



# KWS DAWSUM

Grower's Guide

SEEDING  
THE FUTURE  
SINCE 1856





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# Introduction

The number of varieties growers must choose from is sometimes daunting. The choices are made a bit smaller if you are growing for a specific quality group on the RL but as feed wheat grower you have whole list at your disposal. So, the question is, how do you choose? Our advice is to list the attributes or traits that you require for the specific slot you are choosing for on your farm. Once you have these criteria you will soon whittle the numbers down. In this growers guide we will outline all characteristics of KWS Dawsum to try and give as much information as possible to assist decision making on your farm.

Awesome Dawsum, the excellent barn-filling choice with outstanding grain quality including one of the highest specific weights on the market today. A hard Group 4 wheat that offers growers the ultimate flexibility on-farm, delivering fantastic yields right across the rotation if you are drilling early (106%), mainstream (103%) or late sown slots (103%).

Combine these benefits with the excellent disease package, the variety delivers an untreated yield (91%) second only to KWS Extase and includes 6.3 for Septoria and 9 for yellow rust. Add in the exceptionally marketable grain and you have a truly D-awesome variety that will earn itself a place on every farm this season!

This guide is intended to give growers and KWS Dawsum advisers the latest information to get the most out of their crop of this growing season. Rather than being a stringent protocol, this guide aims to provide sufficient technical information, covering aspects such as varietal characteristics, regional performance and crop management strategies so that grain quality, yield potential and agronomic performance can be specifically tailored to your farming situation.

If you have any questions, or would like further information on our varieties, please do not hesitate to contact the KWS UK team (see back page for details).



# Varietal Characteristics

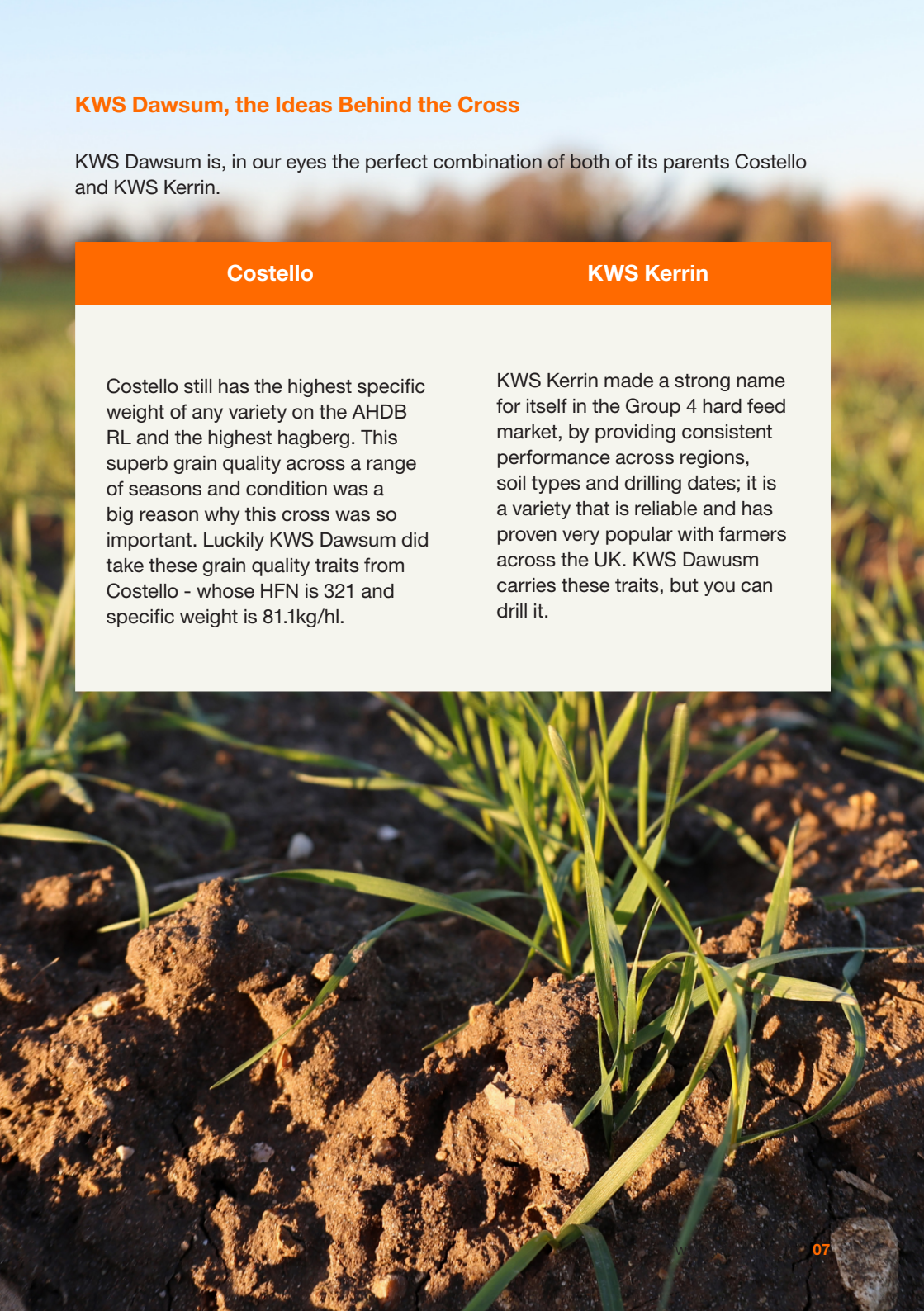
## KWS Dawsum in a Nutshell

New in 2022, awesome Dawsum, the excellent barn-filling choice with outstanding grain quality including one of the highest specific weights on the market today. KWS Dawsum is a feed wheat with stiff straw and high yields. A slow and prostrate growth habit means it is suitable for early drilling so therefore won't show much competitiveness against grass weeds compared to some other varieties. A very good all round disease package, including seedling resistance for yellow rust. KWS Dawsum has just over a 6 for Septoria, so chemistry selection will be important in the west. Another thing to watch is it does not have Orange Wheat Blossom Midge (OWBM) resistance so will need spraying if you see one midge for every 3 ears.

## KWS Dawsum, the Ideas Behind the Cross

KWS Dawsum is, in our eyes the perfect combination of both of its parents Costello and KWS Kerrin.

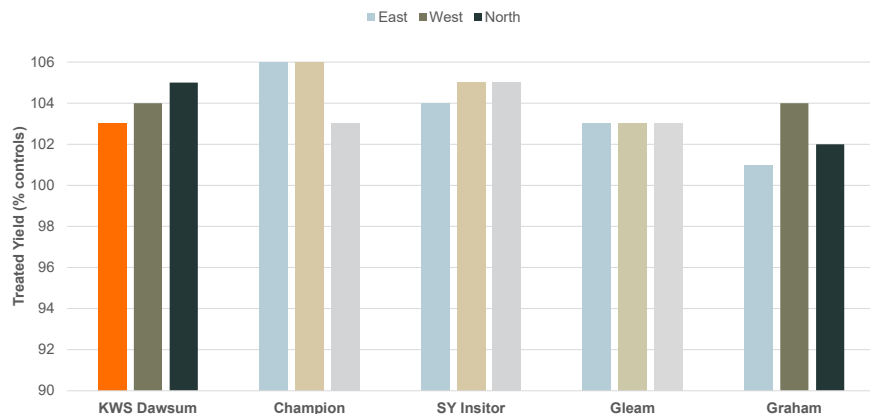
Costello	KWS Kerrin
Costello still has the highest specific weight of any variety on the AHDB RL and the highest hagberg. This superb grain quality across a range of seasons and condition was a big reason why this cross was so important. Luckily KWS Dawsum did take these grain quality traits from Costello - whose HFN is 321 and specific weight is 81.1kg/hl.	KWS Kerrin made a strong name for itself in the Group 4 hard feed market, by providing consistent performance across regions, soil types and drilling dates; it is a variety that is reliable and has proven very popular with farmers across the UK. KWS Dawsum carries these traits, but you can drill it.



## Yield Potential



KWS Dawsum offers growers the ultimate flexibility on-farm, delivering fantastic yields right across the UK if you are drilling in the East (103%), West (104%) or the North (105%).

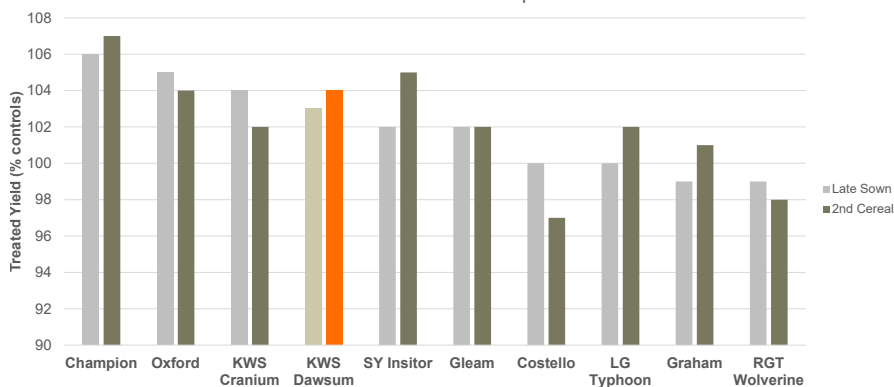


## Rotational Potential



KWS Dawsum is a high yielding feed wheat from two strong feed wheat parents. The yield level is high in both the earlier sowing window (before 25th September) and main sowing window (end of September- end of October). This wide sowing window is incredibly useful on farm as changeable weather patterns mean the autumn is unpredictable and more flexibility is needed in the system, what better place to start than with the seed. KWS Dawsum is a rotationally robust variety doing well in every situation. This increasing flexibility on farm in the autumn as we pick and choose land that is ready and will drill in good order.

Late sown and second cereal performance



## Pest and Disease Resistance

KWS Dawsum has the highest untreated yield of all the soft and hard group 4 varieties. This is down to its high yellow rust resistance including young plant resistance. As Yellow Rust and Septoria are the key talking points for disease at the present, with KWS Dawsum looking smart in the yellow rust department you know it won't be a worry for the upcoming season.

With greater demand on machinery, it's imperative to manage that workload as best as possible. This is where utilising the resistance in KWS Dawsum and others offers greater on farm flexibility. Critically earlier spray timings are important for controlling yellow rust before it develops too far.

A desk study undertaken by KWS in the 2022/23 season looked at wind speed data on the 20 days either side of a normal T1 spraying date. Many counties experienced 40% of days with an average wind speed of over 10 mph. This indicates a reduced opportunity and increased risk for the farm business.

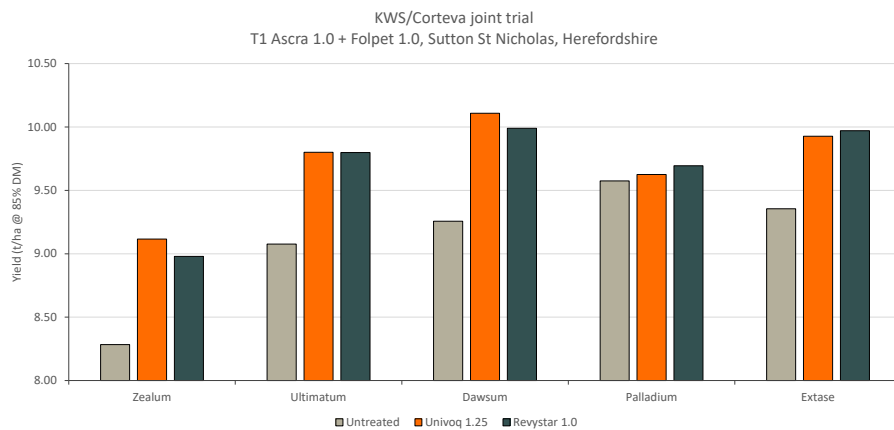
This chart shows KWS Dawsum's disease resistance in comparison to some of the competitors in the market.

	Untreated Yield (% treated control)	Mildew	Yellow rust	Brown rust	Septoria tritici	Eyespot	Fusarium	OWBM
<b>KWS Dawsum</b>	<b>91</b>	<b>8</b>	<b>9</b>	<b>7</b>	<b>6.3</b>	<b>6</b>	<b>7</b>	-
LG Beowulf	91	[6]	9	5	6.7	6	[6]	R
Champion	90	7	8	5	7.9	4	6	R
Graham	89	6	7	5	6.6	4	6	-
Gleam	80	6	5	6	5.7	5	6	R
SY Insitor	79	7	4	6	6.4	5	7	R
LG Redwald	89	6	7	7	6.5	4	6	R
LG Skyscraper	83	7	7	5	4.9	5	6	R

A solid 6.3 for *Septoria* is a good place to start and significantly reduces the risk of disease and therefore the mindset around fungicide programmes has increased flexibility. *Septoria* was historically considered a greater issue in the wetter West and North. The loss of certain key actives and pressure to protect those that are left means growers use a much stronger IPM approach.

The graph below shows a trial that KWS have been running alongside Corteva now for a few years, the results below are from the 2023 trial. This trial has put KWS Dawsum, alongside other KWS varieties in a high disease pressure situation in the West, but pressure was high across the whole of the UK in 2023.

The comparison you see in KWS Dawsum from untreated to treated just highlights that it is wise to concentrate on the yield response to disease control in KWS Dawsum, rather than focussing on the disease levels. With good, well-timed chemistry, Septoria control is easily done with KWS Dawsum, even in a high pressure situation.



James Chapman - Trader at GrainCo

Varietal resistance is an integral part of the disease control strategy. KWS Dawsum has an excellent disease package, the variety delivers an untreated yield (91%) second only to KWS Extase and includes 6.3 for Septoria and 9 for yellow rust.



## Grain Quality

As a measure of grain quality, specific weight is a standard and well understood trading measure. Whichever end-market grain is being sold into, there is a threshold to meet which in most circumstances is 72 kg/hl. Varieties with an inherent higher level give more security in meeting that requirement. However specific weight itself tells us more about the variety than simply the plumpness of the grains. Varieties with a higher specific weight generally tend to be the more consistent, especially in difficult situations and in years of prolonged or repeated stress.

AHDB RECOMMENDED	LG Beowulf	Champion	SY Instar	Oxford	KWS Dawsum	Glam	Graham	KWS Cranum	LG Typhoon	RGT Wolverine
	Hard Group 4									
Scope of recommendation	UK	UK	UK	E&W	UK	UK	UK	UK	UK	Sp
Variety status	NEW					C				
Endosperm texture	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard	Hard
Protein content (%)	11.1	11.0	10.5	11.2	10.8	10.9	11.0	10.9	10.8	10.7
Protein content (%) – milling spec	12.3	11.9	11.2	12.2	11.7	11.5	11.8	11.7	11.8	11.4
Hagberg Falling Number	253	235	261	202	299	215	271	286	164	271
Specific weight (kg/hl)	78.3	75.4	78.6	76.1	79.9	76.9	77.7	75.8	77.1	76.3

KWS Dawsum has the highest specific weight of all the current group 4 winter wheats. This is and will continue to be KWS Dawsums strong point. When starting on a specific weight of 79.9 kg/hl, there is a lot of room before dropping below minimum standard, so whatever the season throws at you, KWS Dawsums specific weight will keep you above that minimum standard.

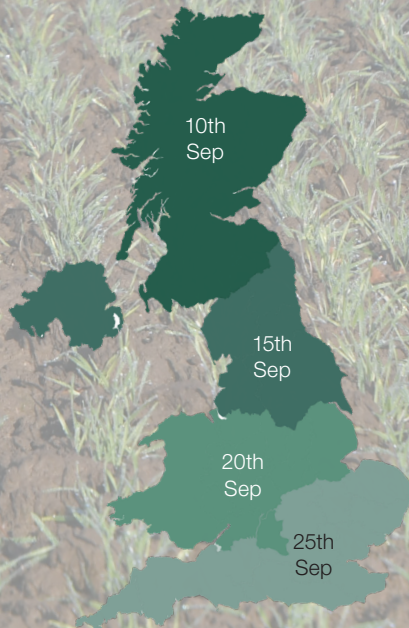


# Crop Management Strategies



## Seed Rates

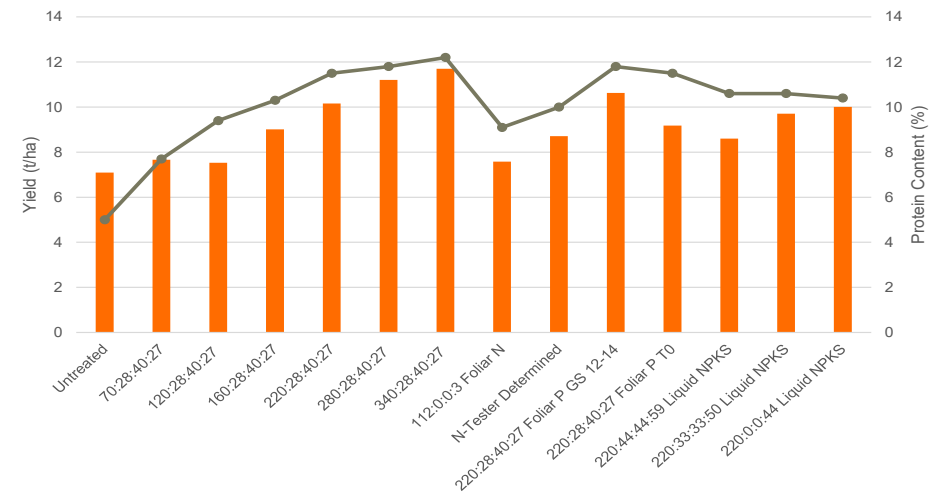
	1st - 3rd week Sep	End Sep - Early Oct	Mid - Late Oct	Late Oct - Early Nov	Early Nov - Early Dec
<b>Conditions</b>					
<b>Good Seed Bed</b>	200 - 250	250 - 325	350 - 400	350 - 400	425 - 500
<b>Bad Seed Bed</b>	250 - 275	350 - 375	400 - 425	400 - 425	500+
<b>Soil Type</b>					
<b>Light</b>	250 - 275	275 - 350	350 - 375	350 - 375	425 - 475
<b>Heavy</b>	250 - 275	300 - 350	400 - 425	400 - 425	500+



## Crop Nutrition

Nutritional requirements for KWS Dawsum will not be significantly different to many other wheat varieties grown but any key tips for success will be based around the situation in which the variety is sown. For feed wheat, the total nitrogen dose will be between 175 - 240 kg N/ha. This broad range is unavoidable given the range in nitrogen prices that farmers have been paying over the last few years. The figure below shows multiple nitrogen doses and the split at which they are put on. The graph also shows the protein content from KWS Dawsum from each of these doses.

KWS Dawsum – Nitrogen Response and Protein Content



As you can see from the graph, KWS Dawsum starts responding in yield when we hit 160kgN/ha and keeps increasing up to 340kg/ha. However, the increase in yield from 280kgsN/ha and 340kgsN/ha is not significant. Additionally, we have always seen really decent protein in KWS Dawsum and as you can see from the graph, it responds well when extra Nitrogen is added, typically following the yield curve. We had some medium levels of Septoria in this trial and I think the extra N has helped keep the crop greener for longer to help combat this too.





Above 100 kg N/ha, yield benefits to additional N can be economically justified but yield increases are much smaller. Equally, small reductions on total N applied also have a very small effect on yield. For example, a 20 kg N/ha reduction from a total of 220 kg N/ha is likely to reduce yield by 0.1 t/ha. A 40 kg N/ha reduction will reduce yield of the order of 0.25 t/ha. The unknown however, are the wheat prices.



Fertiliser recommendations should always be based around RB209 and not exceed nitrate vulnerable zones (NVZ) crop max limits. Recommendations should be received from a FACTS qualified advisor. The aims of the fertilizer strategy should be a balance for the crops needs about crop structure, soil nitrogen availability and total crop requirements to achieve the aims. Total amounts applied would vary between site, season, and soil reserves.

When meeting the crop's nutrient requirements, the intention should always be to ensure a steady but consistent supply through the

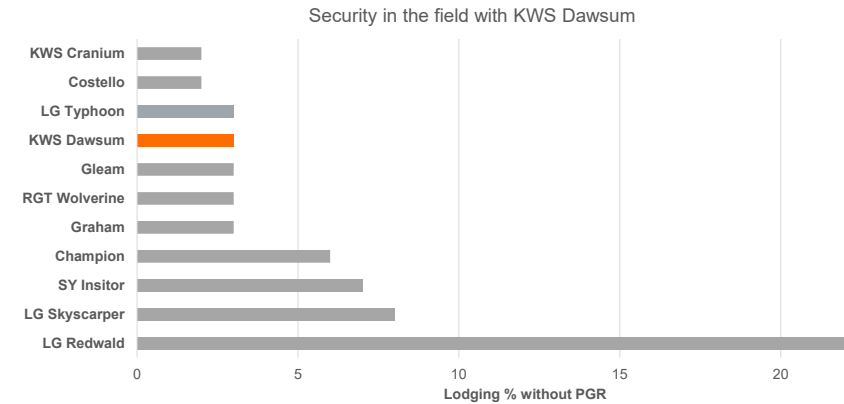
growing period. Whatever product you choose to apply, KWS suggest a three-way split of nitrogen to meet crop needs. Early spring management should target a plant population of 260 plants/m<sup>2</sup>. Each plant may be carrying between 3 and 4 tillers, giving a total of just under 1000 tillers in early spring. More than this number creates a structure which is hard to support and this level is adequate to achieve the targets set. From GS31 back tillers start to die off.

The AHDB wheat growth guide indicates 30% of final nitrogen will be taken up at this point. This is the time when temptation is greatest to apply a large dose. While there are good arguments for this in some years and areas due to the weather patterns, it will increase the retention of unnecessary tillers and lead to increased lodging risk. There is no substitute for spring tiller counting to justify decisions. 50% of total nitrogen is taken up in the period between first node and flag leaf. A further 20% is taken up between flag leaf and flowering GS61. Roughly 70% of the final nitrogen demand of the crop should be in the plant inside this construction phase. Only a small amount of nitrogen is taken up by plants after flowering (30kg/ha).



## PGR Strategy

KWS Dawsums stiff straw reduces the potential for lodging and yield loss, often a greater issue with fast developing wheats. Stiff straw provides the insurance of standing crop come harvest and fast and efficient harvesting. Very stiff strawed varieties can reduce the need for plant regulation products in line with the low risks. Each input decision will be different depending on drilling date, soil fertility and weather-related lodging risks but with KWS Dawsum you have one of the lowest risk varieties available.







### Additional Nutrients

Nitrogen is the key driver in crop yields. Its utilisation is only as good as the crops next limiting nutrient. Phosphate and potash are rarely considered limiting factors on most soils but at certain times of year or under conditions of stress their availability is critical to build the crop architecture, resist stress and help nutrient efficiency and water transportation. Applications containing sulphur should be routine in milling crops to ensure efficient protein assimilation. Trace elements are an important addition on many soils. Much of the requirement will be based on field history. Additional applications are justifiable on higher value crops such as milling crops. Crops should be monitored closely throughout the season so any elemental deficiencies can be addressed quickly.



### Harvesting & Storage

As a feed wheat storage is straight forward. It has not been considered for Milling testing, this is an out and out feed wheat variety.

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

## Further Information

If you need any further information or advice on growing KWS Dawsum, then please email us at: [info@kws-uk.com](mailto:info@kws-uk.com) or telephone **01763 207300**.

For more about KWS UK Ltd and our other varieties, please visit our website at: [www.kws-uk.com](http://www.kws-uk.com)

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