic Features	
Resistance to lodging -PGR (1-9)	[8]
Resistance to lodging +PGR (1-9)	8
Brackling (%)	7
Ripening (+/- KWS Orwell)	-1
Grain Quality	
Specific Weight (kg/hl)	69.3
Screenings (% through 2.25mm)	1.7
Screenings (% through 2.5mm)	5.9

What makes Inys the winter barley variety for you?

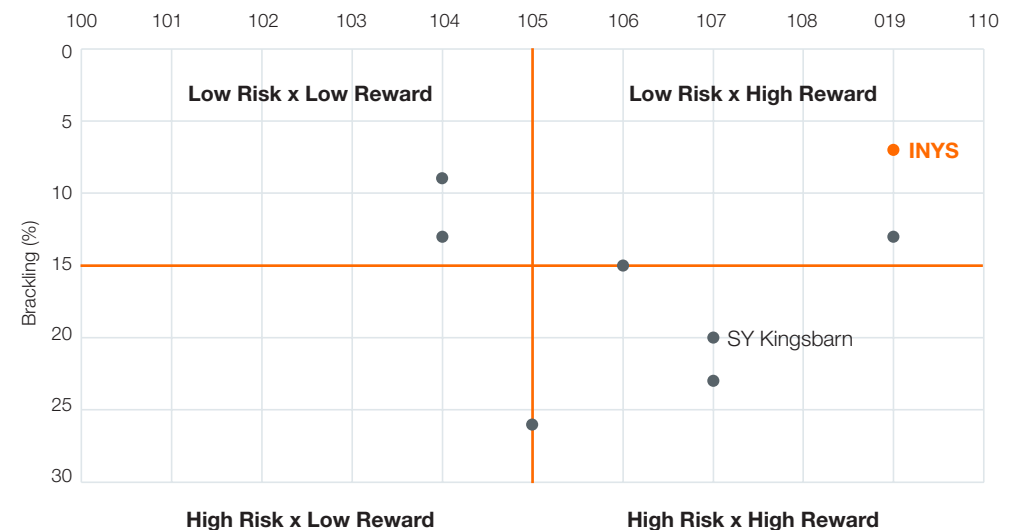
Inys delivers an outstanding UK yield performance of 109%, driven by exceptional results in the West (112%), and consistently high yields in both the East (109%) and North (106%). Combined with an impressive untreated yield at 90% of controls, Inys is the next level of yield potential.

UK Treated Yield (%)



With its high yields and very low brackling percentage, Inys is a stand out variety amongst the current hybrid barley varieties, making it a lower risk, higher reward variety for growers.

UK Treated Yield (%)



History is created – BYDV tolerance is built in

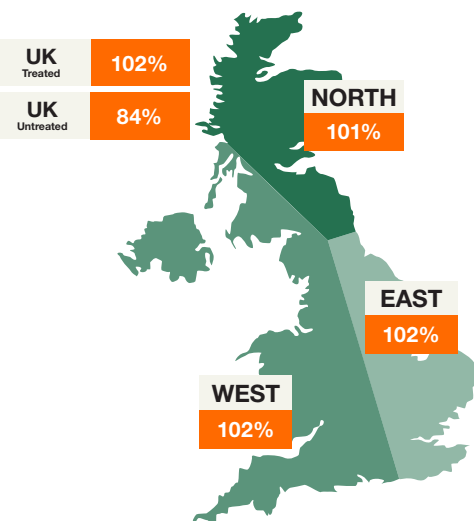
KWS FEERIS

6-Row Winter Barley - Feed, (Amistar x KWS Kosmos)

- 6-row conventional barley with BYDV tolerance
- Excellent risk management tool for those looking to drill early
- Very low levels of lodging

KWS Feeris is an ideal choice for growers choosing winter barley, but with the added assurance of built-in BYDV tolerance. KWS Feeris has respectable yields with good disease resistance and strong agronomics.

Treated Yield By Region

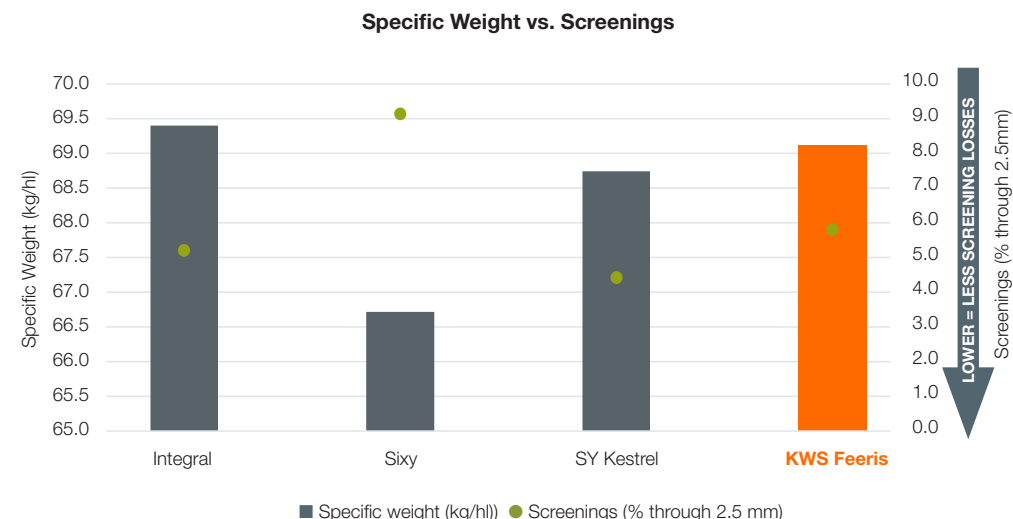


Key Agronomics and Disease Resistance

Disease Resistance	
Mildew	5
Brown Rust	6
Rhynchosporium	6
Net Blotch	6
Agronomic Features	
Resistance to lodging -PGR (1-9)	8
Resistance to lodging +PGR (1-9)	7
Brackling (%)	13
Ripening (+/- KWS Orwell)	0
Grain Quality	
Specific Weight (kg/hl)	69.1
Screenings (% through 2.25mm)	1.7
Screenings (% through 2.5mm)	5.8

What makes KWS Feeris the winter barley variety for you?

KWS Feeris has a strong combination of yields and low screenings in the 6-row market. Low screenings and high specific weight indicate the very good grain quality attributes of the variety.



The Trait Protection Scheme: Sharing the value of BYDV tolerance

What is the BSPB Trait Protection Scheme and how does it work?

Launched in 2021, the Trait Protection Scheme (TPS) includes a breeder-set trait fee within the seed price to fund genetic trait development. When purchasing KWS Feeris, your seed supplier will inform you it is part of the TPS. The trait fee and royalty are included in the certified seed price and collected by BSPB under a license agreement.

What if I farm save my seed?

You will be contracted under the TPS to pay the trait fee and the Farm Saved Seed royalty. The trait fee will not exceed the rate set at the point of purchase.

What is the value of the BYDV trait worth?

BYDV tolerance is a specialist agronomic trait developed through selective plant breeding. The virus will still be present in a plant with BYDV tolerance, but it will be able to overcome the virus. Benefits of BYDV tolerance include:

- Reduced insecticide inputs
- Season-long genetic protection
- Avoiding targeting beneficial insects
- Yield protection on headlands with pyrethroid buffer zones



Winter Barley Recommended List 2025/26, Six Row Feed
Page 1

	Inys#	SY Quantock#	SY Kingston#	SY Kingsbarn#	SY Canyon#	Integral	Sixy	SY Nephini#	SY Kestrel#	Belfry#	KWS Feeris
End-use group	Six-row feed										
Scope of recommendation	UK	UK	UK	UK	UK	UK Sp	UK Sp	UK	UK Sp	UK	UK Sp
Variety status	NEW	NEW	*	C		NEW	NEW		NEW	*	C
Fungicide-treated grain yield (% treated control)											
United Kingdom (9.6 t/ha)	109	109	107	107	106	105	105	105	104	104	102
East region (9.4 t/ha)	109	106	107	106	105	105	104	106	102	104	102
West region (9.6 t/ha)	[112]	[112]	108	108	106	[107]	[105]	103	[108]	104	102
North region (10.4 t/ha)	[106]	[109]	105	107	106	[103]	[107]	104	[104]	104	101
Untreated grain yield (% treated control)											
United Kingdom (9.6 t/ha)	90	93	85	82	91	91	75	91	86	85	84
Disease resistance											
Mildew (1–9)	7	7	8	7	7	4	7	6	7	6	5
Brown rust (1–9)	6	6	6	5	6	6	5	6	6	6	6
Rhynchosporium (1–9)	6	7	7	7	7	6	6	7	7	7	6
Net blotch (1–9)	5	6	5	5	5	6	5	6	6	5	6
BaYMV2	-	-	-	-	-	-	-	-	-	-	-
BYDV	-	-	-	-	-	To	To	-	R	-	To
WDV	-	-	-	-	-	-	-	-	To	-	-
Agronomic features											
Resistance to lodging without PGR (1–9)	[8]	[7]	6	6	6	[8]	[8]	7	[8]	7	8
Resistance to lodging with PGR (1–9)	8	7	6	6	6	8	8	6	7	8	7
Lodging without PGR (%)	[1]	[4]	17	18	11	[1]	[1]	9	[2]	7	2
Lodging with PGR (%)	1	2	7	6	6	1	2	6	2	1	2
Straw length without PGR (cm)	114	112	117	113	116	102	105	111	116	110	100
Straw length with PGR (cm)	106	106	109	105	108	95	101	104	106	104	96
Bracking (%)	7	13	23	20	15	4	6	26	9	13	13
Ripening (days +/- KWS Orwell)	-1	-1	-1	-1	-1	0	+1	-1	-1	-1	0
Main market options											
MBC matting approval for brewing use	-	-	-	-	-	-	-	-	-	-	-

Winter Barley Recommended List 2025/26, Six Row Feed
Page 2

	Inys#	SY Quantock#	SY Kingston#	SY Kingsbarn#	SY Canyon#	Integral	Sixy	SY Naphin#	SY Kestrel#	Belfry#	KWS Feeris
End-use group	Six-row feed										
Grain quality											
Specific weight (kg/hl)	69.3	70.4	70.2	70.2	71.1	69.4	66.7	70.9	68.7	69.2	69.1
Screenings (% through 2.25 mm)	1.7	2.8	2.7	1.5	1.9	1.7	2.8	3.2	1.5	2.8	1.7
Screenings (% through 2.5 mm)	5.9	9.5	8.7	5.4	6.1	5.2	9.1	11.0	4.4	9.2	5.8
Nitrogen content (%)	-	-	-	-	-	-	-	-	-	-	1.74
Malting quality											
Hot water extract (l deg/kg)	-	-	-	-	-	-	-	-	-	-	295.4
Annual treated yield (% control)											
2020 (9.3 t/ha)	-	-	107	106	105	-	-	104	-	105	102
2021 (9.8 t/ha)	-	-	105	106	106	-	-	105	-	103	102
2022 (9.9 t/ha)	109	109	107	108	107	105	105	104	105	105	103
2023 (10.0 t/ha)	109	109	107	109	106	105	105	104	105	105	100
2024 (9.8 t/ha)	108	108	106	106	105	105	106	104	105	103	102
Soil type (about 50% of trials are medium soils)											
Light soils (9.8 t/ha)	[107]	[109]	106	106	106	[102]	[110]	105	[104]	104	102
Heavy soils (9.0 t/ha)	[108]	[108]	102	103	101	[105]	[102]	103	[100]	100	100
Breeder/UK contact											
Breeder	SCP	SCP	SyP	SyP	SyP	Sec	Ack	SyP	SCP	SyP	KWS
UK contact	KWS	Syn	Syn	Syn	Syn	Sec	ElsAck	Syn	Syn	Syn	KWS
Status in RL system											
Year first listed	25	25	21	19	22	25	25	23	25	16	22
RL status	P1	P1	*	-	-	P1	P1	-	P1	*	-



Bred to be **bold**,
lively and **full**
of spirit



Those who
endure, **conquer!**



KWS SASSY

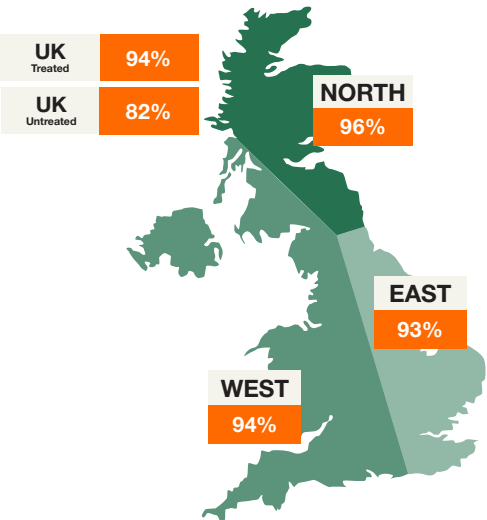
2 Row Spring Malting Barley, (Concerto x Publican)



- High specific weight (69.6 kg/hl)
- Very low screenings
- Full approval with MBC for malt distilling

KWS Sassy is a non-GN producing spring malting barley. It is fully approved by the Malting Barley Committee (MBC) for malt distilling and continues to deliver the highest specific weight and the lowest screenings of any currently listed spring distilling barley.

Treated Yield By Region



Key Agronomics and Disease Resistance

Disease Resistance	
Mildew	8
Brown Rust	5
Rhynchosporium	6
Net Blotch	5
Agronomic Features	
Resistance to lodging -PGR (1-9)	6
Straw Length without PGR (cm)	79
Ripening (days +/- RGT Planet)	+2
Resistance to brackling (1-9)	6
Grain Quality	
Specific Weight (kg/hl)	69.6
Screenings (% through 2.25mm)	0.8
Screenings (% through 2.5mm)	1.9

KWS ENDURIS

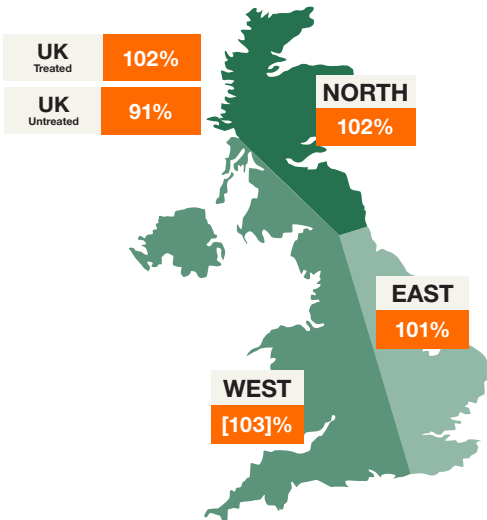
2 Row Spring Malting Barley, (KWS 17/2222 x KWS Willis)



- Very good yield potential and consistency across the UK
- Excellent agronomics with an [8] for resistance to lodging without a PGR and an 8 for resistance to brackling
- Currently under test with the Malting Barley Committee

New to the 2025/26 Recommended List, KWS Enduris is under testing with the Malting Barley Committee (MBC) as a dual-purpose malting variety, offering strong potential for both brewing and distilling, along with farmer-friendly agronomics and solid grain quality.

Treated Yield By Region



Key Agronomics and Disease Resistance

Disease Resistance	
Mildew	8
Brown Rust	4
Rhynchosporium	7
Net Blotch	[5]
Agronomic Features	
Resistance to lodging -PGR (1-9)	[8]
Straw Length without PGR (cm)	76
Ripening (days +/- RGT Planet)	+1
Resistance to brackling (1-9)	8
Grain Quality	
Specific Weight (kg/hl)	67.9
Screenings (% through 2.25mm)	0.9
Screenings (% through 2.5mm)	2.4

	Firefox	Laureate	Skyway	SY Tennyson	LG Diablo	RGT Planet	KWS Sassy	Bounty	Beller	LG Aquarius	Diviner	SY Signet	Olsen	SY Arrow	Firecracker	Plarmigan	KWS Enduris
End-use group	Approved							Provisional						Under test for malting			
Scope of recommendation	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK	UK
Variety status	C	C	C		C	C								NEW	NEW	NEW	NEW
Fungicide-treated grain yield (% treated control)																	
United Kingdom (7.8 t/ha)	102	102	101	101	99	96	94	106	104	103	102	102	102	104	103	103	102
East region (8.0 t/ha)	102	101	101	102	100	96	93	107	104	105	101	103	103	104	102	101	101
West region (7.3 t/ha)	102	103	102	101	98	95	94	106	104	103	102	101	101	[105]	[106]	[104]	[103]
North region (8.1 t/ha)	102	101	101	101	100	96	96	105	104	101	103	102	102	103	103	103	102
Untreated grain yield (% treated control)																	
United Kingdom (7.8 t/ha)	86	89	87	84	84	83	82	87	90	88	86	87	88	87	93	90	91
Disease resistance																	
Mildew (1–9)	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Brown rust (1–9)	4	5	4	4	4	4	5	4	5	4	5	5	4	5	5	5	4
Rhynchosporium (1–9)	6	7	7	5	5	5	6	6	6	5	5	5	5	7	5	6	7
Net blotch (1–9)	7	8	6	5	6	5	5	7	6	6	6	6	7	[8]	[7]	[7]	[5]
Agronomic features																	
Resistance to lodging without PGR (1–9)	7	6	7	[7]	7	7	6	[8]	[7]	[8]	[7]	[7]	[8]	[7]	[7]	[7]	[8]
Straw length without PGR (cm)	71	70	76	71	72	74	79	70	69	71	67	72	71	74	71	72	76
Ripening (days +/- RGT Planet)	0	+1	+1	+2	+3	0	+2	+2	+2	+1	+1	+2	+2	+1	+1	+0	+1
Resistance to brackling (1–9)	7	7	7	7	7	7	6	7	8	7	7	7	7	7	7	7	8
Main market options																	
MBC malting approval for brewing use	-	F	F	F	F	F	Nt	P	P	P	Nt	P	P	T	T	T	T
MBC malting approval for malt distilling use	F	F	-	F	F	Nt	F	-	P	-	P	-	P	T	T	T	T
Grain quality																	
Specific weight (kg/hl)	67.8	67.8	69.9	67.0	68.4	69.3	69.6	66.5	68.2	68.8	68.1	68.0	67.5	67.7	68.8	69.4	67.9
Screenings (% through 2.25 mm)	1.1	1.1	0.8	1.2	1.2	1.0	0.8	1.2	0.8	1.2	1.4	1.3	1.5	1.1	1.2	1.3	0.9
Screenings (% through 2.5 mm)	3.1	2.7	1.9	2.7	3.0	2.9	1.9	3.4	2.1	3.4	3.8	3.0	3.9	2.9	3.2	2.8	2.4
Nitrogen content (%)	[1.46]	1.48	1.51	1.42	1.48	1.50	-	1.46	1.50	1.45	1.46	1.44	1.46	1.39	1.45	1.48	1.47
Malting quality																	
Hot water extract (l deg/kg)	[314.1]	314.2	314.1	316.2	314.2	313.5	-	314.4	314.0	314.1	314.9	314.9	315.7	315.8	315.9	314.9	315.1
Predicted spirit yield (laa/t)	[433.8]	434.9	-	437.9	436.0	-	-	435.6	436.3	437.4	437.0	[433.2]	436.5	437.8	435.6	436.6	434.5

	Firefox	Laureate	Skyway	SY Tennyson	LG Diablo	RGT Planet	KWS Sassy		Bounty	Belter	LG Aquarius	Diviner	SY Signet	Olsen	SY Arrow	Firecracker	Plannigan	KWS Enduris
End-use group	Approved								Provisional						Under test for malting			
Annual treated yield (% control)																		
2020 (7.7 t/ha)	100	101	103	102	100	97	95		-	-	-	102	102	-	-	-	-	-
2021 (8.0 t/ha)	103	102	101	103	99	95	94		107	104	103	103	103	102	-	-	-	-
2022 (7.9 t/ha)	101	101	102	102	98	97	96		107	104	104	102	102	103	103	104	103	102
2023 (7.7 t/ha)	102	102	101	99	99	96	94		104	103	102	102	102	102	104	102	103	102
2024 (7.8 t/ha)	102	103	100	101	100	95	91		106	105	103	103	101	102	105	104	102	102
Breeder/UK contact																		
Breeder	Ack	SyP	NS	SyP	LimEur	RAGT	KWS		NS	Sec	Lim	Sec	SyP	Sej	SCP	Sec	Sec	KWS-Gmbh
UK contact	ElsAck	Syn	Agr	Syn	Lim	RAGT	KWS		AgV	Agr	Lim	Agr	Syn	Lim	Syn	Agr	Agr	KWS
Status in RL system																		
Year first listed	20	16	21	23	18	15	16		24	24	24	23	23	24	25	25	25	25
RL status	-	-	-	-	-	-	-		P2	P2	P2	-	-	P2	P1	P1	P1	P1



OATS

Oats - healthy for us and sustainable for fields

The rotational benefits of oats are well documented and now play a more significant role in crop rotation with the reduction in acreage of other break crops. In both the UK and globally, consumption of oats continues to grow, driven by end users and a rising awareness of their health benefits.

Oat Breeding at KWS

KWS work with well-known European breeders such as Wiersum Plant Breeding (WPB) as well as having our own dedicated oat breeding programme with a significant trials network across the UK.

What are the benefits of growing oats?

Oats are an adaptable crop that can be successful in challenging conditions. They are good nutrient scavengers and usually require less fertiliser than other cereals. Oats are more resistant to diseases like Take-all which means they can act as a break crop to break the disease cycle in a cereal heavy rotation.

Oats can offer some competitiveness against grassweeds, but shouldn't be grown in high pressure situations as herbicide options can be limited.

What should I be looking for in an oat variety?

There are plenty of end market options for oats, with oats mills spread throughout the country. Oat millers look for varieties with good grain characteristics to make milling easier, including: high specific weight, low screenings, good kernel content and hullability.

When should I drill spring oats?

We recommend drilling spring oats from late February to March, ideally before April. Early planting allows deep rooting ahead of variable spring weather, particularly in a hot dry spring which can impact crop development and reduce yield.



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The first choice spring oat for end users

WPB ISABEL

Husked Spring Oat, (LW 03W0383-06 x Husky)

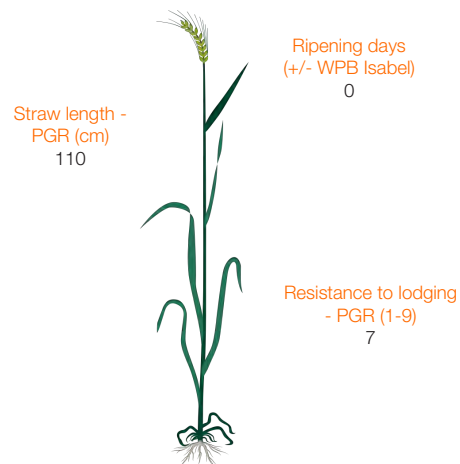
- Best specific weight on the 2025/26 Recommended List
- Excellent hullability for end users
- Good agronomics on-farm

From the Wiersum plant breeding stable that brought WPB Elyann to the UK market, WPB Isabel has established itself to be the UK's most planted spring oat in 2023 and 2024 and for good reason too: it's a variety that ticks all the boxes for the grower and the end-user.

Yield, Disease Resistance and Grain Quality

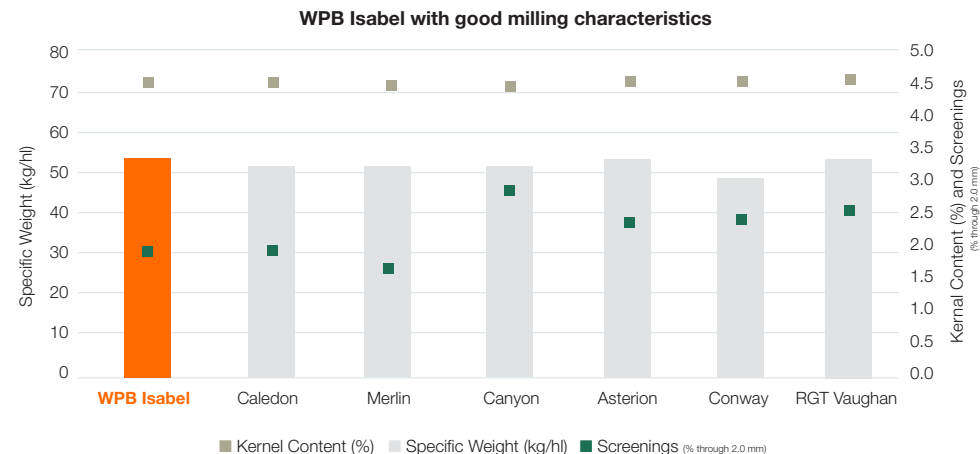
UK Yield	
Fungicide-treated (%)	100
Untreated (%)	86
Disease Resistance	
Mildew	5
Crown Rust	5
Grain Quality	
Kernel Content (%)	72.8
Specific Weight (kg/hl)	53.6
Screenings (% through 2.0 mm)	1.9
Screenings (% through 1.8 mm)	-

Agronomic Features



What makes WPB Isabel the spring oat variety for you?

Tried and tested by UK growers over the last 4 seasons, it has found end user appeal thanks to its good specific weight (53.6kg/hl), low screenings and excellent kernel content. It is a sought-after variety, and contracts are available this spring thanks to the variety's flexibility in the mill.



Data Source: AHDB Spring Oat Recommended List 2025/26

Up and Coming Oat Varieties

New to growers from the KWS oat breeding programme are **KWS Vibrant**, a husked spring oat and **KWS Pertinent**, a husked winter oat.

KWS Vibrant

- Excellent yield potential and very good untreated yield
- Good combination of field yield and kernel content
- Short and stiff

KWS Vibrant is a year 4 candidate with good treated and untreated yields. It is a shorter variety and is showing good milling characteristics on a par with other varieties that have found popularity on-farm.

KWS Pertinent

- A very early ripening variety
- Good specific weight
- Good kernel content

KWS Pertinent is currently undergoing testing with end users for suitability through the mill.



Spring Oats Recommended List 2025, Husked Varieties

	Caledon	Merlin	WPB Isabel	Canyon	Asterion	Conway	RGT Vaughan
Variety type	Husked						
Scope of recommendation	UK	UK	UK	UK	UK	UK	UK
Variety status	NEW		C	C			
UK yield (% treated control)							
Fungicide-treated (7.5 t/ha)	105	101	100	100	99	96	94
Untreated (% of treated control, 7.5 t/ha)	98	94	86	93	94	85	89
Disease resistance							
Mildew (1–9)	8	7	5	8	8	6	8
Crown rust (1–9)	5	4	5	4	5	4	4
Agronomic features							
Resistance to lodging without PGR (1–9)	[7]	8	7	7	[7]	7	[7]
Straw length without PGR (cm)	[112]	106	110	111	109	102	108
Ripening (days +/- WPB Isabel)	-1	-2	0	-2	-1	-1	-2
Grain quality							
Kernel content (%)	72.8	71.4	72.8	71.5	72.8	71.4	72.8
Specific weight (kg/hl)	51.5	51.5	53.6	51.6	52.0	49.5	52.4
Screenings (% through 2.0 mm)	1.9	1.6	1.9	2.7	2.3	2.4	2.5
Screenings (% through 1.8 mm)	-	-	-	-	-	-	-
Annual treated yield (% control)							
2020 (6.4 t/ha)	-	[98]	[99]	[101]	[97]	[99]	[100]
2021 (8.0 t/ha)	[103]	[101]	[100]	[100]	[102]	[98]	[94]
2022 (7.9 t/ha)	[110]	[103]	[99]	[101]	[101]	[95]	[97]
2023 (7.4 t/ha)	[104]	[102]	[102]	[98]	[102]	[94]	[92]
2024 (8.0 t/ha)	[101]	[99]	[100]	[100]	[94]	[94]	[91]
Breeder/UK contact							
Breeder	Nord	Selg	Wier	Nord	Nord	IBERS	R2n
UK contact	SU	COPE	KWS	SU	SU	Sen	RAGT
Status in RL system							
Year first listed	25	22	20	11	24	14	23
RL status	P1	-	-	-	P2	-	-

Farming Photo of the Month Competition!

We want to see your best farming photos. We are looking for the finest amateur photograph taken each month by you.



WIN a £50 Sugar
Loaf Clothing
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Sony earbuds!



Submit your competition entries by scanning the QR code now!

RYE



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Hybrid rye - the cereal with **much to offer**

With its lower input costs, flexibility, adaptability and strong returns the UK's hybrid rye acreage has the potential to dramatically increase in the coming years. Rye can be grown for either grain or whole crop, with an increasing number of Anaerobic Digestate plants having been built in recent years, this market has grown in size. While wheat remains the dominant feed source for livestock in the UK, rye could prove just as effective due to its lower input requirements making it a more sustainable source of animal feed.

What are the benefits of growing hybrid rye?

Farmers prioritise flexibility when selecting crops and hybrid rye is a versatile choice for a wide range of rotations. Its key advantages include deep-rooting that maximises nutrient and water uptake, rapid spring growth and reduced input requirement compared to other cereals. It also boasts high straw yields, useful for livestock farmers or as another income stream for the crop.

What land type suits hybrid rye?

Hybrid rye can be grown in a variety of conditions, including light, sandy and drought-prone soils. Rye requires around 25% less water than wheat to produce 1 tonne of grain per hectare, making it well-suited to drought-prone soils and areas of low rainfall.

However it also yields well on heavier land due to its strong rooting system and tolerance to wet conditions and low susceptibility to *Septoria*. It is a good option for land facing weed pressure as its rapid spring growth and dense canopy create a highly competitive environment that helps to suppress weeds.

What makes KWS hybrid rye different to other varieties?

Beyond grain yield and stability, reducing ergot remains a top priority in the KWS hybrid rye breeding programme. KWS hybrid rye varieties incorporate PollenPLUS® technology, which significantly boosts pollen production, strengthening the plants' natural defence against ergot. With increased pollen shedding, fertilisation occurs more efficiently, prompting the glumes to close sooner. This reduces the risk of ergot spores infecting the grain site, ensuring a healthier and more resilient crop.



The amount of pollen released by PollenPLUS® hybrids (right) vs. a competitor hybrid (left)



For those who **aim high**

KWS EMPHOR

Hybrid Rye

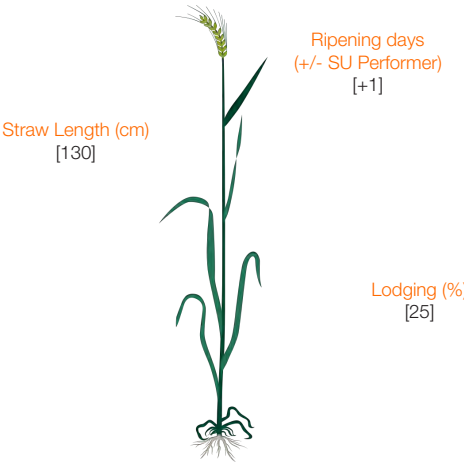
- KWS’s highest-yielding variety
- Dual purpose for grain and wholecrop
- Excellent drought tolerance

New on the Descriptive List for sowing in autumn 2025, KWS Emphor offers an improvement on the market-leading hybrid rye KWS Tayo. KWS Emphor has high yields, strong brown rust resistance and excellent drought tolerance.

Disease Resistance and Grain Quality

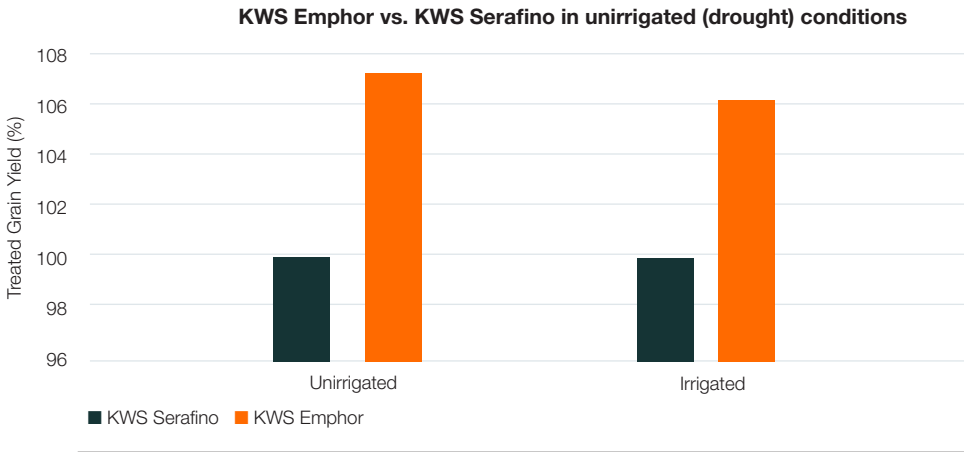
Grain Yield	
Fungicide-treated (% of controls)	104
Disease Resistance	
Brown rust (1-9)	6
Grain Quality	
Protein content (%)	8.2
Hagberg Falling Number	229
Specific weight (kg/hl)	76.2

Agronomic Features



What makes KWS Emphor the hybrid rye variety for you?

KWS Serafino was once our top-performing variety in drought conditions, but KWS Emphor has now claimed that title, as demonstrated by trials at our rye breeding station in Germany.



Data Source: Own variety trials as plot trials for year of 2022, rel. 100 non-irrigated = 88.7 dt/ha and irrigated = 123.3 dt/ha, n = 1(KWS Lochow, 2022)

Ergot tolerance in KWS Emphor

KWS Emphor is now also our top-ranked variety for ergot tolerance. The table below compares its performance against our own portfolio and competitors. The number indicates the percentage of ergot in the samples taken across 6 different locations from trials in Germany.

Variety	Percentage Ergot Content in Sample
SU Performer	2.0
SU Perspectiv	1.0
KWS Tayo	0.6
SU Karlsson	0.6
KWS Serafino	0.4
KWS Emphor	0.3

Data Source: KWS Wohlde 2024



The most popular rye grown in the UK



KWS TAYO

Hybrid Rye

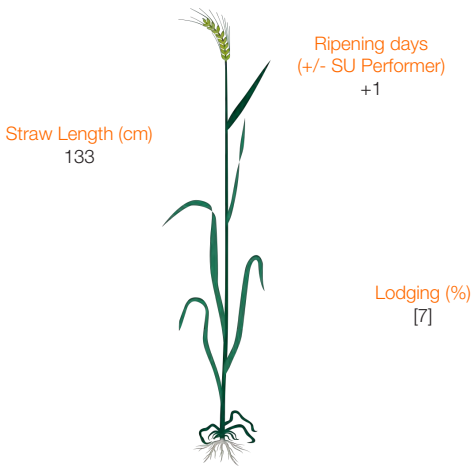
- Market-leading hybrid variety
- Dual purpose for grain and wholecrop
- Proven performance on-farm

KWS Tayo is a market-leading rye variety with high grain and straw yields, strong brown rust resistance and good standing power. KWS Tayo offers a lot of potential for growers.

Disease Resistance and Grain Quality

Grain Yield	
Fungicide-treated (% of controls)	101
Disease Resistance	
Brown rust (1-9)	6
Grain Quality	
Protein content (%)	8.8
Hagberg Falling Number	241
Specific weight (kg/hl)	76.0

Agronomic Features

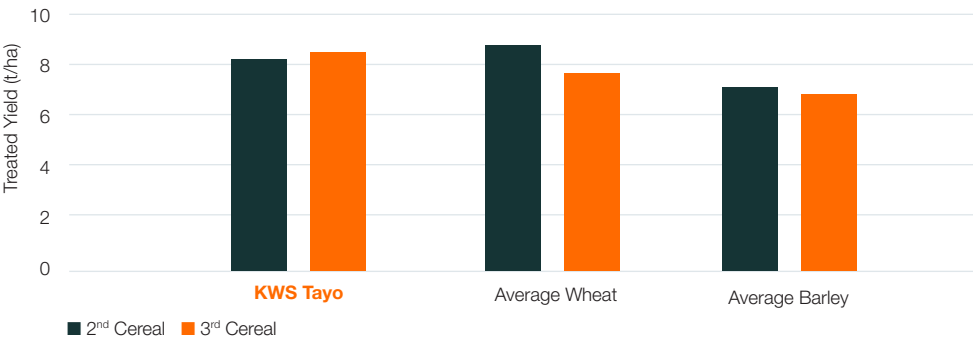


What makes KWS Tayo the hybrid rye variety for you?

The graph below presents data from our product development site in Fowlmere, demonstrating the adaptability of KWS Tayo in rotation as either a second or third cereal. The results show that KWS Tayo delivers strong grain yields despite receiving a lower nitrogen input of 100 kg N/ha, compared to wheat and barley at 180 kg N/ha.

This reduced nitrogen requirement not only lowers production costs but also provides significant environmental benefits. Less nitrogen is lost to the surrounding environment through leaching, contributing to improved sustainability and a reduced carbon footprint for the crop.

Rye vs. Wheat and Barley in 2nd and 3rd Cereal Positions



Data Source: KWS Own Trials 2023

Maximise Your Hybrid Rye Potential!

Learn more about hybrid rye options, including key agronomic data and disease profile information with the KWS Hybrid Rye Guide.



To download now, please scan the QR code.

KWS UK

2024 Hybrid Rye Guide



Fire up your
rye yields and
grain quality!



KWS SERAFINO

Hybrid Rye

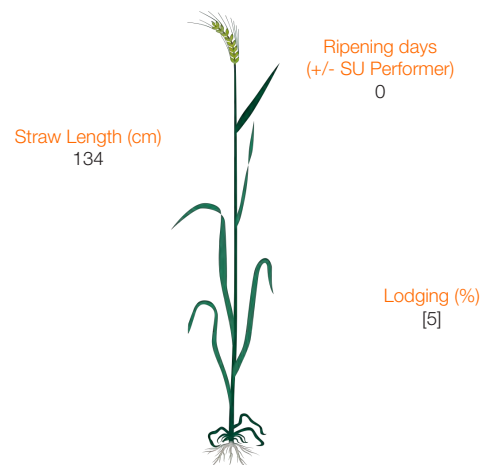
- High ergot resistance
- High drought tolerance
- Stiff-strawed

While KWS Serafino is one of the older varieties on the AHDB Descriptive List, it still performs very well on-farm, giving growers reassurance of a solid yield along with excellent grain quality.

Disease Resistance and Grain Quality

Grain Yield	
Fungicide-treated (% of controls)	99
Disease Resistance	
Brown rust (1-9)	5
Grain Quality	
Protein content (%)	8.7
Hagberg Falling Number	256
Specific weight (kg/hl)	76.5

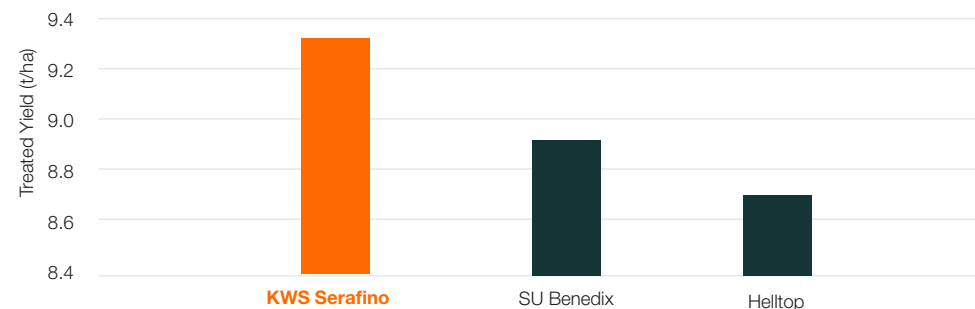
Agronomic Features



AHDB
DESCRIBED

What makes KWS Serafino the hybrid rye variety for you?

Although KWS Serafino is our oldest variety, it continues to deliver strong on-farm performance. The graph below highlights its ability to maintain competitive yields compared to newer varieties. With excellent grain and straw yields, KWS Serafino remains a reliable choice for pig finishing or sow rations. Additionally, thanks to PollenPLUS® technology, it offers enhanced resistance to ergot, further strengthening its value in the field.



Data Source: Agrii Aberdeen Winter Rye Variety Trials Harvest 2023

What's in the hybrid rye breeding pipeline at KWS?



Short Rye

Our breeders in Germany have bred in genetics that shorten the height of conventional hybrid rye whilst still maintaining the benefits you would associate with the crop: PollenPLUS® and deep rooting.

This new technology can offer advantages which include:

- Reduced lodging risk
- Reduced amount of PGR applied to the crop

We have 3 varieties in the Descriptive List testing system with yields comparable to KWS Tayo.

Biomass Varieties

These varieties are suited for biomass markets only, whether that be an early cut for livestock silage or a later cut in June for Anaerobic Digestion Plants. Wholecrop trials in Germany have shown that these varieties can bring a yield advantage of around 15% over conventional hybrid rye.

Flexi Rye

Flexi rye is a new hybrid innovation from our German breeders, designed as a genetically spring crop with fast, vigorous early growth. Suitable for drilling from November to February, it extends the planting window for growers. As hybrid varieties, they offer benefits like PollenPLUS® and deep rooting.



First class in terms of yield

KWS IGOR

Hybrid Rye

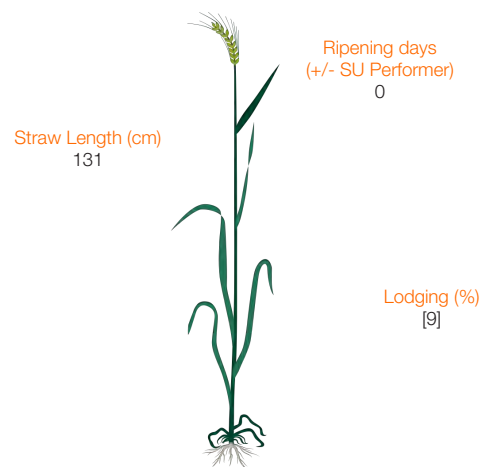
- Dual purpose grain and wholecrop
- High-yielding
- Good all-round disease resistance

KWS Igor has decent yields and is relatively short-stawed with medium to good straw strength. It has been shown in our trials to be our highest-yielding variety for wholecrop.

Disease Resistance and Grain Quality

Grain Yield	
Fungicide-treated (% of controls)	103
Disease Resistance	
Brown rust (1-9)	3
Grain Quality	
Protein content (%)	8.6
Hagberg Falling Number	236
Specific weight (kg/hl)	75.4

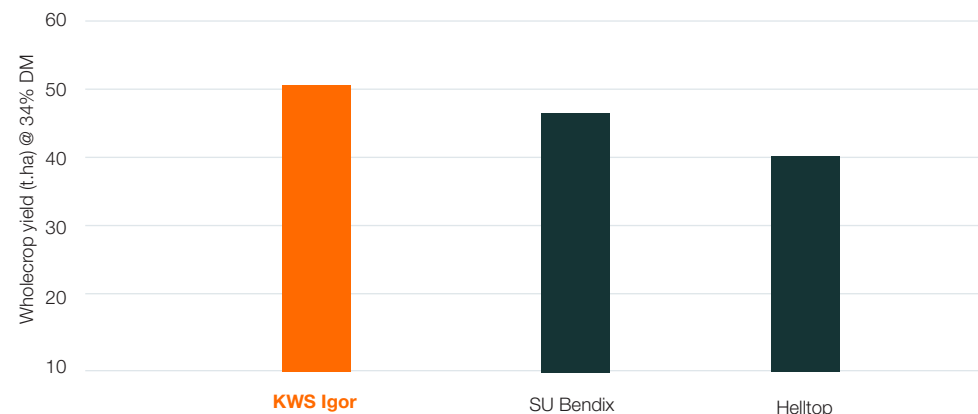
Agronomic Features



What makes KWS Igor the hybrid rye variety for you?

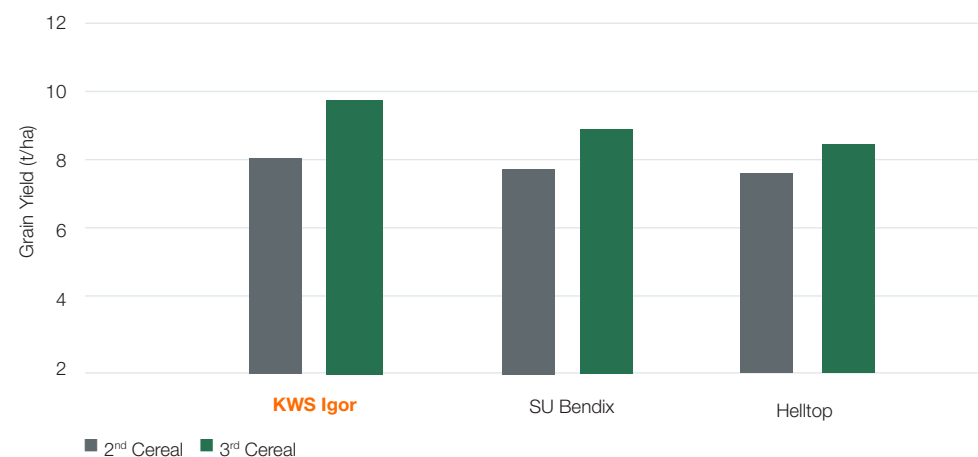
An Agrii winter rye trial highlighted KWS Igor for its impressive wholecrop yield, along with strong treated and untreated grain yields, positioning it as a promising dual-purpose variety.

KWS Igor vs. Competitor Varieties - Wholecrop Yield



Data Source: Agrii Winter Rye Trials Data Harvest 2023

KWS Igor vs. Competitor Varieties - Treated Yield



Data Source: Agrii Winter Rye Trials Data Harvest 2023

Winter Rye Descriptive List 2025/26

	SU Thor	SU Baresi	Astranos	KWS Emphor	SU Karlsson	KWS Bardor	KWS Iger	SU Perspectiv	KWS Tayo	SU Avid	SU Performer	SU Bendix	KWS Serafino	KWS Curator	Poseidon
Variety type	Hybrid														
Variety status	NEW			NEW		NEW					C			NEW	*
Grain yield (as % treated control)															
Fungicide-treated (9.7 t/ha)	108	104	104	104	104	104	103	102	101	100	100	99	99	98	94
Number of trials	6	19	11	6	11	6	17	11	19	19	19	18	19	6	18
Disease resistance															
Brown rust (1–9)	5	4	4	6	6	6	3	4	6	5	4	4	5	6	3
Agronomic features															
Lodging (%)	[48]	[9]	[4]	[25]	[3]	[8]	[9]	[6]	[7]	[15]	[13]	[7]	[5]	[8]	[1]
Straw length (cm)	[130]	132	132	[130]	137	[135]	131	133	133	138	134	136	134	[134]	133
Ripening (days +/- SU Performer)	[0]	0	0	[+1]	0	[0]	0	0	+1	0	0	0	0	[+1]	-1
Grain quality															
Protein content (%)	8.4	8.4	9.4	8.2	9.0	8.5	8.6	8.8	8.8	8.7	8.8	9.2	8.7	8.4	9.4
Hagberg Falling Number	176	218	183	229	226	208	236	227	241	185	212	193	256	223	160
Specific weight (kg/hl)	76.1	77.1	76.6	76.2	77.6	76.4	75.4	77.0	76.0	76.0	76.8	76.6	76.5	77.2	75.5
Breeder/UK contact															
Breeder	Hybro	Hybro	NS	KWSGmbH	Hybro	KWSGmbH	KWSGmbH	Hybro	KWSGmbH	Hybro	Hybro	Hybro	KWSGmbH	KWSGmbH	NS
UK contact	SU	SU	Sen	KWS	SU	KWS	KWS	SU	KWS	SU	SU	SU	KWS	KWS	Dalt
Status in DL system															
Year first listed	25	22	24	25	24	25	23	24	22	21	17	22	21	25	21
DL status	P1	-	P2	P1	P2	P1	-	P2	-	-	-	-	-	P1	*

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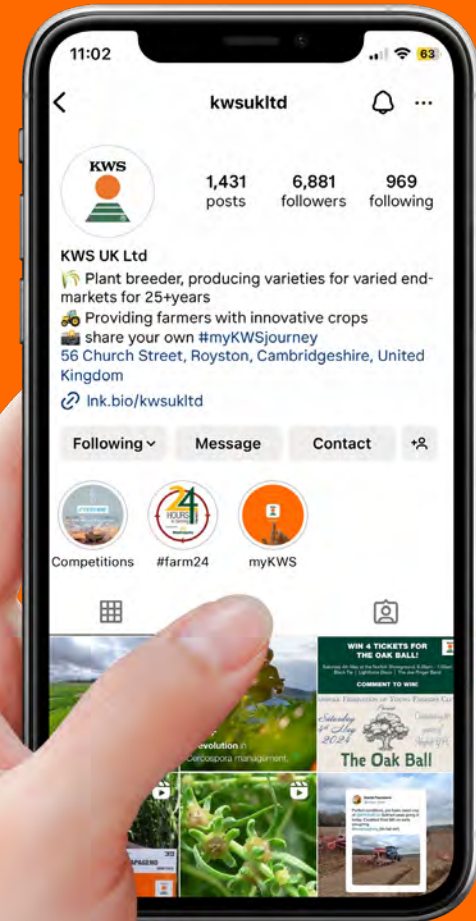


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OSR



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Why it's important to keep growing **oilseed rape**



Oilseed rape is good for biodiversity, good for the economy, good for food security and good for your rotation. It has faced challenges of late, but the tide is turning. With low CSFB pressure and SFI support to help mitigate risks, now is the time to bring OSR back into the rotation.

The opportunity is here, we just need to take it, United Oilseeds have launched a OSR Reboot campaign to do just this and here are some of their reasons as to why to keep on growing oilseed rape.

5 great reasons to keep growing OSR!

- 1. A break from cereals rotations.** OSR provides a genuine break from cereals, giving growers the opportunity to effectively control both pests and diseases, which in turn can make management simpler and improve yields in following crops.
- 2. Weed Management.** As a true break in cereals-based rotation, oilseed rape also enables the use of a different set of herbicides compared to those used in wheat and barley. It can also be a big help in controlling problematic weeds such as blackgrass.
- 3. Early harvest.** OSR helps to spread workloads during the summer and provide the potential for early grain movement off farm, helping cashflow. This will assist with creating a stale seed bed for following crops as well as with weed control.
- 4. Improves soil structure and biodiversity.** Deep rooting crops can help to improve soil structure, whilst the canopy can provide a natural habitat for bees and other beneficial insects.
- 5. Demand remains strong.** Demand for rapeseed and its associated products remains strong with the UK being far from self-sufficient. There is undoubtedly a growing requirement for domestically produced vegetable oils following the recent focus on food security.



Hinsta, the **consistent** and **reliable** performer.



HINSTA

Hybrid Winter Oilseed Rape

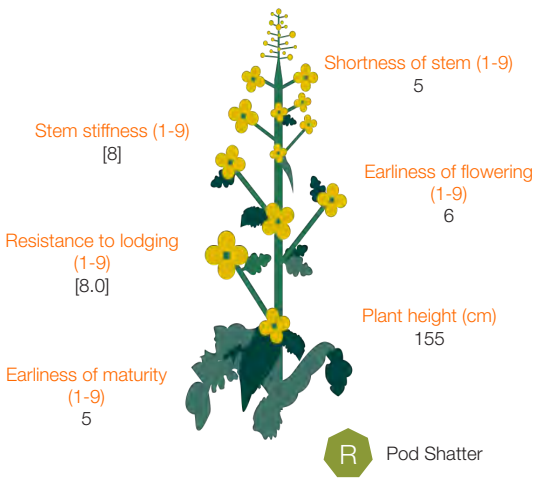
- High gross output
- High oil content
- Built-in traits

Newly recommended this year for the East/West, Hinsta is one of a new generation of hybrids from KWS which include the bolt-on traits that the innovative farmer expects.

Gross Output and Disease Resistance

Gross Output	
East/West region (%)	106
Disease Resistance	
Light Leaf Spot	7
Stem Canker	5
Verticillium	[1]
TuYV	R

Agronomic Features

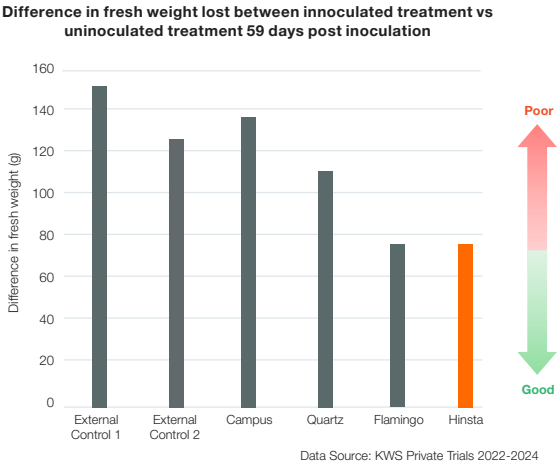


What makes KWS Hinsta the oilseed rape variety for you?

Hinsta is a high-yielding variety with excellent oil content. It has a medium maturity, flowers later in the season and carries the pod shatter resistance gene. With strong resistance to lodging and above-average early vigour, it establishes well in the field.

Hinsta also boasts a robust disease resistance package, including protection against TuYV. Trials have demonstrated its exceptional tolerance to Verticillium Stem Stripe.

Verticillium Stem Stripe can significantly impact oilseed rape yields. In ADAS trials conducted for KWS UK Ltd between 2022 and 2024, Hinsta demonstrated strong performance in inoculated pot tests. Varieties with greater resistance show a smaller reduction in fresh weight between inoculated and non-inoculated plants, highlighting Hinsta’s resilience against this yield-limiting disease.



Up and Coming Oilseed Rape Varieties

KWS is actively addressing the challenges associated with oilseed rape through two breeding programs for maritime and continental regions: one in Mons-en-Pévèle in northern France and the other in Einbeck in Germany. We aim to develop varieties that are more resistant to disease and pests, and have higher yields.

KWS has one hybrid variety currently undergoing AHDB trials for the 2025 harvest:

- KWS Domingos** - Resown in the East/West only with high gross output and a strong disease package. KWS Domingos has the built-in traits we select varieties for, with both pod shatter resistance and TuYV resistance.





Winter Oilseed Rape Recommended List 2025/26, UK

	Maverick	LG Adapt	Hinsta	Magdalen	Turing	LG Armada	LG Academic	LG Adeline	LG Avenger	Murray	LG Auckland	Vegas	Dolphin	Attica	Ambassador	Aurelia	LG Wagner
	Hybrid																
Variety type	Hybrid	Hybrid	Hybrid	Hybrid	Hybrid	Hybrid	Hybrid	Hybrid	Hybrid	Hybrid	Hybrid	Hybrid	Hybrid	Hybrid	Hybrid	Hybrid	Hybrid
Scope of recommendation	E/W	UK	E/W	E/W	E/W	UK	UK	UK	N	E/W	E/W	UK	E/W	UK	E/W	UK	N
Variety status	NEW	NEW	NEW	NEW	C				NEW		*	*		*	*C	*C	*
Gross output, yield adjusted for oil content (% treated control)																	
United Kingdom (5.1 t/ha)	108	108	106	106	106	105	105	105	104	104	104	104	103	101	101	101	101
East/West region (5.0 t/ha)	109	108	106	106	106	105	105	105	104	104	104	104	103	101	101	101	100
North region (5.7 t/ha)	100	108	[104]	[102]	104	105	106	107	[106]	102	103	103	98	102	100	102	105
Seed yield (% treated control)																	
United Kingdom (4.7 t/ha)	107	106	104	104	106	105	105	105	103	105	103	103	100	101	101	101	100
East/West region (4.6 t/ha)	108	106	105	104	107	105	105	105	103	105	103	103	101	101	102	101	100
North region (5.2 t/ha)	99	106	[102]	[100]	105	104	105	107	[105]	102	102	102	97	102	100	102	104
Untreated yield (% untreated control) – UK																	
Gross output (5.1 t/ha)	-	-	-	-	102	[110]	[108]	[106]	-	104	103	104	[105]	102	101	102	[105]
Seed yield (4.7 t/ha)	-	-	-	-	103	[110]	[108]	[106]	-	104	103	103	[103]	101	101	102	[105]
Disease resistance																	
Light leaf spot (1–9)	7	7	7	6	7	7	7	7	7	7	7	7	6	7	7	7	7
Stem canker (1–9)	9	6	5	5	4	6	6	5	5	8	5	9	6	5	6	4	4
Verticillium	[1]	[1]	[1]	[MR]	1	[1]	[1]	[1]	[S]	[MR]	[1]	[1]	[1]	[S]	S	[S]	[S]
TuYV	R	R	R	R	-	R	R	R	R	-	R	-	R	R	R	R	R
Agronomic features																	
Resistance to lodging (1–9)	[8.0]	[8.0]	[8.0]	[7.8]	[7.9]	[8.0]	[7.9]	[7.9]	[8.0]	[8.0]	[7.8]	[7.9]	[8.0]	[7.9]	7.9	7.9	[7.9]
Stem stiffness (1–9)	[8]	[8]	[8]	[8]	8	9	8	8	[8]	9	7	8	9	8	8	7	[8]
Shortness of stem (1–9)	6	5	5	6	6	6	6	6	5	6	6	6	6	6	6	6	6
Plant height (cm)	154	157	155	154	146	155	154	152	161	153	150	148	146	153	150	146	147
Earliness of flowering (1–9)	7	6	6	7	8	5	7	7	6	7	7	8	7	7	7	7	7
Earliness of maturity (1–9)	5	5	5	5	5	5	5	5	5	5	5	5	4	5	6	5	5
Pod shatter resistance	-	R	R	R	-	R	R	R	R	-	R	-	-	R	R	R	R
Seed quality (at 9% moisture)																	
Oil content, fungicide-treated (%)	46.0	46.4	46.1	46.3	44.4	45.6	45.2	44.9	46.0	44.6	45.5	45.5	46.5	45.1	44.8	44.8	45.1
Glucosinolate (µmol/g)	11.3	12.7	14.8	14.8	10.4	12.6	14.1	14.7	10.5	11.1	12.2	11.0	13.0	12.0	10.9	10.2	11.7
Annual treated gross output, yield adjusted for oil content (% control) – UK																	
2021 (5.2 t/ha)	-	-	-	-	105	105	104	106	-	104	103	103	99	102	100	100	101
2022 (5.9 t/ha)	104	107	104	103	104	106	105	105	105	102	103	102	102	102	101	101	103
2023 (5.2 t/ha)	104	108	105	105	104	105	106	106	105	103	104	102	102	102	100	100	103
2024 (5.0 t/ha)	104	107	105	103	105	105	106	105	105	103	104	104	98	101	101	103	102
Treatment benefit at co-located sites (% treated control, 5.3 t/ha) – UK																	
Treated gross output	-	-	-	-	104	[107]	[109]	[109]	-	99	105	101	[105]	103	101	101	107
Untreated gross output	-	-	-	-	98	[106]	[104]	[102]	-	99	99	100	[101]	98	97	98	[101]
Breeder/UK contact																	
Breeder	NPZ	LimEur	KWSR	LimEur	NPZ	LimEur	LimEur	LimEur	LimEur	NPZ	LimEur	NPZ	DSV	LimEur	LimEur	LimEur	LimEur
UK contact	NPZU	Lim	KWS	Lim	NPZU	Lim	Lim	Lim	Lim	NPZU	Lim	NPZU	DSV	Lim	Lim	Lim	Lim
Status in RL system																	
Year first listed	25	25	25	25	23	24	24	24	25	23	22	23	24	23	20	20	23
RL status	P1	P1	P1	P1	-	P2	P2	P2	P1	-	*	*	P2	*	*	*	*



Winter Oilseed Rape Recommended List 2025/26, UK

	PI Pinnacle	Tom	Powerhouse	Annika	Acacia	Aspire	Amarone	Miraculix CL	Beatrix CL	Matrix CL	Cruise	Compuiter	Crocodile	Crome
	Conventional open-pollinated							Herbicide tolerant			Clubroot resistant			
Variety type	Conv	Conv	Conv	Conv	Conv	Conv	Conv	Hybrid	Hybrid	Hybrid	Hybrid	Hybrid	Hybrid	Hybrid
Scope of recommendation	UK	UK	N	E/W	UK	N	N	N Sp	E/W Sp	UK Sp	UK Sp	UK Sp	E/W Sp	N Sp
Variety status		NEW			*	*C	*				NEW	NEW		
Gross output, yield adjusted for oil content (% treated control)														
United Kingdom (5.1 t/ha)	101	100	99	98	97	95	94	94	94	93	103	98	97	94
East/West region (5.0 t/ha)	101	100	98	98	97	95	94	94	94	93	103	99	99	94
North region (5.7 t/ha)	101	100	102	96	98	97	98	93	89	93	101	96	90	95
Seed yield (% treated control)														
United Kingdom (4.7 t/ha)	102	100	100	98	97	94	95	93	92	92	104	98	98	93
East/West region (4.6 t/ha)	102	100	100	98	97	94	94	93	93	92	104	98	99	93
North region (5.2 t/ha)	101	100	104	96	97	96	99	92	89	92	101	96	90	94
Untreated yield (% untreated control) – UK														
Gross output (5.1 t/ha)	[102]	101	-	94	97	96	98	[93]	93	94	-	-	99	92
Seed yield (4.7 t/ha)	[102]	101	-	95	97	96	99	[92]	92	93	-	-	99	91
Disease resistance														
Light leaf spot (1–9)	7	6	7	7	5	7	7	5	5	6	6	6	6	6
Stem canker (1–9)	4	5	5	5	5	5	5	6	6	6	7	5	4	2
Verticillium	[1]	[S]	[S]	[MR]	[1]	[1]	[S]	[S]	1	[S]	[MR]	[MR]	[1]	[1]
TuYV	-	-	-	R	-	R	R	R	R	R	R	R	-	-
Agronomic features														
Resistance to lodging (1–9)	[8.0]	[8.0]	[8.0]	[8.0]	8.0	8.0	[8.0]	[7.9]	[7.9]	7.8	[8.0]	[7.9]	[8.0]	8.0
Stem stiffness (1–9)	9	[9]	[8]	9	8	8	[8]	8	[8]	7	[8]	[8]	8	8
Shortness of stem (1–9)	6	6	7	6	7	7	7	5	6	6	5	6	6	7
Plant height (cm)	152	146	142	146	142	139	140	155	149	152	155	150	144	143
Earliness of flowering (1–9)	5	7	6	6	6	7	7	7	7	7	6	6	6	7
Earliness of maturity (1–9)	5	5	5	4	5	5	5	6	6	6	5	5	6	5
Pod shatter resistance	-	-	-	-	-	-	-	R	R	R	-	-	-	-
Seed quality (at 9% moisture)														
Oil content, fungicide-treated (%)	44.5	45.2	43.5	44.9	44.9	45.2	44.5	45.5	45.8	45.6	44.5	45.5	44.8	45.8
Glucosinolate (µmol/g)	13.0	11.6	14.5	11.6	8.1	9.9	11.9	15.2	15.3	14.2	12.6	13.4	12.8	10.8
Annual treated gross output, yield adjusted for oil content (% control) – UK														
2021 (5.2 t/ha)	102	100	-	97	98	95	96	94	91	92	-	-	94	95
2022 (5.9 t/ha)	100	100	99	98	97	96	96	94	94	94	102	97	96	94
2023 (5.2 t/ha)	100	101	99	95	97	96	96	93	91	93	102	98	92	95
2024 (5.0 t/ha)	102	99	101	[97]	97	94	96	91	90	91	101	96	92	93
Treatment benefit at co-located sites (% treated control, 5.3 t/ha) – UK														
Treated gross output	[99]	100	-	98	96	96	97	[94]	97	95	-	-	96	93
Untreated gross output	[98]	97	-	90	93	92	94	[89]	90	90	-	-	94	88
Breeder/UK contact														
Breeder	Pick	CBI	Els	LimEur	LimEur	LimEur	LimEur	DSV	DSV	DSV	NPZ	DSV	DSV	NPZ
UK contact	GSd	FrontAg	Els	Lim	Lim	Lim	Lim	DSV	DSV	DSV	NPZU	DSV	DSV	NPZU
Status in RL system														
Year first listed	24	23	25	22	20	19	22	24	23	22	25	25	20	19
RL status	P2	-	P1	-	*	*	*	P2	-	-	P1	P1	-	-

PEAS



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Growing Combining Peas

Combining peas serve as a valuable break crop, not only for producing high-protein grain but also for enriching the soil with residual nitrogen for the following crop. The first step in planning a pea crop is determining the target market. Ideally choose a variety that is suited for multiple end markets, or a variety that is well known by the end users for its grain characteristics.

What market should I target?

The biggest market in the UK is for **green peas** which make up approximately 50% of the combinable pea area. Green peas are used for a wide variety of end markets from local domestic trade, to micronising, animal feed and exportation. Having good colour retention is key for these varieties as well as having large even-sized seed, both of which widen market options for selling. **Yellow peas** are a smaller proportion of the pea market at 10%, with end uses varying from pea flour to pigeon feed. **Marrowfat peas** take a good segment of the pea trade at around 30%, with markets for human consumption and exportation to the Far East. Marrowfats command a higher premium than other varieties, however their yields tend to be lower. A small proportion of peas in the UK are **maple varieties** and these tend to be grown for the pigeon feed trade.

When should I drill my peas?

Drill peas early (March to April in the UK) when soil temperatures are suitable for germination. Planting peas early in the season can maximise yield, as they thrive in cool weather. However, it's important to ensure soils are well-drained prior to planting, as peas prefer loamy soils with

good moisture retention. Avoid compacted or waterlogged soils, which can lead to poor establishment and disease issues.

When should I harvest my peas?

High quality peas can command a premium, so care must be taken when harvesting the crop. Determination of moisture content is a useful means of assessment of combining stage (25% or less), grain storage (14-16%) and long-term storage 14-15% MC. The recommended moisture content at harvest will vary depending on which market you are targeting, so it is important to take this into consideration when making harvesting decisions.

What should I be looking for in a combining pea variety?

Choose a variety with good grain characteristics (large, even sized), that has a wide variety of end market options or one that is well known by an end user so that you know you will get a good price for the grain.

Ideally you want a variety that has proven performance with yield over a number of seasons, has good standing ability at harvest and a good disease profile.

Bats above the competition



KWS GOTHAM

Spring Green (Blue) Pea

- Earliest-maturing green pea on the PGRO Descriptive List 2025
- Robust agronomic package
- Good thousand seed weight (306g)

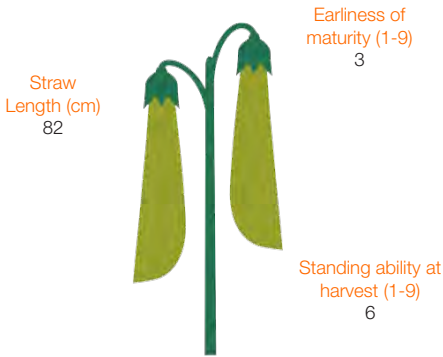


KWS Gotham offers growers easy crop management combined with excellent opportunities to serve the green pea market. It’s a strong all round variety with a robust disease resistance package, stiff straw and good standability through to harvest.

Yield, Disease Resistance and Seed Quality

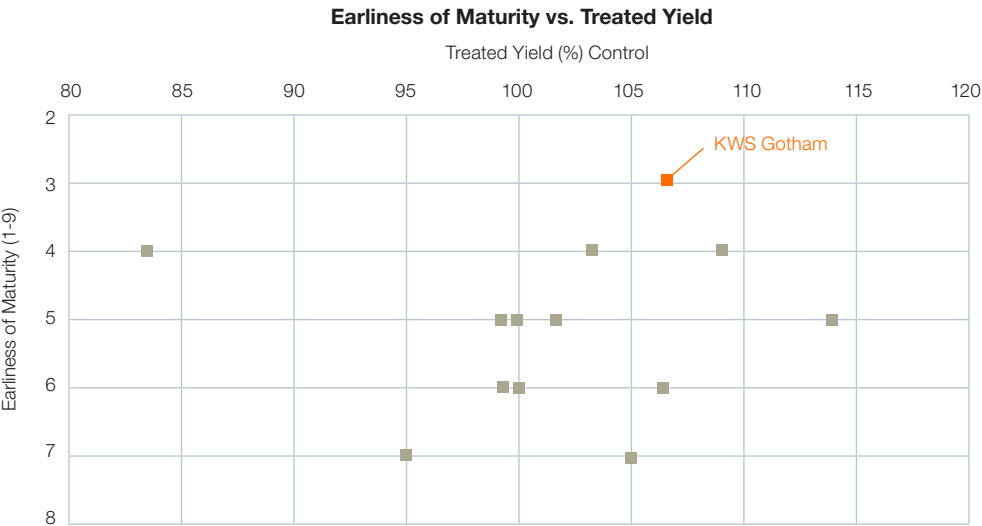
Yield	
Yield as % of control	107
Disease Resistance	
Pea Wilt (Race 1)	R
Downy Mildew (1-9)	5
Powdery Mildew *	[S]
Seed Characteristics	
Thousand Seed Weight (g)	306
Protein Content (% dry)	22.4

Agronomic Features



What makes KWS Gotham the pea variety for you?

KWS Gotham brings a useful combination of good yields with early maturity. KWS Gotham is the earliest maturing variety on the Descriptive List with a rating of 3, providing a early harvest allowing growers time to prepare the field for the following crop.



Data Source: PGRO Descriptive List 2025

What do the end users say?

Askew and Barrett are one of the leading traders and processors of dried pulses in the country. Based on a sample from Harvest 2024, they comment on KWS Gotham:

This is a really nice variety based on the harvest sample from 2024. The seeds are large round and uniform with a good cook result. With a little better colour retention, this variety - based on this sample - could be placed into any domestic market or exported for human consumption or high end animal feed product.

KWS Gotham will undergo further testing this season to look at its consistency over a number of different years.





High Yields, High Protein

KWS BRAM

Spring Yellow (White) Pea



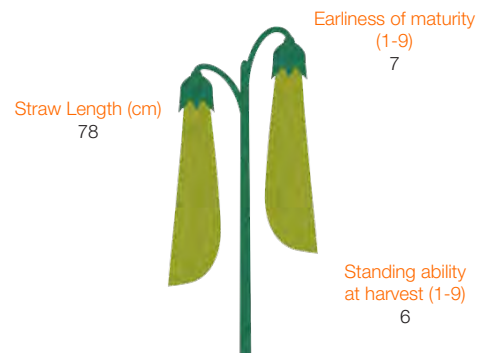
- Highest-yielding yellow pea on the PGRO Descriptive List 2025
- Consistently high yields across the past three harvests
- Good combination of yield and protein content

KWS Bram is a new addition to the 2025 PGRO Descriptive List and goes straight to the top for yield at 118% of controls. New for this season is claimed virus resistance. KWS Bram has purported resistance to BYMV.

Yield, Disease Resistance and Seed Quality

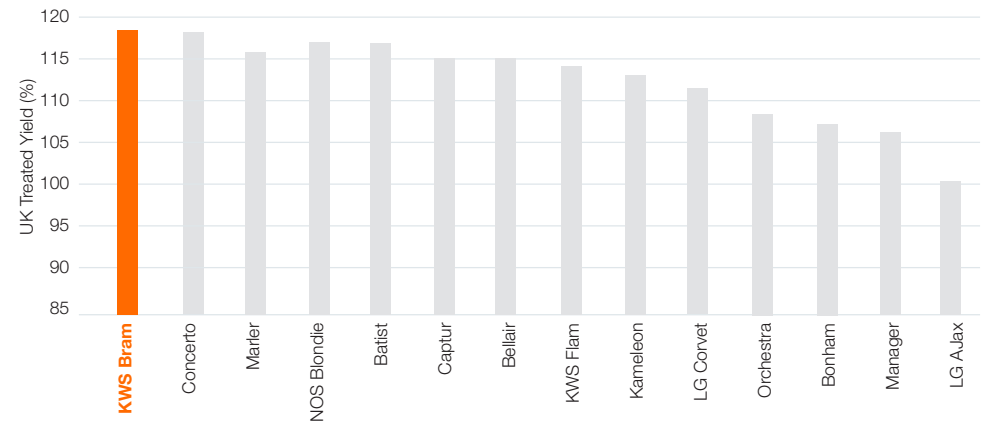
Yield	
Yield as % of control	118
Disease Resistance	
Pea Wilt (Race 1)	R
Downy Mildew (1-9)	6
Powdery Mildew *	-
Seed Characteristics	
Thousand Seed Weight (g)	288
Protein Content (% dry)	21.8

Agronomic Features



What makes KWS Bram the pea variety for you?

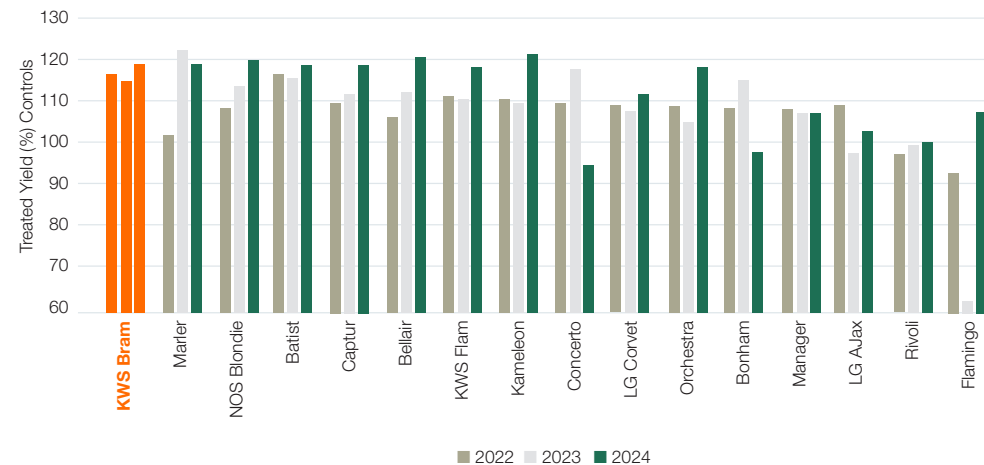
KWS Bram is the highest yielding yellow pea on the PGRO Descriptive List 2025.



Data Source: PGRO Descriptive List 2025

Across the last 3 harvests, KWS Bram has shown it is the yellow pea variety of choice when it comes to consistent high yields across multiple seasons. KWS Bram has the ability to yield well regardless of what the season may bring.

KWS Bram - high yields across contrasting seasons



Data Source: PGRO Descriptive List 2025



Fire up your pea profits in your rotation

KWS FLAM

Spring Yellow (White) Pea

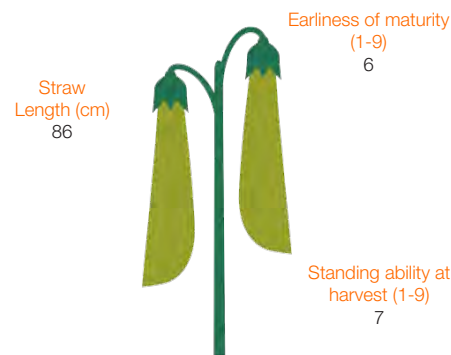
- High-yielding variety
- Robust agronomic package
- Tall but stiff

In its second year on the Descriptive list, KWS Flam sits with high yields of 114% of controls, with good potential for both the animal feed and human consumption markets. KWS Flam offers growers easy crop management with all the characters for a safe harvest.

Yield, Disease Resistance and Seed Quality

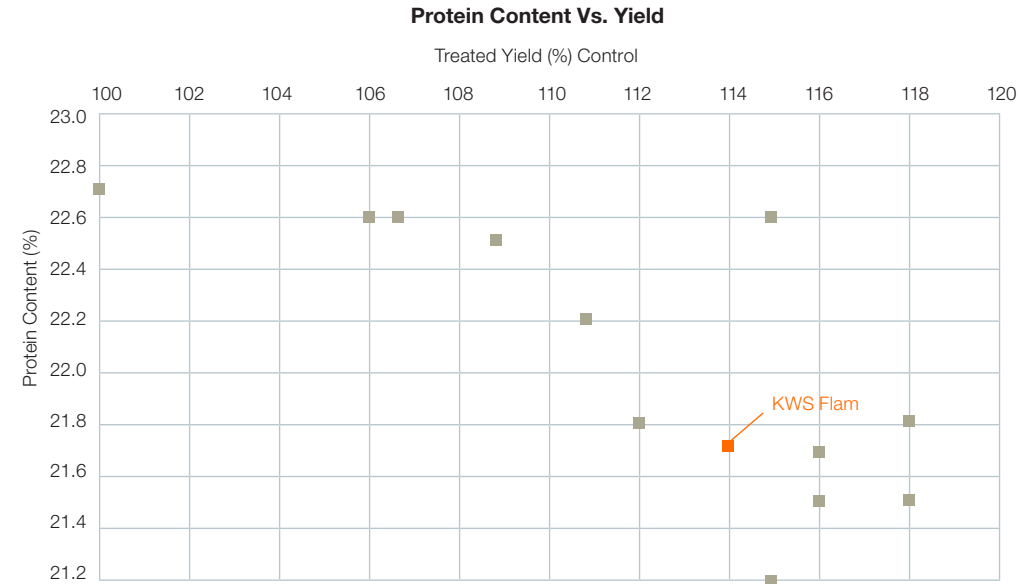
Yield	
Yield as % of control	114
Disease Resistance	
Pea Wilt (Race 1)	R
Downy Mildew (1-9)	5
Powdery Mildew *	[S]
Seed Characteristics	
Thousand Seed Weight (g)	266
Protein Content (% dry)	21.7

Agronomic Features



What makes KWS Flam the pea variety for you?

KWS Flam brings a good combination of field yield and protein content to today's yellow pea market.



Data Source: PGRO Descriptive List 2025

Up and Coming Spring Pea Varieties

France serves as the heart of KWS' pea breeding programme, backed by decades of expertise. Since beginning grain pea breeding in the 1980s, KWS has developed an extensive genetic pool of pea varieties. On average, the development of a new pea variety takes around seven years from the initial cross to market readiness.

The following varieties are currently candidates for the 2026 PGRO Descriptive List.

- KWS Arkham** – high-yielding green pea that has shown consistency across its 2 trialling years, particularly in a difficult 2023 season
- KWS Telegram** – high-yielding yellow pea
- KWS Downstream** – high-yielding yellow pea





Peas PGRO Descriptive List 2025

		Agronomic characters				Resistance to			Seed characters			
	UK Agent	Yield as % of Control	Earliness of maturity (1-9)	Straw length (cm)	Standing ability at harvest (1-9)	Pea wilt (Race 1)	Downy mildew (1-9)	Powdery mildew *	Thousand seed weight (g) (@ 15%mc)	Protein content (% dry)	No. Years in matrix	Year first listed
Yellow												
KWS Bram^{V1}	KWS	118	7	78	6	R	6	-	288	21.8	3	25
Concerto	NPZ	118	6	75	7	R	7	[S]	365	21.5	3	24
Marler	Cope	116	6	84	6	R	6	[HR]	305	21.7	3	25
NOS Blondie	EI	116	7	79	7	-	5	-	304	21.5	3	25
Batist	Sen	116	6	83	7	R	6	[S]	317	21.7	4	24
Captur	Agro	115	6	76	7	R	6	[S]	312	22.6	3	25
Bellair ^{V2}	IARA	115	5	73	7	R	5	[HR]	242	21.0	3	25
KWS Flam	KWS	114	6	86	7	R	5	[S]	266	21.7	4	24
Kameleon	Sen	112	6	73	7	R	5	[S]	319	21.8	5	20
LG Corvet	LUK	111	7	74	7	-	8	[S]	298	22.2	3	25
Orchestra	NPZ	109	6	74	7	R	4	[S]	329	22.5	4	20
Bonham	Sen	107	6	82	6	R	6	[S]	314	22.6	3	25
Manager	KWS	106	6	79	7	R	6	[MR]	297	22.6	4	18
LG Ajax	LUK	100	6	69	7	R	7	[HR]	282	22.7	5	23
Pink												
Flamingo	Cope	87	5	86	7	R	7	-	285	22.8	4	24
Green												
Pangea	NPZ	114	5	79	6	R	6	[HR]	366	22.8	3	25
Mikka	IARA	108	4	84	7	R	7	[S]	316	22.5	5	21
KWS Gotham	KWS	107	3	82	6	R	5	[S]	306	22.4	5	23
Carrington	NPZ	107	6	81	7	R	8	[S]	260	21.5	5	22
Butterfly	NPZ	105	7	78	7	R	6	[S]	314	21.5	5	23
Bluetime	NPZ	103	4	84	7	R	8	[S]	300	21.9	4	18
Shazam	Sen	103	4	85	7	R	6	[S]	267	22.0	4	24
Greenway	IARA	102	5	82	7	R	7	[S]	314	22.3	5	21
Karioka	Sen	100	6	80	7	R	6	[S]	276	21.9	4	18
Kactus	Sen	100	5	74	7	R	7	[S]	305	22.3	5	20
Reacher ^{V3}	IARA	99	6	72	5	R	7	[HR]	284	21.2	4	24
LG Aviator	LUK	99	5	73	7	R	7	[HR]	299	22.1	4	20
Daytona	Agrii	95	7	74	7	R	6	[S]	285	21.9	3	10
Prophet	LUK	83	4	70	7	R	6	[S]	315	21.7	3	07
Maple												
Mantara	LUK	94	6	60	7	R	8	[S]	256	23.6	3	10
Rose	Dalt	88	8	74	7	S	9	[S]	272	24.0	3	03
Marrowfat												
Midori	NPZ	103	4	88	7	R	4	[S]	393	22.7	3	25
Vision	EI	99	5	73	8	R	7	[S]	386	22.7	4	24
Akooma	NPZ	95	5	77	6	R	5	[S]	421	22.8	4	21
Takayama	NPZ	95	5	82	6	R	6	[S]	370	22.9	5	23
Octavia	IARA	86	3	73	8	R	4	[S]	417	23.6	5	20
Sakura	Dalt	80	5	74	7	R	4	[S]	394	23.3	5	08

(1-9) A high rating indicates that the variety shows the character to a high degree. All varieties are semi-leafless. Downy mildew: Varietal resistance may vary in different regions as race structure of the disease changes. Pea wilt (Fusarium oxysporum f. sp. pisii)(race 1) R = Resistant; S = Susceptible. *Powdery mildew Trials & Breeders information - HR = High resistance, MR = Moderate resistance, S = Susceptible. V1=Breeder reported resistance to BYMV V2=Breeder reported resistance to PSbMV V3=Breeder reported resistance to PSbMV & PEMV © PGRO 2024 27.11.2024

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BEET



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The KWS Beet Portfolio

In the UK, our portfolio includes **sugar beet** as well as **feed and energy beet**. Over 150 years of KWS history began with growing **sugar beet** and today, KWS is one of the market leaders in the commercialisation of sugar beet seed. Regardless of the intended use, whether it is the production of sugar, ethanol or biogas, KWS provides the right variety for each purpose and region.

Through an active selection process focused on key characteristics, KWS develops high-performing beet varieties optimised for both **anaerobic digestion** and **livestock feed**. Using advanced breeding techniques, these varieties are specifically designed to meet the unique needs of the UK market, delivering high dry matter yields and superior agronomic traits.

KWS Sugar Beet

While we strive for yield improvement, we continue to see other characteristics take on additional importance in protecting the sugar beet crop – particularly as more of our important active ingredients are at risk.

Our recent developments such as CONVISO® SMART and GENEROSA KWS continue to offer choice, both for innovative weed control and tolerance to BMVYV respectively. Our most recent development, CR+, offers growers vastly improved tolerance to Cercospora whilst maintaining very high yields, with and without disease infection.

KWS Feed and Energy Beet

Currently, most of our beet varieties are of a higher dry matter percentage. These make them ideal to be lifted by sugar beet harvesting type equipment. These beet types are preferred in intensive feeding systems and can be fed fresh as chopped beet or ensiled prior to feeding.

Our energy beet varieties are specially bred for providing clean roots, exceptional yields and for delivering high methane and energy output per hectare. This makes them an ideal choice for bioethanol production and biogas generation.



Fab Four Sugar Beet Varieties

With the growing demand for resilience in arable rotations, we showcase four expertly bred and developed varieties designed to address the key challenges faced by sugar beet growers.

CHYMA KWS



CHYMA KWS is an exciting introduction for 2025. This is the first variety into the UK to have our CR+ trait. This offers unrivalled protection to the devastating disease cercospora.

SMART NELDA KWS



SMART NELDA KWS is the first variety on the market to combine CONVISO® SMART technology with tolerance to Beet Cyst Nematode.

NEW

JOSEPHINA KWS



JOSEPHINA KWS is a classical variety with a very high sugar percentage. It also offers the lowest early-sown bolters of all varieties on the BBRO Recommend List.

DAPHNA



For 9 years, **DAPHNA** has delivered excellent yields in both RL trials and more importantly, on farms. DAPHNA has again provided BCN tolerance whilst offering very competitive yields.

2026 KWS Sugar Beet Portfolio

Due May 2025. To sign up for your copy once available, **please scan the QR code.**

Alternatively, email us, ukmarketing@kws-uk.com.



Beet Breeding at KWS

It takes 10 years of selection efforts to provide the market with a new sugar beet variety. To accelerate this process, we are exploring innovative breeding technologies that could potentially shorten the timeline by 2-3 years. Globally, our 18 breeding stations employ over 360 dedicated professionals in Research & Development, actively working on more than 50 sugar beet-specific projects.

Some of our latest innovations introduced to the market include **CONVISO® SMART** and **CR+**, which are advancing sugar beet cultivation with cutting-edge solutions.

CONVISO® SMART

CONVISO® SMART revolutionises weed control in sugar beet cultivation. Developed through more than 15 years of collaboration between KWS and Bayer, this innovative system combines cutting-edge breeding with advanced herbicide technology.



At its core, CONVISO® SMART consists of two key components: SMART KWS sugar beet varieties, specifically bred for tolerance, and CONVISO® ONE, a novel herbicide developed by Bayer. Together, they provide superior control of a broad spectrum of grass and broadleaf weeds, including those that are particularly challenging to manage with conventional methods. By reducing the need for multiple herbicide applications, CONVISO® SMART streamlines weed management, enhancing efficiency while supporting sustainable agricultural practices.

CR+

Cercospora is a challenging disease. CR+ offers a tool to get back control.

Cercospora Leaf Spot is by far the most destructive disease affecting sugar beet, reducing yield by up to 50%. Furthermore cercospora leads to reduced processing quality of roots, reducing productivity.

With the growing risks and concerns about cercospora, we have introduced our CR+ trait into the UK, leading to new levels of cercospora protection. This has been commercially available on the continent for several years already and has proven to be a huge success in high risk areas.



MAIZE

Specialising in **Maize Hybrids**

KWS offers a diverse selection of top-performing maize varieties tailored to suit all farm conditions. Our UK maize portfolio includes ultra-early, early/maincrop, and late/biogas varieties, ensuring optimal performance across different growing needs.

Our breeding programmes focus on forage, biogas and the increasingly important grain maize production. With a dedicated breeding programme for northern Europe and the UK, we continue to produce adaptable varieties to cope with our ever-changing climate, delivering significant advances in yield and quality.

Choosing the correct **FAO**

FAO numbers serve as a guide to crop maturity - the lower the FAO, the fewer days required to reach maturity. In trials, FAO can be reflected in the dry matter (DM) at harvest, with higher DM values generally corresponding to lower FAO numbers. However, it's important to note that FAO classifications can vary between breeders. You can check your farm's heat units and FAO suitability on the KWS website.

We can supply all maturities for all maize growing environments in the UK. Our varieties can be split into 3 key groups:

Ultra Early (FAO 150-160)	Early / Maincrop FAO 170-190	Late / Biogas FAO 200-260
For maximum drilling or harvest security.	For all mainstream growing areas and maximum starch yield.	Maximum DM yield, and lowest cost per tonne for forage and biogas production.

For information on all of our key varieties, check out the **Maize Variety Portfolio**.



2026 KWS Maize Variety Portfolio

Due September 2025. To sign up for your copy once available, **please scan the QR code**.

Alternatively, email us, maize@kws-uk.com.



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The Next Generation Varieties

Lay the foundation for successful maize cultivation with KWS maize. Four new varieties will be added to the **BSPB 2026 Forage Maize Descriptive List (DL)**.



KWS REO is a proven performer on both favourable and less favourable sites, consistently delivering extreme yield and quality for its maturity. This combination of high yields and exceptional quality provides a true multi-use variety suited to all end uses - livestock, AD, or grain.



KWS PORTABELLO is out in front for early yield, and combines excellent starch to drive ruminant production. Very high early vigour encourages rapid establishment. A superb option for early sowing.



KWS ZIMO delivers high dry matter yields as a maincrop, to fill your clamp for both ruminant and AD performance. Excellent early vigour provides a rapid establishment and promotes a longer growing season.



AGROLINO delivers heavy yields for both forage and biogas segments where a long growing season is available. Very suited to favourable sites, offering a balanced starch for high maize inclusion diets and AD.

Visit our site!



KWS Open Days

KWS has a long tradition of opening its Gloucestershire-based Maize Demonstration Site during September, where we welcome growers and merchants to tour the variety plots.

What you can see:

- KWS Population Wheel and the effects of plant density
- The UK's leading maize varieties
- New outstanding varieties for the future
- Breeding demonstration



Get in touch now to book your visit! **Just scan the QR code.** Alternatively, email us maize@kws-uk.com or call our office **01594 528234**.



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