



# GrainCo seed special

2018 edition

[www.grainco.co.uk](http://www.grainco.co.uk)

The North of England & Scotland's leading farmer-owned grain and seed marketing business

## Quality comes as standard!

Insiders view on Shabras,  
KWS Jackal & RGT Gravity

## Focus on Clearfield Oil Seed Rape



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Welcome...

...to our new season **Seeds Special**, one which we hope you will find both interesting, informative and importantly a useful tool in helping you decide which varieties and seed treatments to consider on your farm for this coming autumn.

We are very grateful once again to all of our suppliers for their continued support shown throughout the year, whether that be attending our regional farmer workshops, variety farm demonstration days or by providing interesting and relevant articles for our **Seeds Special**.

I would also personally like to thank both David Harrison from East Layton and James Bainbridge from Seamer for taking the time to give us all a brief overview of their farming enterprises, it is greatly appreciated. We hope you enjoy the read.

Gary Bright  
Managing Director

It's a FACT

**Quality comes as Standard with Seed supplied from Grainco's Piercebridge Seed Plant.**

As we now start to look forward to the forth coming autumns plantings, we thought it would be timely to let our customers know of the seed standards our plant at Piercebridge achieved in 2017. Our customers can rest assured our efforts to maintain these standards will continue unabated.

As you will be able to see from the chart below, the official germination levels of both the wheat and barley crops that we processed were well in excess of the HVS standard of 85%. It was very pleasing to be in the position to say that all of our seed was once again blackgrass free, something we know is an important consideration for many of our customers when they are looking to order their seed requirements.

One of the key factors in being able to continue to provide high quality seed year after year can be capsulated into one simple word and that is **control**.

**All of our contracted seed crops are grown on farms, many of whom have grown for us over many years in Cumbria, Co Durham, Northumberland, North and East Yorkshire, areas not noted for having black grass issues.**

We have our own Ministry Licensed Cereal Crop Inspectors, Seed Analyst and laboratory, in addition we have our own bulk haulage fleet and crucially it goes without saying we own and operate our own seed plant, all of which enables us to be in control from beginning to end, something we are very proud of and long may it continue.

	EEC Minimum	HVS Standard	Grainco Piercebridge Wheat – Autumn		Grainco Piercebridge Barley – Autumn	
			2016	2017	2016	2017
Minimum Germination	85%	85%	95%	96%	98%	97%
Analytical Purity	98%	99%	99.9%	99.9%	99.9%	99.9%
Guaranteed Blackgrass free?	No	No	CLEAR	CLEAR	CLEAR	CLEAR

Investing in our seed business

**With the continuing expansion of our seed business, we felt that it was important that we had additional members of our team fully qualified to inspect our own seed crops, most of which are grown right across the North of England.**

As a direct result, we are delighted to announce that both **Rebecca Parker** and **Mike Temple** who cover the South Durham and Driffield areas respectively, successfully passed their theory and field examinations in Cambridge and are now fully qualified **Ministry Cereal Crop Inspectors**.

In addition we are also delighted that **Declan Thurlow** who joined our production team at Piercebridge last season, has just successfully passed his examinations at NIAB in Cambridge to become a **Ministry Licensed Seed Sampler**.

Mike Temple

Rebecca Parker

Declan Thurlow

Cereal Demonstration Days

Look out in the coming weeks for details on how to attend our three regional Cereal and Oilseed Rape Demonstration days.

Tuesday 19th & Wednesday 20th June	Boroughbridge North Yorkshire
Tuesday 26th June	Wylam Northumberland
Wednesday 4th July	Balgonie Fife
Thursday 5th July	East Heslerton, North Yorkshire (in conjunction with KWS)



### Wanted

New Spring + Autumn Seed Growers Required

**Good Premiums Paid**

For more information please speak to **Peter Collins** on: **01325 728905 / 079570819397**

### GrainCo Seed Testing Service

As a fully licensed Ministry seed testing station, we can offer a wide range of laboratory tests for our customers which include:

• Full Germination Tests

• TGW

• Purity

• Hagberg Falling Number

• Grain Nitrogen Content

• Tetrazolium Viability Tests

• Moisture Content

• Specific Weight

• Protein Content

Contact Jane Greenwood or Rebecca Parker on: **01325 728912 / 01325 728907**



# Shabras – a true barn filler with great second wheat potential and early maturity

Syngenta’s Winter Wheat variety **Shabras** led the way at the **Croft AHDB trial site nr Darlington in 2017, taking first place for yield 108% of the site average.**

In addition the variety also topped our own trial site at Wylam in Northumberland for yield 105% of the site average, outlining the varieties potential over different sites and locations.

The variety **Shabras** first appeared on the **AHDB Recommended List** in December 2016, as a high yielding, hard endosperm Group 4 feed wheat. It has shown good consistency across all regions within the UK. It is currently the fourth highest yielding Hard Group 4 Winter Wheat on the **Recommended List** with yields of 104% of controls across the whole of the UK, and 105% of controls in the northern region.

**Shabras** has a flexible rotational position, with strong yields as both a first cereal (104% of controls) and as a second cereal (106% of controls). **Shabras** also performs well on both light (105% of controls) and heavy (102% of controls) soils. It is suitable for drilling from the second week of September to the end of October.

**Shabras** was bred through Syngenta’s doubled haploid breeding programme, which is the quickest way to get a cross to market. It is a cross of **Cassius** and **Hereford**: **Cassius** is a soft endosperm variety, but **Hereford** is a hard; both with the potential for high yields. **Hereford** is also a fantastic second wheat - head and shoulders above others – and both bring in strong *Septoria tritici* resistance.

This strong *Septoria tritici* resistance has been passed down to **Shabras**, as it has a rating of 6.2, which stands it in good

stead alongside its nearest yield rivals. **Shabras’** other disease scores also help it stack up as an excellent choice for growers, including an 8 rating for yellow rust. **Shabras** has a 4 for brown rust however, if kept an eye on that is an easy disease to control.

With its strong yield, solid disease resistance package coupled with its early maturity and flexible rotational position, **Shabras** really is an excellent choice for growers in our northern region.



**SHABRAS**  
FRONT RUNNER  
WITH A GOOD  
TRACK RECORD

**Shabras**  
Winter wheat

**syngenta**

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TM

# Autumn 2018 Piercebridge Plant Winter wheat and winter barley availability portfolio

With a total of 61 fully recommended winter wheat and barley varieties on the new 2018/19 AHDB Recommended List, it is simply impossible to produce even 50% of them during that tight time frame we know exists around the autumn drilling season.

Therefore we have selected the following varieties which we believe will cover most of our customer’s requirements for processing at our Piercebridge Plant nr Darlington.

All of our seed is supplied with a single purpose seed treatment as standard and additional complementary seed treatments are available which include, Redigo Deter, Radiate, Latitude, New Manganese Solution, Vibrance Duo and Austral Plus, please see pages 18–21 for further details.

However don’t worry if your preferred variety is not shown below, for as always we can supply most, if not all of the varieties on the Recommended List.

## WINTER WHEAT

GROUP 1	KWS ZYATT
GROUP 2	KWS LILI, KWS SISKIN
GROUP 3	KWS BARREL
GROUP 4 SOFT	KWS JACKAL, LG MOTOWN, LG SUNDANCE, LG REVELATION
GROUP 4 HARD	COSTELLO, DICKENS, GRAHAM, GRAFTON, KWS GATOR, SHABRAS, KWS KERRIN, RGT GRAVITY

PLEASE ENQUIRE REGARDS OVER WINTERED SEED AVAILABILITY

## WINTER BARLEY

TWO-ROW FEED	KWS CASSIA, KWS ORWELL, KWS TOWER
TWO-ROW MALTING	SY VENTURE
HYBRIDS*	BAZOOKA, LIBRA, SUNNINGDALE

\* DIRECT FROM THE BREEDER





# Winter wheat variety comments

## Nabim Group 1 – Breadmaking Wheat

**KWS ZYATT**

KWS

Hereford x Quartz

UK Yield 102%

East 102%

North 100%

The UK’s highest yielding Group 1 bread making wheat and it offers feed wheat growers lots of additional benefits. As you would expect from a Group 1 variety it has excellent grain quality and the joint highest untreated yield available. This is further highlighted by its Pch1 eyespot resistance which may go some way to explaining its excellent second wheat performance. Throw in its early maturity and medium short stiff straw you can see why it’s attracting some strong interest from northern growers.

The variety performed exceptionally well coming second for yield in both of our wheat demonstration sites at Boroughbridge, North Yorkshire (continuous site) and Wylam in Northumberland

Mildew

Yellow Rust

Brown Rust

Septoria Tritici

Fusarium

Eyespot

Resistance to lodging (–PGR)

Resistance to lodging (+PGR)

7

7

6

6.2

6

7

7

8

1 <sup>st</sup> Wheat %	2 <sup>nd</sup> Wheat %	Light Soils %	Heavy Soils %	Specific wt kg/hl	Maturity	Protein Content %	Hagberg Falling Number	Untreated Yield %	OWBM Resistance
101	103	101	102	78.5	0	11.9	274	89	NO

Nabim Group 2 – Breadmaking Potential

TOP SELLER

**KWS LILI**

KWS

Horizon x Cordiale x Timaru

UK Yield 102%

East 102%

North 103%

This variety was once again in huge demand last autumn, in fact it was our **biggest selling variety** for the second season in a row and will once again be extremely popular this season. It is well-suited to the Northern region where it can be drilled early and fits that first wheat slot perfectly.

In official trials over the past 4 years, the variety has remained incredibly consistent with a swing of only 1% in yield showing its ability to cope through different seasons, a trait much liked by growers. It offers good all round grain characteristics, tillers well with short, stiff straw and comes with a good set of disease ratings.

Mildew

Yellow Rust

Brown Rust

Septoria Tritici

Fusarium

Eyespot

Resistance to lodging (–PGR)

Resistance to lodging (+PGR)

8

7

4

6.1

5

5

7

8

1 <sup>st</sup> Wheat %	2 <sup>nd</sup> Wheat %	Light Soils %	Heavy Soils %	Specific wt kg/hl	Maturity	Protein Content %	Hagberg Falling Number	Untreated Yield %	OWBM Resistance
102	101	104	102	77.6	+3	12.3	305	74	NO

**KWS SISKIN**

KWS

Sterling x Timaru

UK Yield 103%

East 103%

North 100%

This variety was the 2nd biggest selling variety nationally in 2017, due in no small part to its top rated disease resistance ratings. With excellent grain quality, it performs across all soil types and all rotational positions, however it is not quite as stiff as its sister variety **KWS Lili**, but is earlier to mature so a good partner variety. Best suited to being drilled from mid-September onwards where its vigorous growth habit comes to the fore.

One of only three listed varieties to offer yellow rust resistance at both the seedling and adult plant stages.

Mildew

Yellow Rust

Brown Rust

Septoria Tritici

Fusarium

Eyespot

Resistance to lodging (–PGR)

Resistance to lodging (+PGR)

9

9

5

6.9

5

5

6

7

1 <sup>st</sup> Wheat %	2 <sup>nd</sup> Wheat %	Light Soils %	Heavy Soils %	Specific wt kg/hl	Maturity	Protein Content %	Hagberg Falling Number	Untreated Yield %	OWBM Resistance
103	103	101	102	77.7	+1	11.5	302	86	NO

## Nabim Group 3 – Biscuit Wheats

**KWS BARREL**

KWS

Viscount x Bantam

UK Yield 103%

East 102%

North 107%

This variety sold out with us for the second year running last year, due in no part to its exceptional northern yield performance which once again was repeated in trials last year. As a result there is no doubt it will sell out once again this season, so growers should seriously look to order this variety early. Short with stiff straw, it performs well in either rotational position and its performance on light land is rarely beaten.

It offers good all round grain characteristics and comes with OWBM. Disease resistance profile is a bit of a mixed bag with excellent yellow rust resistance, however its Septoria tritici resistance is low so subsequently needs monitoring.

Mildew

Yellow Rust

Brown Rust

Septoria Tritici

Fusarium

Eyespot

Resistance to lodging (–PGR)

Resistance to lodging (+PGR)

6

8

6

4.7

4

6

7

8

1 <sup>st</sup> Wheat %	2 <sup>nd</sup> Wheat %	Light Soils %	Heavy Soils %	Specific wt kg/hl	Maturity	Protein Content %	Hagberg Falling Number	Untreated Yield %	OWBM Resistance
103	103	105	102	77.6	0	12.1	224	+1	YES

# Winter wheat variety comments

## Group 4 – Soft Wheats

**KWS JACKAL**

KWS

Santiago x Istabraç

UK Yield 104%

East 104%

North 105%

With a specific Northern recommendation, this variety is the highest yielding soft wheat available and at the breeders own demonstration site at Malton in N Yorkshire, this variety was the highest yielder by quite some distance. Suitable for distilling it has a good specific weight with medium height, stiff straw and no disease weaknesses. First wheat, second wheat, light land, heavy land this variety will perform in any situation and its second wheat performances are up there with the best of the barn fillers.

Mildew

Yellow Rust

Brown Rust

Septoria Tritici

Fusarium

Eyespot

Resistance to lodging (–PGR)

Resistance to lodging (+PGR)

7

9

5

5.1

6

4

7

7

1 <sup>st</sup> Wheat %	2 <sup>nd</sup> Wheat %	Light Soils %	Heavy Soils %	Specific wt kg/hl	Maturity	Protein Content %	Hagberg Falling Number	Untreated Yield %	OWBM Resistance
104	105	103	104	76.7	+1	10.8	160	79	YES

**LG MOTOWN**

Limagrain

Bantam x Hunter x Denman

UK Yield 102%

East 102%

North 102%

Yielding 4% above its stable-mate **Revelation** and substantially earlier to mature than most of its direct competitors, a key factor for northern growers to consider when often frustrated by later maturing wheat’s in a catchy season. Consequently the variety will be one of the first into the plant for processing this autumn. The variety has an enviable set of disease resistance ratings which give it one of the highest untreated yields available on the RL list. A shorter strawed variety which would benefit from a good PGR programme, suitable in either rotational slot and is best suited to the traditional mid-September drilling slot.

Mildew

Yellow Rust

Brown Rust

Septoria Tritici

Fusarium

Eyespot

Resistance to lodging (–PGR)

Resistance to lodging (+PGR)

8

9

7

5.7

6

4

6

6

1 <sup>st</sup> Wheat %	2 <sup>nd</sup> Wheat %	Light Soils %	Heavy Soils %	Specific wt kg/hl	Maturity	Protein Content %	Hagberg Falling Number	Untreated Yield %	OWBM Resistance
101	103	103	101	76.2	0	12.2	219	88	YES

**LG SUNDANCE**

Limagrain

Hereford x Viscount x Cassius

UK Yield 102%

East 102%

North 102%

Consistent across all regions of the UK, this variety has an outstanding set of disease resistance ratings which include a 9 for YR and the highest score of any **Recommended List** wheat variety of 7.4 for Septoria tritici.

A high tillering variety which is best suited to the main drilling window and performs well in either rotation position, however having a slightly lower spt wt its best performance will come on heavier soils.

Mildew

Yellow Rust

Brown Rust

Septoria Tritici

Fusarium

Eyespot

Resistance to lodging (–PGR)

Resistance to lodging (+PGR)

7

9

6

7.4

6

3

6

7

1 <sup>st</sup> Wheat %	2 <sup>nd</sup> Wheat %	Light Soils %	Heavy Soils %	Specific wt kg/hl	Maturity	Protein Content %	Hagberg Falling Number	Untreated Yield %	OWBM Resistance
102	104	102	101	75	+2	11	175	87	YES

**REVELATION**

Limagrain

Alchemy x Claire x Shepherd

UK Yield 98%

East 99%

North 99%

A medium height variety which has very stiff straw and offers growers very good grain characteristics and an impressive set of disease ratings.

Now starting to look outclassed for yield, it is however still the ideal variety to consider for that early September drilling slot. It is not the earliest to mature though, therefore growers looking for early delivery should enquire about the availability of over wintered seed.

Mildew

Yellow Rust

Brown Rust

Septoria Tritici

Fusarium

Eyespot

Resistance to lodging (–PGR)

Resistance to lodging (+PGR)

5

9

8

6.3

7

8

7

8

1 <sup>st</sup> Wheat %	2 <sup>nd</sup> Wheat %	Light Soils %	Heavy Soils %	Specific wt kg/hl	Maturity	Protein Content %	Hagberg Falling Number	Untreated Yield %	OWBM Resistance
98	99	99	98	76.7	+3	11.3	253	80	NO

# Winter wheat variety comments

## Group 4 – Hard Wheats

**COSTELLO**

Senova

Timaru x W151

UK Yield 101%

East 101%

North 100%

Despite not being a perceived high yielder, this variety was still the 4th biggest selling variety nationally in 2017 and performed exceptionally well at both of our demonstration sites at Boroughbridge North Yorkshire and Wylam in Northumberland. A versatile performer with stiff, short straw, it offers exceptional grain quality including the best specific weight of any variety on the **RL** a valuable asset in a catchy season. One of only three listed varieties to offer Yellow Rust resistance at both the seedling and adult plant stages.

Mildew

Yellow Rust

Brown Rust

Septoria Tritici

Fusarium

Eyespot

Resistance to lodging (–PGR)

Resistance to lodging (+PGR)

8

9

5

6.4

7

8

7

8

1 <sup>st</sup> Wheat %	2 <sup>nd</sup> Wheat %	Light Soils %	Heavy Soils %	Specific wt kg/hl	Maturity	Protein Content %	Hagberg Falling Number	Untreated Yield %	OWBM Resistance
101	100	101	101	81.1	+2	11.6	336	83	NO

**DICKENS**

Secobra

Equinox x Charger x Defender

UK Yield 102%

East 102%

North 103%

A very versatile and proven performer, this variety often slips under the radar, yet it performs consistently well in the northern region where its early maturity is an important factor and is equally at home in either rotational slot. It has good grain quality with medium height stiff straw and a decent set of disease ratings with the exception of septoria tritici which needs monitoring, suitable for mid-September drillings.

Mildew

Yellow Rust

Brown Rust

Septoria Tritici

Fusarium

Eyespot

Resistance to lodging (–PGR)

Resistance to lodging (+PGR)

7

9

6

4.8

6

4

7

7

1 <sup>st</sup> Wheat %	2 <sup>nd</sup> Wheat %	Light Soils %	Heavy Soils %	Specific wt kg/hl	Maturity	Protein Content %	Hagberg Falling Number	Untreated Yield %	OWBM Resistance
102	103	104	101	76.8	0	11.5	257	78	NO

**GRAFTON**

KWS

Cordiale x W07

UK Yield 99%

East 99%

North 101%

Suitable for early drilling and one of the earliest to harvest ensures this variety maintains its niche place on many farms and will once again be the first wheat variety into the plant for processing this season. Its combination of excellent grain quality coupled with short very stiff straw makes it an ideal variety for very fit soils. A shy tiller, growers should look to lift seed rates accordingly.

Mildew

Yellow Rust

Brown Rust

Septoria Tritici

Fusarium

Eyespot

Resistance to lodging (–PGR)

Resistance to lodging (+PGR)

7

6

6

5.4

5

6

8

8

1 <sup>st</sup> Wheat %	2 <sup>nd</sup> Wheat %	Light Soils %	Heavy Soils %	Specific wt kg/hl	Maturity	Protein Content %	Hagberg Falling Number	Untreated Yield %	OWBM Resistance
99	97	96	99	79.1	0	11.6	324	74	NO

**GRAHAM**

Syngenta

Primo x Expert

UK Yield 103%

East 102%

North 101%

Ideally suited to the first wheat slot, this medium tall, stiff strawed variety offers growers consistently high yields coupled with good grain quality and consequently was the 3rd most popular variety nationally last autumn. It can be drilled early i.e.1st week September onwards and importantly offers growers that early maturity at harvest, a trait well-liked by northern growers. In addition it has one of the best untreated yields available, including an impressive 6.9 rating for the yield robbing disease Septoria tritici and an 8 rating for YR.

Mildew

Yellow Rust

Brown Rust

Septoria Tritici

Fusarium

Eyespot

Resistance to lodging (–PGR)

Resistance to lodging (+PGR)

7

8

6

6.9

6

4

7

8

1 <sup>st</sup> Wheat %	2 <sup>nd</sup> Wheat %	Light Soils %	Heavy Soils %	Specific wt kg/hl	Maturity	Protein Content %	Hagberg Falling Number	Untreated Yield %	OWBM Resistance
104	101	102	103	77.1	0	11.1	286	88	NO

# Winter wheat variety comments

## Group 4 – Hard Wheats (continued)

**KWS GATOR\***

KWS

Oakley x W89

UK Yield 100%

East 100%

North 104%

This variety really comes to the fore as a second wheat and consequently it has become the preferred choice in that rotational slot on many farms in our region where it has proved itself to be very consistent. Best drilled from mid–late September where its aggressive competitive nature really comes to the fore. This medium height variety has exceptionally stiff straw.

Mildew

Yellow Rust

Brown Rust

Septoria Tritici

Fusarium

Eyespot

Resistance to lodging (–PGR)

Resistance to lodging (+PGR)

6

6

3

4.7

6

4

8

8

\*2016 data

1 <sup>st</sup> Wheat %	2 <sup>nd</sup> Wheat %	Light Soils %	Heavy Soils %	Specific wt kg/hl	Maturity	Protein Content %	Hagberg Falling Number	Untreated Yield %	OWBM Resistance
101	105	104	100	75.4	+1	10.9	199	79	YES

**KWS KERRIN**

KWS

Santiago x Istabraq

UK Yield 105%

East 105%

North 107%

This is the highest yielding out and out feed variety produced by this breeder which is no surprise considering its parentage and consequently was in huge demand last year taking a near 6% share in its first commercial year. Its northern yield is virtually unrivalled and has to be a serious contender for farmers wishing to maximise their output. Similar to its parent Santiago in its plant type and growth habit, it is rotationally versatile fitting into any situation and indeed topped our continuous wheat demonstration site at Boroughbridge in North Yorkshire.

Mildew

Yellow Rust

Brown Rust

Septoria Tritici

Fusarium

Eyespot

Resistance to lodging (–PGR)

Resistance to lodging (+PGR)

7

7

7

5.3

6

5

7

7

1 <sup>st</sup> Wheat %	2 <sup>nd</sup> Wheat %	Light Soils %	Heavy Soils %	Specific wt kg/hl	Maturity	Protein Content %	Hagberg Falling Number	Untreated Yield %	OWBM Resistance
104	106	105	103	76.6	+1	10.6	139	83	YES

**NEW**

**RGT GRAVITY**

RAGT

Scout x Oakley x Santiago

UK Yield 106%

East 106%

North 108%

This is the highest yielding winter wheat in the UK and gained automatic promotion to the 2018/19 **AHDB Recommended List**, the first time a feed variety has achieved that for over a decade. It has proved very consistent, outperforming all other varieties in NL1, NL2 and during its **RL** trial year. As a result it is the highest yielding wheat in both the first and second wheat rotations and on light and heavy soils. Medium height with medium stiff straw, it has a good specific weight and a solid set of disease ratings. Being a **Santiago** cross, it produces a big canopy and a large flag leaf and is best suited to the traditional mid-September drillings.

Mildew

Yellow Rust

Brown Rust

Septoria Tritici

Fusarium

Eyespot

Resistance to lodging (–PGR)

Resistance to lodging (+PGR)

4

8

6

5.2

6

4

7

7

1 <sup>st</sup> Wheat %	2 <sup>nd</sup> Wheat %	Light Soils %	Heavy Soils %	Specific wt kg/hl	Maturity	Protein Content %	Hagberg Falling Number	Untreated Yield %	OWBM Resistance
106	108	105	106	76.8		11.2	195	83	YES

**SHABRAS**

Syngenta

Hereford x Cassius

UK Yield 104%

East 104%

North 105%

Consistent in 4 years of trials this out and out feed variety offers northern growers the potential of some big returns. In fact it topped our own Wylam demonstration site in Northumberland and indeed the **NIAB** Tag site at Darlington Co Durham.

This medium height, stiff strawed variety is earlier to mature than some of its direct competitors, an important trait for northern growers and in terms of management its balance of disease resistance is good for both yellow rust and Septoria tritici which are the diseases that cause many growers most concern.

Mildew

Yellow Rust

Brown Rust

Septoria Tritici

Fusarium

Eyespot

Resistance to lodging (–PGR)

Resistance to lodging (+PGR)

6

8

4

6.2

5

5

7

7

Ideally suited to the traditional mid-September drilling slot it has a very quick spring regrowth and a very erect growth habit unlike most other varieties. It fits nicely into either rotational position, however it will produce its best potential in that important 2nd wheat position where its yield is almost unrivalled.

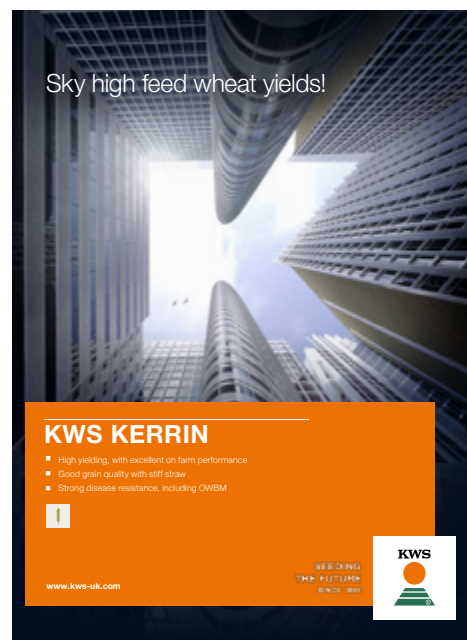
1 <sup>st</sup> Wheat %	2 <sup>nd</sup> Wheat %	Light Soils %	Heavy Soils %	Specific wt kg/hl	Maturity	Protein Content %	Hagberg Falling Number	Untreated Yield %	OWBM Resistance
104	106	105	102	76.4		10.9	202	83	NO



# High-yielding wheats for all situations

**Growers across our region are in the enviable position of having a wide selection of high-yielding wheats suited to a range of situations from which to choose this year.**

Whether it is straw strength, disease resistance, speed of maturity or second cereal performance, the best varieties in these situations all offer excellent yield potential meaning you no longer have to trade yield for desirable agronomic characteristics.



Sky high feed wheat yields!

## KWS Kerrin

Coming top of the GrainCo continuous wheat variety trial drilled on 13th October at Limebar Farm, Boroughbridge in 2017 was **KWS Kerrin** were it yielded 10.5t/ha. Justifying its position as the highest yielding variety on the **AHDB Recommended List (RL)** for 2017–8.

It is a level of performance that has been replicated elsewhere. In official **AHDB** trials, **Kerrin** has recorded an average yield for the North of 107% of controls making it one of the highest-yielding varieties available.

At the **KWS** variety demonstration field at East Heslerton **Kerrin** yielded 11.2t/ha, close to **KWS Siskin** and **KWS Barrel**, but it showed the greatest consistency between seasons with a two-year average yield of more than 11.3t/ha.

A **Santiago** cross, **Kerrin**'s appeal to those in our region will be obvious: as a true barn-filler it offers excellent yields in both the first and second cereal position and does well across a wide sowing window. The performance off all varieties across an extended drilling window is becoming of greater interest as more growers delay drilling to better control black-grass. Although **Kerrin**'s best performances have come from mid-September sowings, **Kerrin**'s performance in October-drilled **AHDB** trials suggests it will appeal strongly to growers seeking a high-yielding variety able to be sown across a wide drilling window.

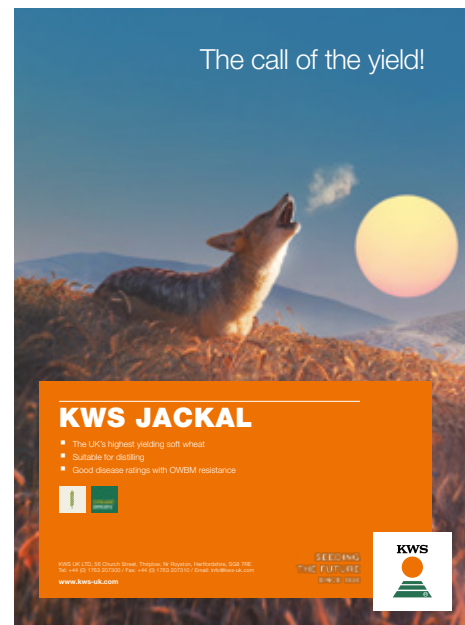
In terms of agronomics, it doesn't stand out as being better on one specific criteria than any other variety, but it has shown itself to be an absolute barn-filler. Twin 7s for lodging put it firmly in the top half of the pack alongside its parent **KWS Santiago** and on a par with newcomer **RGT Gravity**.

Much the same can be said for its disease resistance were it has good resistance scores of 7 for mildew, yellow rust and brown rust and a solid 5.3 for *Septoria tritici*. The varieties yield results show that when managed correctly it is capable of impressive performances.

It is slightly later to mature than the average at +1 day compared with **JB Diego** and is slightly shorter than most feed varieties at 83cm, but is equal to **KWS Siskin** and just taller than **KWS Lili** (81cm) and **KWS Barrel** (82cm). It is stiff strawed, similar to both **Shabras** and to **RGT Gravity**.

Although not a concern to all growers, **Kerrin**'s resistance to orange wheat

blossom midge (OWBM) is a welcome bonus. As the effectiveness of pyrethroids declines, we will all come to rely more on



a plant's natural defences against pests.

## KWS Jackal

New for autumn 2018 is **KWS Jackal**, the highest yielding soft feed on the **AHDB RL** for the North region and another absolute barn-filler. In fact at the **KWS** variety demonstration field at East Heslerton, **Jackal** was the highest yielding variety by quite some distance. Aside from its outstanding yield potential, **KWS Jackal** marries good market appeal as a suitable distilling and soft milling variety along with a combination of good disease resistances. It will find ready homes across the region for biscuit making, grain distilling and bioethanol.

Perhaps most importantly, it looks to be farmer friendly variety that will do well on farm thanks to its good agronomic characteristics.

Its mildew resistance (score of 7) is above average, while its yellow rust resistance (9) is exceptional and a solid *Septoria tritici* rating of 5.1. Like **Kerrin**, **KWS Jackal**

also carries orange wheat blossom midge (OWBM) resistance.

A medium height variety of 85cm and with stiff straw – it has one of the lowest lodging scores of any variety on the **RL** – it is similar to that of **KWS Kerrin**.

Its performance as both a first and second cereal is similar suggesting it will do well wherever it is grown across the rotation. A reasonably fast developing variety, it is suited to drilling from mid-September onwards and has given slightly better performances on heavier soils.

## KWS Lili

By far the most popular winter wheat among **GrainCo** customers last year, **KWS Lili** has earned a place on farm as an easy-to-manage wheat with excellent yield potential and broad market appeal.

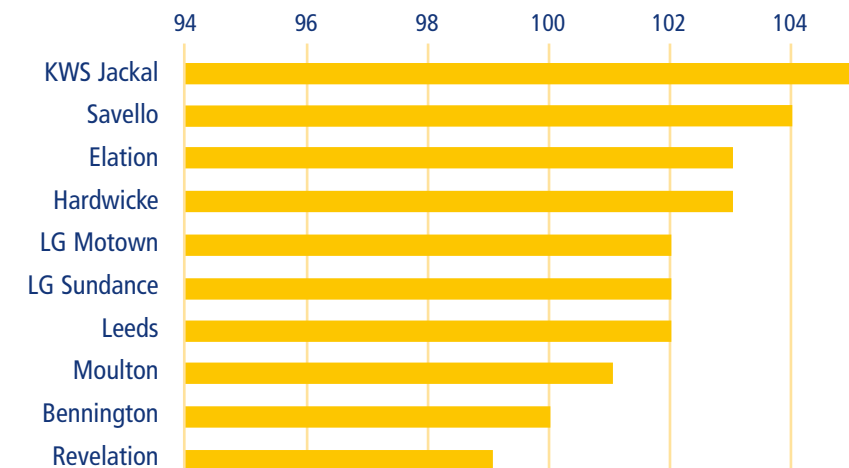
It has short, stiff straw and looks pleasing in the field with a decent flag leaf and a clean ear. Understandably, many will choose to grow it as a feed wheat, but with a little extra management paid to nitrogen requirements, it can easily meet a range of bread-making or export specifications.

An ideal first wheat and suitable for drilling from early September, it has a competitive growth habit similar to that of **Cordiale** and is an aggressive tillerer akin to **Oakley**. Come the spring its speed of movement



## AHDB, 2017 Soft Wheat Yields: North Trials

### Yield, % of Controls



is fairly typical and there are no concerns around early applications of nitrogen as with some varieties.

Its good all-round disease scores only further its appeal, but these should not be interpreted as an opportunity to delay applications or cut back on rates.

Its official resistance ratings reflect what is seen on farm, but it is always worth keeping on top of disease. In recent seasons showing high disease pressure, **Lili**'s *Septoria* resistance showed strongly. However, input trials showed even highly resistant varieties gave a good yield response.

The same can be said for orange wheat blossom midge (OWBM) and growers should follow best practice as **KWS Lili** does not have inherent resistance.

It is slightly later to mature than **JB Diego** and with good standing strength is often used to spread the harvest workload without fear of losing grain quality or lodging.

## KWS Zyatt

The highest-yielding Group 1 on the **AHDB Recommend List**, **KWS Zyatt** outperforms all others in this group across the wheat heartlands of the UK. It was the second-highest yielding wheat in the **GrainCo** continuous wheat trials last year

at Boroughbridge in North Yorkshire and Wylam in Northumberland.

In our experience it yields close to that of the leading feed wheats, but with the grain attributes expected of a quality wheat. It has excellent all-round disease resistance, is short and stiff-strawed, and is early to mature, similar to **Gallant**.

But what makes it appealing in the North however, is its fantastic second wheat performance. Excellent eyespot resistance (score of 7) and good all-round disease resistance partly explain why it has done so well in this situation.

An untreated yield of 89% of controls puts it at the top-end of performance and significantly ahead of **Skyfall** on 82% and **Crusoe** on 76%. No other variety on the **RL** offers a higher untreated yield.

Other management considerations such as maturity, height and straw stiffness are important too, but their significance is often determined by farm location and soil type.

Experience suggests that taller varieties fair better in drought conditions and at 84cm, **KWS Zyatt** is of average height and just 2cm shorter than **KWS Santiago**. Its maturity is equal to **Skyfall** which means it is slightly earlier to ripen than other high yielding varieties on the **RL** and it has stiff straw.



## Farmer focus: James Bainbridge



**James Bainbridge of Seamer and NFU North Riding and Durham County Chairman.**

The farm is a family enterprise trading as **W Bainbridge and Sons**, Greystones Farm Seamer, nr Stokesley and is made up of four equal partners, David, Les, Jonathan and myself.

Greystones is a mixed family farm and comprises 5 enterprises, 1600 acres Arable, 8,000 Free Range hens, 200 Beef fattening, 150 breeding sheep and a Contracting operation.

The arable is a combination of 800 acres of renting and share farming agreements, with the other 800 acres being stubble to stubble contracts.

Our cropping rotation is oilseed rape, wheat, wheat, barley and barley, occasionally spring beans are sown in replacement for the oilseed rape.

Approximately 70% of the land is cultivated off the top with a sumo trio with the remaining being ploughed for barley. Drilling is carried out with either a **Varderstadt** drill or a power harrow combination depending on the weather. Phosphate and potash are spread from variable rate maps, while nitrogen is still being applied flat rate.

All spraying is carried out by myself with a self-propelled machine which minimizes any crop damage due to its high clearance and light weight.

In 2015 we installed a new 20 tonne per hour **Allmet** grain dryer and a weigh bridge on the farm. This has greatly improved our drying efficiency on the farm and has allowed us to dry other people's grain creating another valuable income stream for the business. Every tonne of corn is weighed on and off the farm and provides us with very useful information on a field by field basis.

All the wheat and the barley we produce is grown for feed and with the exception of a small tonnage which is retained for feeding to the cattle at home, is sold and delivered to a local feed mill. All of our grain marketing is carried out in house and we like to sell little and often, this we find helps our cash flow and also creates a decent average price at the end of the season. The exception is with **OSR** which is sold off the combine.

Seed variety decision making is done after visiting a variety of field trials which included **Grainco's** new wheat demonstration plots at Boroughbridge with their representative Colin Jewell. As a result we currently have **Graham** and **KWS Barrel** which were our first choice wheat varieties in the ground along with **Costello** and **LG Motown**.

**KWS Tower** and **Cassia** are our two main stay barley varieties once again and we have some **Phoenix**, **Anastasia** and **Sparrow** oilseed rape in the ground.

We switched back to drilling conventional oilseed rape seed following the 2016 harvest, at that time we were growing **Hear** rape varieties which unfortunately shedded quite badly.

The free range hen unit comprises of 8,000 hens which produce in the region of 700 dozen eggs a day. These are contracted to a local business who process them ready for the supermarket shelves and are sold under the **Happy Egg** brand, something we are really proud of.

The manure from this enterprise is also a valuable resource for the arable unit.

We finish approximately 500 head of beef cattle a year, the majority of which are bought in from Hexham as strong stores, they are then fed roll barley until they are suitable for the fat stock mart at Northallerton.

We currently run two **Welger** round balers and a **Massey Ferguson** square baler, along with 5 **John Deere** tractors and harvest with a **John Deere** combine. We bale and wrap in the region of 10,000 silage and 10,000 straw bales per year, with all of the wrapping being carried out in the customer's farmyard to minimize bale damage. A **JCB 320s** handles all the bale wrapping and stacking.

I am now in my 2nd year as North Riding and Durham County Chairman, following a period where I became chairman of Stokesley **NFU** before taking on the county vice chairman role.

This is a role that I find both challenging and rewarding due to the diverse range of issues the **NFU** is currently dealing with behind the scenes. It goes without saying that we are always looking to increase our membership, for undoubtedly we have more strength in numbers. I often hear people say the **NFU** doesn't do enough for farmers, however nothing could be further from the truth and until you have been to Stoneleigh to visit the **NFU** headquarters and seen the wide range of issues they are involved with on a daily basis you really haven't scratched the surface.

I am sure as an industry we will continue to adapt as we always have done and rise to the many challenges faced, Brexit being one, I believe it will bring farming and our business more opportunities in the future for I am sure the EU need us as much as we need them and importantly let's not forget we produce food to some of the highest welfare standards in the world.

## New heavyweight RGT Gravity takes yield and consistency to new levels



**New Group 4 feed wheat RGT Gravity looks set to become one of the biggest selling varieties next autumn and one of the most important wheat varieties over the next few years.**

**RGT Gravity** is the highest yielding winter wheat in the UK and gained automatic promotion to the **2018/19 Recommended List** as a result, the first time a feed variety has achieved that for over a decade.

**RGT Gravity**, a three-way cross of **Oakley**, **Scout** and **Santiago**, scores 106 for treated yield on a UK basis and for the East and West region.

However, in the North region that figure jumps to 108. That gives this heavyweight a clear lead of 3% above leading soft wheat **KWS Jackal** and this season's other hard wheat newcomer, **Gleam**, and a 4% advantage over old favourites **KWS Santiago** and **Evolution**.

It is not just the amount of yield **RGT Gravity** delivers; it is the unrivalled consistency of its performance, across different seasons and a range of sites, that make it a leading contender as the next farmers' favourite.

The variety outperformed all other varieties in three years of private trials and

continued to lead the pack in both **NL1** and **NL2** trials and during its **RL** trial year.

It also maintains its clear yield advantage as a first and second wheat (see chart), on both heavy and light soils, and it is also the top late-sown variety.

**RGT Gravity's** medium height, stiff straw makes it a reliable performer even in catchy summers. It also has good bold grain, with a specific weight of 76.8kg/hl that comfortably exceeds the minimum standards laid down by the region's compounders and bioethanol manufacturers.

It has a good disease profile, particularly against yellow rust, and the variety is also resistant to orange wheat blossom midge. That removes a potential headache as farmers only have a limited armoury available to control the pest, which, in bad years, can quickly downgrade yields and quality in susceptible varieties.

Although not recommended for early drilling, the variety's resilience and speed of development means it flowers early and ripens just one day later than **JB Diego**, on a par or earlier than most other contenders in the north.

This long flowering/grain filling period coupled with its large biomass help drive **RGT Gravity's** very high yields.

Overall, **RGT Gravity's** exceptional consistency means that the variety can be expected to deliver on farm as it has in trials, taking yields to new heights across the UK and particularly in the north.

Demand is likely to be very strong. Anticipating this, **RAGT Seeds** fast-tracked seed production in 2017/18 and the variety took 2% share of the national market last autumn, before it was even recommended.

**Tom Dummett**  
*Cereals and OSR product manager*  
**RAGT Seeds**





# KWS Orwell – the highest yielding two-row

Growers in search of a high-yielding winter barley with excellent straw strength should consider KWS Orwell.

As the highest yielding two-row feed on the 2018–19 RL, its strong agronomic credentials and impressive disease resistance make it the obvious choice for those looking for a new variety with exciting potential.

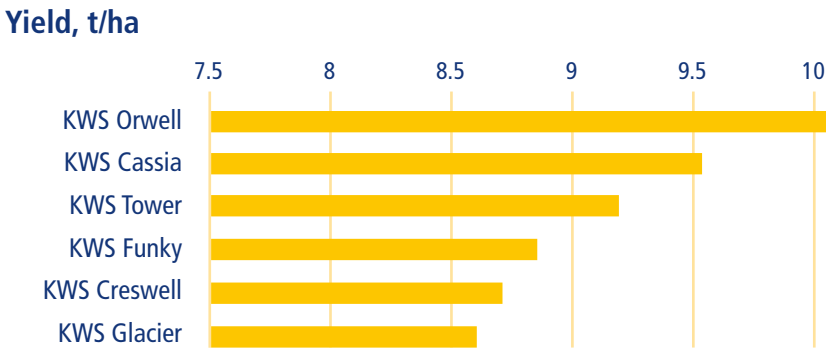
Its medium height, stiff straw and consistent grain yields make KWS Orwell well-suited to those with mixed farms or with more fertile soils, says KWS.

Disease resistance is generally sound with no weakness to the two most common wet weather diseases, net blotch and Rhynchosporium. If there a disease concern though most growers manage to control this without difficulty.

Its brown rust too is respectable and better than many of the varieties on the 2018–19 Recommended List. KWS Orwell has similar maturity to KWS Cassia, but earlier ear emergence which partly explains its higher yield potential. Although it has the maturity date of KWS Cassia, ear emergence is about two days earlier in comparison. This

gives it an increased grain fill period and a yield improvement across the country of about 5%, without any delay in harvest. It is by far the stiffest strawed winter barley on the RL and produces grain with good specific weight. It is on course to become the most widely sown winter barley in the UK in the next few years.

## KWS, 2017 PDF North Winter Barley Trials



L–R David Harrap – KWS Senior barley breeder with Grainco seed specialist Colin Jewell.



The highest yielding 2-row

### KWS ORWELL

- Highest yielding Recommended 2-row winter barley
- Highly consistent across regions with good physical grain quality and low screenings
- Good combination of wet weather disease resistance

SEEDING THE FUTURE  
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# Winter barley variety comments

## Two-row

### KWS CASSIA

KWS

Carat x Saffron

UK Yield 99% East 99% North 99%

Having being recommended way back in 2010, this variety remains in big demand by barley growers due to its consistency of performance irrespective of what each season throws at it. It has never been out of the top three in terms of sales nationally and is in fact predicted to be the second biggest selling two-row this season. A medium to tall stiff strawed variety, giving growers lots of valuable straw and the best specific weight of any barley variety on the recommended list.

Specific wt kg/hl	Untreated Yield %	Straw Height with PGR	Light Soils %	Heavy Soils %	Maturity
70.9	83	90cm	98	99	0

Mildew 4

Yellow Rust 6

Brown Rust 7

Rhynchosporium 4

Net Blotch 5

Ramularia n/a

Resistance to lodging 7

### KWS ORWELL

KWS

B105 x Salsa

UK Yield 104% East 104% North 103%

First recommended in 2016, this variety has sold out two years running and is predicted to become the NO1 variety for this coming autumn's drillings.

A full 5% above KWS Cassia, it sits top of the RL for two-row feed varieties and is incredibly consistent across all regions of the UK. Slightly shorter with a much improved lodging resistance than its sister varieties, it comes with a good set of disease resistance scores with the exception of Mildew. Equally at home on light or heavy soils, it does save its best performance however for heavier soils and has very good brackling resistance.

Specific wt kg/hl	Untreated Yield %	Straw Height with PGR	Light Soils %	Heavy Soils %	Maturity
67.7	83	86cm	103	104	0

Mildew 3

Yellow Rust 7

Brown Rust 7

Rhynchosporium 6

Net Blotch 5

Ramularia 5

Resistance to lodging 8

### KWS TOWER

KWS

Saffron x Retriever

UK Yield 101% East 100% North 102%

The UK's leading two-row variety for the past two seasons taking a near 20% share of the winter two-row barley market. Slightly taller than its sister varieties and with the exception of net blotch has no major disease resistance weaknesses.

Specific wt kg/hl	Untreated Yield %	Straw Height with PGR	Light Soils %	Heavy Soils %	Maturity
67.3	78	89cm	102	101	-1

Mildew 5

Yellow Rust 8

Brown Rust 6

Rhynchosporium 5

Net Blotch 3

Ramularia 4

Resistance to lodging 7

## Two-row malting

### SY VENTURE

Syngenta

DH9525 x Retriever

UK Yield 95% East 95% North 94%

The most widely grown winter malting barley of its type and fully approved for the production of malt. Relatively short strawed variety with a high specific weight.

Specific wt kg/hl	Untreated Yield %	Straw Height with PGR	Light Soils %	Heavy Soils %	Maturity
69.8	72	84cm	95	95	0

Mildew 6

Yellow Rust 7

Brown Rust 6

Rhynchosporium 4

Net Blotch 5

Ramularia 5

Resistance to lodging 7

## Hybrids

### BAZOOKA

Syngenta

UK Yield 109% East 109% North 107%

Tallest of the hybrids, this variety has been very consistent over 5 years of trials and is currently the most popular hybrid available. It has one of the best specific weights available for a Hybrid barley, a solid disease resistance profile with the exception of mildew. In addition on heavy land it offers growers the highest yield potential of any barley on the recommended list.

Specific wt kg/hl	Untreated Yield %	Straw Height with PGR	Light Soils %	Heavy Soils %	Maturity
68.5	91	110	107	111	-1

Mildew 4

Yellow Rust 9

Brown Rust 6

Rhynchosporium 7

Net Blotch 6

Ramularia 5

Resistance to lodging 7

### SUNNINGDALE

Syngenta

UK Yield 108% East 108% North 110%

The highest yielding hybrid variety in the Northern region and topped our demonstration site at Wylam in Northumberland for yield. Shorter and with a specific weight slightly below that of Bazooka, it has a very good all round disease resistance profile and delivers its best performance on lighter soils.

Specific wt kg/hl	Untreated Yield %	Straw Height with PGR	Light Soils %	Heavy Soils %	Maturity
67.5	90	105	109	106	-1

Mildew 6

Yellow Rust 6

Brown Rust 6

Rhynchosporium 7

Net Blotch 6

Ramularia 5

Resistance to lodging 7

\*Other varieties available on request.



# Introducing: GrainCo Scotland



Simon Thomson (left) and Gavin Will at the Balgonie Office

## Balgonie Offices

In June 2014 we set up a second trading office in Scotland based at Balgonie, near Glenrothes, to give our grower base a local presence within the Central consumer belt of Scotland. With key consumers such as **Quaker**, **Diageo**, **Noble Foods**, **Carrs** and **2Ag** all within a 30 mile radius the geography gave us an opportunity to strengthen consumer links on behalf of our growers with Gavin and Simon based at the Fife office trading grain as well as fertiliser and seed inputs.

With **Scottish Agronomy** also sharing the site for plot trials it has given us a unique

opportunity to link up consumers with independent agronomy advice.

"The location of the office within the consumer belt in Fife gives us a real hub to link in consumer thinking with very technical agronomy advice and tailor this to our grower members. A great example of this is with **Quaker** oats and ongoing work with our members to provide a real in depth understanding of each other's business. Critical to this is correct varietal selection up and down the supply chain" commented Gavin.

The **GrainCo** open day at the Balgonie site has become a perennial fixture linking together practical plot trial tours with consumer thinking and input advice. This year it will be on 4th July. Please look out for invites or get in touch for more detail.

## Next Generation Meeting

We were excited to be approached by **SAOS** to host the first **Next Generation** meeting giving our younger generation of members an insight into cooperatives and the **GrainCo** business.

The aim of these meetings were to be very practical in nature with **GrainCo** providing some insights into the world of coops and "workshopping" some grain marketing fundamentals.

"**SAOS** are delighted to be working alongside **GrainCo** to establish a working group of **Next Generation** members to encourage and develop their knowledge about the business as well as provide them with bespoke training sessions tailored to their requirements. We were encouraged to see such a great turn out at our initial meeting and look forward to working with Gavin, Simon and the group over the coming year" commented Anna Robertson from **SAOS**.

Following the first meeting where the group undertook a **Training Needs Analysis** and over the next year will look at practical areas such as budgeting, financial planning, business planning and time management as well as a personal development program.

# Northern oats market – variety update

**Winter and spring oats continue to form an important part of the rotation for many growers in Scotland and the NE of England, with increasing demand from Quaker Oats in particular helping to drive the market forwards.**

**GrainCo's Oatco Grower Group** has grown to become the largest supplier to Uthrogie Mill in Cupar, with supply increasing from circa 30,000-70,000t over the last 10 years.

Quality attributes have been moving on as the market does, with an increasing importance placed on beta glucan levels (a key characteristic for **Quaker's** health claims). To this end, spring varieties

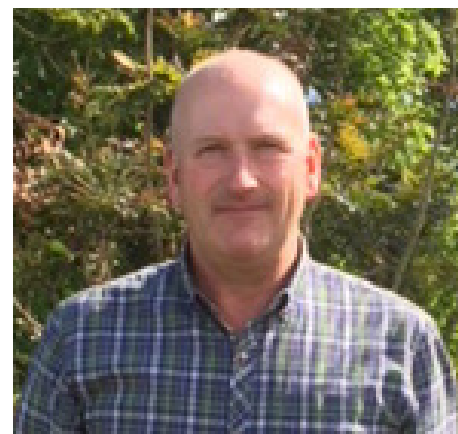
such as **Conway**, **Canyon** and **Elyann** have proved to meet this criteria, whilst also performing well on farm. Yields and quality on spring oats have been developing over recent years, with many of the newer varieties offering significant advantages to traditional varieties like **Firth**.

Winter oats wise, **Dalguise** has been shown to have better beta glucan levels than **Gerald**, making it a more appealing option to millers. The yield differential between **Gerald** and **Dalguise** has been shown to be negligible, making it a reasonable option for growers supplying the Northern market. Moreover, targeting low screenings has been a challenge put to **Oatco** growers over the last few

years, largely due to its efficiency and output benefits to the mill. As such, we have undoubtedly seen varieties with inherently lower screenings, growing in popularity in line with the market. **GrainCo** is also undertaking work with growers around seed rates and dressing methods, particularly on winter oats, to help support improvement here.

Going forwards, the health foods market continues to be forecast for growth, suggesting further opportunities for growers in the North of England and Scotland. Further work on consumer led variety development by breeders, supported by growers, will undoubtedly be central to this.

# Farmer focus: David Harrison



## Introducing David & Judith Harrison from East Layton nr Richmond

David and his wife Judith farm 320 acres at Carlin Fields where they have farmed together since 1982. Back then it was very much a traditional mixed farming enterprise at that time which included cereals, oilseeds, potatoes, cattle and sheep.

In recent years, they have converted the farm to being wholly operated as an arable combinable crop unit, with the farms soil type being mainly medium loam.

The rotation is winter wheat and oilseed rape, with spring wheat (preferably winter sown if at all possible) making up the third crop to be drilled in order to accommodate the three crop rule.

All of the fieldwork is undertaken in-house by themselves with additional help being

called on at harvest and cultivation time if needed. All of the wheat produced is dried and stored on the farm, with the oilseed rape being contract dried and stored.

The main focus on wheat production is for yield, as opposed to quality which is due to regional demand matching or at times out pricing premium markets.

Oilseed rape is grown as the break crop following second or third crop wheat's and is generally drilled due to work load in early September. David prefers to use hybrid varieties which he has found generally ensure a better level of establishment before moving into winter.

Winter barley has not been grown on the farm now for quite some time. Incidentally David was a former seed grower with his last crop of barley being produced for the Piercebridge plant. Improved varieties and the benefit of an earlier start to harvest on the farm have set his mind to thinking that he may go back to barley at some point in the future, but as yet he hasn't been tempted!

David sources the majority of his cereal seed from the Piercebridge plant. As a former seed grower "I am well aware of the attention to detail they insist on, which in turn working with growers ensures a high standard of purity, germination and just as importantly accuracy of chemical loading onto the seed," he says.

While yield is the main driver when selecting a wheat variety, standing ability, grain quality and importantly a good level of disease resistance particularly against Septoria and Yellow rust are key points he considers.

**KWS Lili** and **KWS Siskin** are currently being grown on the farm as first wheat's with **Relay** and **Grafton** for their earliness of harvest being grown as second and third wheat's.

He is keen to try some **RGT Gravity** as a first wheat for this coming plantings with **KWS Zyatt** being one of his selections as a second wheat. It's the varieties excellent eyespot resistance, "a crucial factor," he says, "when selecting second wheats," which has caught his eye.

When selecting his hybrid oilseed rape varieties, the same rules when selecting his wheat varieties come into play, **DK Exalte**, **DK Exclaim** and **Aquila** are currently being grown, all of which have good light leaf spot and phoma resistance coupled with a high stem canker score. Importantly all three have the pod shatter resistance trait which is very evident to see he says at harvest, it's no good to anyone having seed laid in the field!

We are grateful for the many years of continued support by the family and for taking the time to help put this article together, during what has been a challenging spring for all concerned.





# Spotlight on seed treatments: stewardship key to retaining options

Seed treatments are highly sophisticated and designed with a simple aim – strong crop establishment and healthy growth with minimal environmental impact: they target individual seeds so have less impact on the soil around the seed and as they have low application rates, this means lower chemical usage.

While seed treatments offer the best environmental approach to crop protection, they are still chemicals that must be managed appropriately. By maintaining good stewardship practice, growers can help safeguard these crucial crop protection tools for use now and in the future.

To ensure best stewardship practice here are ten top tips to follow:

1. Wear appropriate Personal Protective Equipment (PPE)
2. Prevent accidental emission of dust into the atmosphere during loading and drilling seed – try to minimise movement of the seed bag, and don't pour the seed from too great a height.
3. Prepare the seed bed – check that drill and cultivators are set up correctly beforehand to ensure seed burial and avoid leaving seed on the surface. If any seed is exposed, cover with soil.
4. Carry a spill kit – comprising a spade, a spare bag to recover seed, and a canvas sheet for use when calibrating the drill.
5. Clean up spills immediately – this will prevent treated seed coming into contact with people or animals.
6. Ensure the drill will not drop seed when transported or when lifting at headlands.
7. Finish early – the seed mechanism should be shut off a metre before the row ends.
8. Dispose of seed bags – empty bags should not be used again except to store the treated seed initially stored in that bag which carries the correct seed tag. Otherwise, they need to be collected by a licenced waste contractor.
9. Store treated seed securely – seed should be kept in a safe, dry location away from pets, livestock or wild animals.
10. Wash hands – even when PPE has been worn, hands should be washed immediately after handling seed treatment, and before eating or drinking.



## Does the groundwork before your crop is in the ground

Healthy seed is the first step towards maximising yield. Infected seed can reduce germination, but by targeting disease early on, you can give your spring and winter cereals seed the best chance of establishing a healthy, high-yielding crop.

With Redigo Pro you get the reassurance that you've protected your seed against all major seed- and soil-borne diseases, with the broadest spectrum disease control. Two advanced actives work together, faster, to target fungal diseases like loose smut, offering truly dependable crop establishment right from day one.

Discover all our resources to help give your spring and winter cereal crops the perfect start: [crops.bayer.co.uk/redigopro](https://crops.bayer.co.uk/redigopro)

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# Zinc is the secret to promoting big roots

Seed treated with a zinc-ammonium acetate has been found to produce more vigorous roots than those treated with fungicidal seed treatments only.

In trials across North Yorkshire in 2017, winter wheat seed of the variety JB Diego treated with Radiate, a zinc-ammonium acetate, were found to have a greater root length than those treated with fungicidal seed treatments only.

The products considered in the trial contained either prothioconazole and tebuconazole, fludioxonil and sedaxane, or just straight fludioxonil.

The trial also sought to measure the root-promoting claims made for fludioxonil and sedaxane, but no such effects were observed. When applied on its own, treated plants produced smaller roots than the untreated.

As the table shows (right), the greatest response came when Radiate was co-applied with Redigo Pro (prothioconazole and tebuconazole), though in all treatments root length increased when Radiate was included either on its own or in combination with a fungicidal seed treatment.

## How does it work?

Radiate is a unique seed treatment that promotes root vigour by stimulating auxin production (a natural plant hormone). It is pH neutral and is recommended for use on all winter and spring cereals and oilseeds with trials showing it increases winter wheat and oilseed rape yields by 0.4t/ha on average.

It can be co-applied with any seed treatment used in cereals and oilseeds, including Vibrance Duo (fludioxonil and sedaxane), Beret Gold (fludioxonil) and Redigo Pro (prothioconazole and tebuconazole).

This yield increase is attributed to bigger roots promoting improved drought tolerance and a greater ability to take up essential nutrients.

As growers strive to improve yields, promoting a plant's root activity is being recognised as an important step to better performance.

Greater root mass enables the plant to locate and absorb more water and nutrients which supports general crop health, photosynthesis and, ultimately, yield.

The benefit of greater root mass is also seen on farm with growers reporting faster establishment and yield increases even where the soil profile and pH status suggest zinc should be freely available.

Even on heavy soils which is not normally associated with a zinc deficiency, growers have reported yield gains from using Radiate. One user reported an average yield response of 0.37t/ha across more than 1000 hectares.

Root length (cm) 25 days after emergence		Source: NDSM, 2017. LSD (P=0.05) 7.93; %CV 21.20
Untreated		43.27
Radiate (2.0 ltr/t)		52.65
Fludioxonil + sedaxane (2.0 ltr/t)		41.77
Fludioxonil + sedaxane (2.0 ltr/t) + Radiate (2.0 ltr/t)		53.78
Fludioxonil (2.0 ltr/t)		49.10
Fludioxonil (2.0 ltr/t) + Radiate (2.0 ltr/t)		51.28
Prothioconazole + tebuconazole (0.67 ltr/t)		52.08
Prothioconazole + tebuconazole (0.67 ltr/t) + Radiate (2.0 ltr/t)		55.35



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Redigo Pro + Radiate



# Latitude, the specialist take-all seed treatment

**This year, Latitude (silthiofam) is the only seed treatment approved for the control of take-all, and is the number one specialist seed treatment choice when thinking about second and third cereal crops.**

The impact of take-all cannot be overstated. The issues are not just yield loss; its impact extends to nitrogen uptake, grain fill and subsequent quality, all of which may affect the marketability of the crop.

The take-all fungus can be present in nearly all soils and is endemic to the UK. The initial symptoms of take-all are blackening and stunting of the root system and secondary symptoms are very easy to see later in the year with stunted plants and 'whiteheads' clearly visible – but of course by this time it's too late. Therefore, all growers should consider, and protect against, the disease before drilling second cereals.

Latitude is a unique fungicide that forms a zone of protection around the seed and young roots. This enables solid establishment and roots that are robust enough to cope with the pressures of the take-all inoculum even when they have grown out of this protected zone. In turn, this reduces plant stress leading to increased crop health.

One of the great benefits of **Latitude** is the flexibility it brings in terms of drilling date, allowing planting to be brought forward if there are concerns about weather and being able to travel on heavier soils, this is of course more relevant to planting in northern England and Scotland. Even when planting is later, **Latitude** benefits can be seen right through to November.

**Latitude** is a well-established treatment backed by many years of trials across many soil types and climatic conditions. The data shows

that when the take-all index is rated as medium the seed treatment can offer a yield benefit of 0.55t/ha in second wheat which, with a seed rate of 125kg/ha, means a Gross Margin of £55/ha\* even after the cost of the seed treatment is accounted for. In a higher risk situation then this figure can be as high as £82/ha.

It is also important to remember that in many situations Winter Barley should be considered a second cereal and therefore vulnerable to take-all. In these circumstances, **Latitude** is equally relevant whether conventional or hybrid barley varieties are being grown.

Talk to your **Grainco** representative today about the benefits Latitude can bring you across a wide variety of cereal situations.

\*feed wheat price of £145/t



**Secure your crop with Latitude®**

- Protects yield, quality and profits
- Reduces take-all in wheat and barley
- Enables flexibility of drilling date
- Improves nutrient and water uptake

**LATITUDE®**  
The only take-all seed treatment

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# Increasingly variable weather conditions highlight need for precision fertiliser approach



**Two very different years from 2017's dry Spring and early Summer to 2018's never-ending wet winter conditions and late Spring are highlighting the superiority of Ammonium Nitrate (AN) as the fertiliser of choice for the UK's professional growers.**

It's difficult to imagine two more contrasting Springs than those of 2017 and 2018, says CF agronomist Allison Grundy

Whilst each one has presented very different challenges to growers, both have underlined the importance of focusing on taking a risk management approach to fertiliser applications, she believes.

"The 2018 Spring's icy weather and snow cover combined with often waterlogged land and low soil temperatures caused real problems for growers.

"It was virtually impossible to plan fertiliser applications and fieldwork with the weather confounding operations at every stage."

In such a year, one of the main problems is being unable to get an early enough application of Nitrogen (N) on, she says.

"Even those that managed to get out with the fertiliser spreader inbetween the snow faced the problem of much of the applied N being lost through run-off on often waterlogged soils.

"Although trials have shown that AN performs better than urea at all timings, some people still try to get an early urea application on and those that attempted it in 2018 year would simply be throwing money, quite literally, down the drain."



Contrasting weather conditions in the Springs of 2017 and 2018 have underlined the reliability and consistency of using quality Ammonium Nitrate (AN) fertilisers compared to other Nitrogen sources such as urea and liquid products.

## AN provides best performance

Those unable to get any type of early application on and being forced to spread later than they would like, would always benefit from AN over other Nitrogen sources, she says.

"Nitrogen from AN is taken up much more quickly by the plant than that from urea and in a late application scenario, that's exactly what you want so crops can make use of it immediately and grow as quickly as possible to make up for the slow start.

"This is in sharp contrast to 2017, where the issue was one of the dry Spring conditions leaving urea sitting on

the soil surface at risk of N loss to the atmosphere."

## Liquid Fertiliser problems

But it's not only urea that presents problems in difficult years with 2018 also being remembered as extremely challenging for those relying on liquid fertilisers, Allison Grundy believes.

"Later Springs and reduced windows for optimum fertiliser applications are manageable for those using solid AN, but for liquid users the demand on the sprayer is extremely difficult to manage.

"It's not just fertiliser applications that need to be conducted in a shortened time period in such conditions but also herbicide

**2017 - DRY and WARM Spring increasing the risk of volatilisation of Nitrogen from urea resulting in losses and hungry crops throughout the growing season.**

**2018 - COLD and WET Spring making early applications of urea less effective and liquid fertiliser use difficult due to pressure on sprayer during narrower fieldwork window.**

treatments and fungicide programmes, so there is the potential for real bottlenecks to develop as the Spring progresses."

## Removing the risks

With Nitrogen potentially creating the greatest return on investment of all cereal inputs at around 5:1, ensuring it is used as effectively as possible is key, she says.

"It's all about mitigating risk and ensuring every kg of N you apply is utilised fully.

"Predicting when N losses will be at a minimum with urea is near impossible and for modern finely-tuned arable business with overall margins as tight as they are, introducing an increased level of uncertainty can be the difference between financial gain or pain.

"Even where growers say they don't see a reduction in crop performance when they apply urea, this is usually due to a poor estimation of the extent to which soil Nitrogen reserves are buffering the shortfall from application losses."

However, this is not a sustainable management approach in an environment where every kg of N applied needs to be accounted for, she points out.

"Recent research has been very much focused on understanding plant nutrient needs and trying to match this precisely for optimum yield without wastage – physically or cost wise – and it is difficult to do this with urea."

## The role of other nutrients

Sulphur is essential in helping maximise Nitrogen utilisation and ensuring optimum protein synthesis.

A crop's need for Sulphur is closely associated with it's Nitrogen requirement and it is needed to ensure N is effectively taken up by the plant.

It is also a major component of protein and is essential in the formation of chlorophyll.

A plant takes up a certain amount of Sulphur as it uses Nitrogen, but unlike

## A compelling case for AN fertilisers in all years

**The case for AN over urea in all years is compelling with independent studies by DEFRA proving that it is the best choice for the UK's maritime climate.**

Pete Berry of ADAS, has stated that: "Replicated experiments comparing Ammonium Nitrate with urea, funded by defra, showed that AN yielded more than urea in 77% of cases and gave a higher grain protein content (+0.4%)."

The amount of rainfall and the air temperature after application of urea are thought to be critical in terms of increasing the risk of N loss to the atmosphere.

However, data collected by DEFRA have shown that the environmental conditions previously thought to drive N loss were very difficult to predict. This suggests that rate and level of N loss when using urea is a real roll of the dice. An ideal combination of environmental conditions following application can vary a lot from season to season.

## Higher yields with AN

The research proved urea had an average of 22% N loss due to ammonia volatilisation in cereals (2–43% range) compared to only 3% emissions from AN (range of 0–10%).

Researchers have calculated that to maintain yield and quality, the optimum N rate when using urea would have to be, on average, 20% higher than for AN, risking loss of yield, lodging, negative environmental impact and risk of breaching NVZ regulations, negating any cost saving for a product which is much less reliable.



Nitrogen, Sulphur is not mobile in the plant instead requiring a sustained source from the soil throughout the growing season.

Good sources of Nitrogen and Sulphur are products like **DoubleTop** (27N + 30SO3) and **SingleTop** (27N + 12SO3).

These can be applied as late first dressings, if necessary, followed by straight AN Nitram (34.5%N) to make up the rest of the N requirement.

Neither phosphate or potash are very mobile in the soil either and soils with indexes less than 2 will always show a yield response.

Spring applied **True Granular Compounds** such as **Heartland Sulphur** (24-8-8+8SO3) are a good way of meeting all of a crop's nutrient requirements, particularly following wet winters where essential nutrients have potentially been leached out of the soil.



# Understanding the Clearfield system

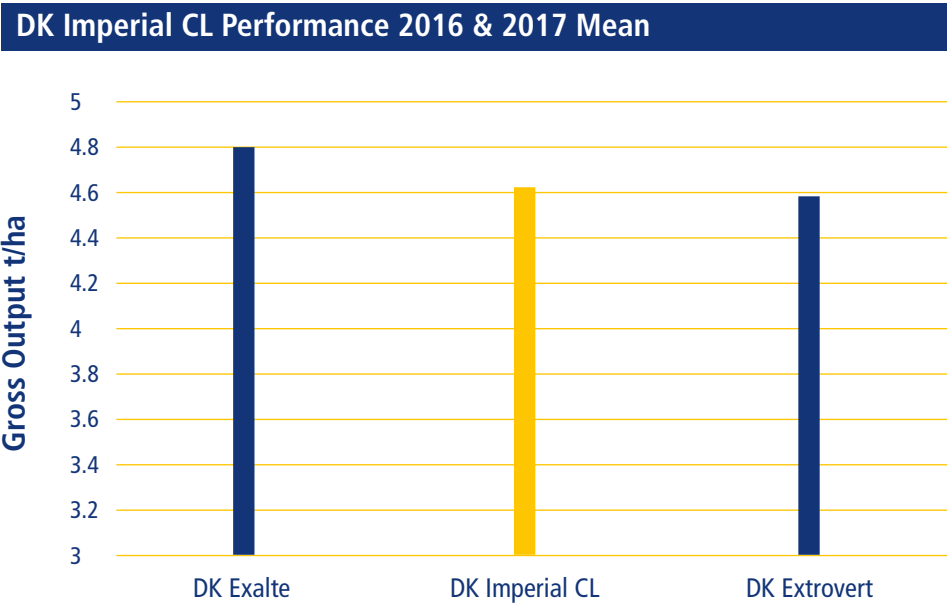


Will Vaughan-France – Dekalb Technical Specialist

**Winter Oilseed Rape remains the UK's most popular combinable arable breakcrop.**

Whilst there had been declines in the crop areas since 2012, the 2018 harvest will represent growth at an estimated total of 622kha (AHDB EBS, 2017). Within this there is much diversity in what is grown. One of the most significant areas of growth is in **Clearfield** varieties which now account for approximately 10% of the UK national crop. This is impressive growth of a trait which substantially alters how Winter Oilseed Rape is grown and was only launched in 2012.

The **Clearfield** system provides OSR varieties carrying specialist genetics with tolerance of the herbicide Imazamox, these varieties are clearly indicated by the **CL** suffix to their name. This system was developed by **BASF** and the genetics made available to a number of Oilseed rape breeders in Europe for introgression



into commercial germplasm. Ordinarily the herbicide Imazamox would kill OSR but these **Clearfield** varieties are able to tolerate it by the presence of two genes. This enables possibilities for weed control and herbicide use that were previously unreliable or unavailable in the OSR crop.

**The following are examples of where the Clearfield system can fit on farm and provide a weed control or management benefit:**

1. To control Brassica weeds like Charlock, Runch & Hedge Mustard where no or limited on-label herbicide options otherwise exist
2. To control volunteer OSR from previous non-Clearfield crops including spring oilseed rape volunteers and High Erucic Acid Rape (HEAR) volunteers
3. Where the option of an effective post-emergence broad-leaved weed

control choice is helpful either due to soil and seedbed conditions being unsuitable for pre-emergence herbicides or for growers who prefer not to use pre-emergence herbicides.

4. Where there is a risk of Sulphonylurea herbicide residues from the previous crop having an adverse affect on crop establishment and vigour. In these situations, varieties with **Clearfield** tolerance may be able to tolerate the residues.

During the last few seasons there have been increasing problems with Erucic acid (EA) contamination being detected in OSR at the crush. There are various potential causes of this contamination but two possible sources could be from brassica weeds and volunteers of previous crops, which can stay viable in the soil for up to 25years. Where either of these two risk factors exist on farm then **Clearfield** is a useful



management option to mitigate the risk of contamination.

Due to the **Clearfield** varieties having a herbicide tolerance that is not normally a feature of OSR production, there are some stewardship considerations which growers should be mindful of. Firstly, growers should ensure that there is no application of **Clearfield** herbicides to any non-Clearfield varieties grown on the farm, and ensure the sprayer is cleaned thoroughly after **Clearfield** herbicide application otherwise severe crop injury or death may result to a non-Clearfield crop treated later. Secondly in managing volunteers the herbicide tolerance in **Clearfield** varieties is likely to lead to reduced or no efficacy from group B (ALS inhibitor) herbicides which would ordinarily control OSR volunteers in following crops. These can be controlled with alternative herbicide modes of action (please consult your agronomist of **BASF** regional agronomy manager for advice on which herbicides are appropriate) and cultural controls. The main cultural control should focus on minimising volunteer generation by using **Clearfield** varieties with Pod Shatter Resistance to reduce harvest losses and ensuring the land is not cultivated immediately after to harvest so that volunteers lose dormancy and germinate on the surface soon after harvest.

When **Clearfield** varieties were first launched in 2012 there was a substantial yield deficit vs the widely grower varieties

## CLEAR BENEFITS

CL hybrids from DEKALB allow you to make the most of the Clearfield® production system:

- Controlling charlock, runch, hedge mustard and a broad range of cruciferous and other problem weeds.
- Protecting double low oil quality from problem weeds and HEAR volunteers.
- Avoiding the need for any herbicide until the crop is well established and the weed burden clear.
- Minimising any crop establishment risk from sulfonylurea residues after cereals.

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of the time. When the first **Clearfield** variety, **DK Imagine CL**, was added to the 2013/14 **Recommended List** it had a gross output rated at 97% compared with **Excalibur** on 100% and **DK Cabernet** at 103%. This deficit in yield is now largely removed by the more recent varieties like **DK Imperial CL** which in our replicated trials in 2016 produced a gross output 12% higher than **DK Cabernet** and 16% higher than **Excalibur**. In 2017 **DK Imperial CL** produced a gross output between **DK Extrovert** and **DK Exalte** in our replicated trials. Together

with the yield parity (vs widely grown non-CL alternatives) we also have much improvement in other characters with the addition of Pod Shatter Resistance, Double Phoma Resistance and faster autumn development which were all shortfalls in the first **Clearfield** varieties. **DK Imperial CL** is a variety which combines high yields with a strong agronomic package of fast autumn development, very good Phoma resistance, moderate Light leaf Spot resistance and **Dekalb's** ubiquitous Pod Shatter Resistance.

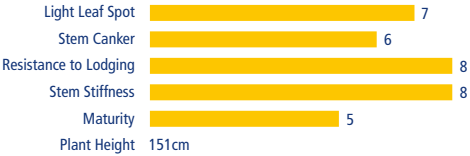


# Winter oilseed rape varieties

## Conventional Varieties

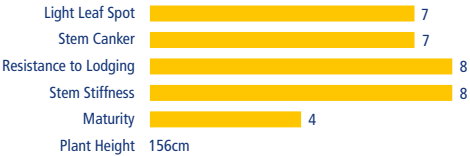
<b>ANASTASIA</b>	Limagrain	North Region 105%	Oil Content 44.8%
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Anastasia is still one of the highest yielding conventional varieties on the AHDB Recommended List 2018/19 – North region. The variety has short, stiff stems with excellent lodging resistance. It is medium-early to flower with good early vigour and a rapid speed of development in the autumn; faster than many hybrids, a vital trait for northern growers and consequently is suitable for later drillings.



<b>BARBADOS</b>	KWS	North Region 106%	Oil Content 45.2%
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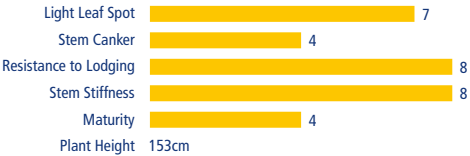
Slightly taller and later to mature than Anastasia, but with very stiff straw, Barbados has the best combination of light leaf spot and stem canker resistance on the AHDB Recommended List 2018/19. In addition this variety is also suitable for early drilling.



NEW

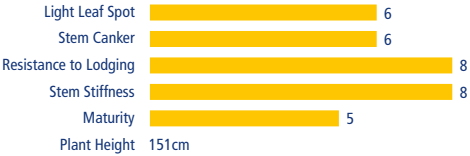
<b>BROADWAY</b>	DLF	North Region 106%	Oil Content 45.7%
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This newly recommended British bred variety is one of the highest gross output varieties on the AHDB 4 year summary (107%). It has very stiff medium-short stems producing strong erect plants and has excellent light leaf spot resistance.



<b>CAMPUS</b>	Limagrain	East/West 104%	North Region 105%	Oil Content 45.7%
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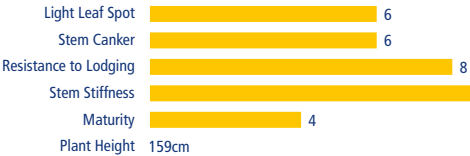
Campus is one of only two conventional varieties recommended for all regions of the UK and consequently is the most widely sown oilseed rape in the UK. Its popularity owes much to its exceptional autumn and strong spring vigour characteristics, which have proved consistent on-farm performance.



<b>KWS DJANGO</b>	KWS	North Region 104%	Oil Content 45.7%
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The leading candidate variety last year and widely grown taking in the region of 4.5% of the certified seed market, Django missed out on recommendation by just 0.3% or 18.4kg/ha.

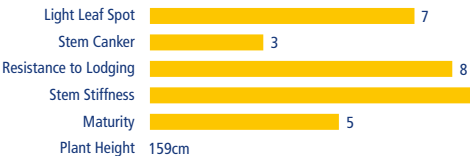
Despite this disappointment, the variety has been resown in all official trials and will be considered for recommendation this autumn. A medium-short exceptionally stiff strawed, vigorous variety.



NEW

<b>KIELDER</b>	Elsom Seeds	North Region 107%	Oil Content 46.3%
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A taller variety, but with exceptionally stiff stems which are equal to the best available this is a variety that has a lot to offer northern growers. It is very vigorous in both the autumn and spring and is one of the earliest to flower. In three years of official trials its yield stability range has shown to be one of the very best available and equally has an excellent level of resistance to light leaf spot.



Django - your golden opportunity for gross output!



## DJANGO

- Very high yielding conventional variety
- Strong disease package
- Excellent combination of stem stiffness and resistance to lodging



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# Winter oilseed rape varieties

## Hybrid Varieties

ALIZZE	RAGT	East/West 105%	North Region 105%	Oil Content 46%
This variety is the highest gross output hybrid with full UK recommendation. It was added to the 2016-17 Recommended Lists for the both the North and East/West regions and it has maintained its consistent performance since then. This performance reflects Alizze's strong agronomic profile, including superior light leaf spot resistance, good autumn and spring vigour coupled with stiff straw making it suitable for heavy soils.				
Light Leaf Spot			7	
Stem Canker			5	
Resistance to Lodging			8	
Stem Stiffness			8	
Maturity			5	
Plant Height	155cm			

AQUILA	Limagrain	East/West 105%	Oil Content 45.6%
This variety has strong autumn and spring vigour coupled with good lodging and excellent disease resistance scores which includes one of the best ratings available for stem canker. In addition Aquila has the added benefit of pod shatter resistance, which is a very important characteristic in oilseed rape; vital for ensuring good yield stability.			
Light Leaf Spot			6
Stem Canker			8
Resistance to Lodging			8
Stem Stiffness			8
Maturity			5
Plant Height	158cm		

DK EXTROVERT	Dekalb	*Gross Output 109%
Despite not having AHDB recommendation, DK Extrovert was one of the most widely grown UK varieties for the 2017 harvest. Over a number of years it has produced very high yields and consistently high oil contents for UK growers. This variety provides pod shatter resistance, rapid autumn and spring development, early maturity and an excellent disease resistance profile. The variety has a rapid autumn development so suits mid or later drillings or less than ideal situations. It has an early and fast speed of spring development leading to mid-early maturity with mid height and moderately good lodging resistance.		
Light Leaf Spot		7
Stem Canker		8
Resistance to Lodging		7
Stem Stiffness	n/a	
Maturity		6
Plant Height	n/a	

\*Based on 3 years Dekalb trials.

## Clearfield Varieties

DK IMPERIAL	Dekalb	*Gross Output 107%
DK Imperial CL is the most widely grown Clearfield variety in the UK. It has a rapid autumn development meaning not only is it suitable for the main drilling window, it can be the ideal Clearfield variety for delayed drilling or more challenging situations.		
Light Leaf Spot		6
Stem Canker		8
Resistance to Lodging		8
Stem Stiffness	n/a	
Maturity		5
Plant Height	N/A	

\*Source NIAB TAG Clearfield trials 2016.



## Club Root Resistant Varieties

CROME	LS Plant Breeding	North Region 107%	Oil Content 46.4%
This very promising new clubroot resistant, candidate variety is from the same breeder as Mentor, currently the only fully recommended club root resistant variety available. It is a restored hybrid variety, the same as Mentor but offers a much increased yield potential over that variety, indeed its gross output is equal to the perceived big hitters and is certain to attract some strong interest. Availability for this Autumn 2018 will be extremely limited, therefore please ensure you speak to your GrainCo representative quickly to order your requirements.			
Light Leaf Spot			6
Stem Canker			4
Resistance to Lodging			8
Stem Stiffness			8
Maturity			6
Plant Height	157cm		

DK PLINY	Dekalb	UK 92%	Oil Content 43.2%
A 2017 candidate variety which brings all the benefits of vigorous establishment, double phoma resistance and pod shatter resistance together with competitive performance for this increasingly important part of the UK market.			
Light Leaf Spot			5
Stem Canker			7
Resistance to Lodging			8
Stem Stiffness	n/a		
Maturity			6
Plant Height	n/a		



# IT'S TIME TO PAY ATTENTION TO CLUBROOT.

Did you know that Clubroot typically causes winter oilseed rape losses of **0.3 t/ha for every 10% severity?**\* Clubroot tolerance in specific **DEKALB varieties provides** you with the performance protection you need for crops grown on land infected with common strains of the disease.

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\* Disease incidence and severity from HGCA Project Report 487, 2013.  
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## Millers and buyers back Senova varieties



Tom Yewbrey, Sales Manager, Senova UK

### Winter Oats

Consistent performance in both the mill and the field is behind the continued success of **Senova's** winter oat variety **Mascani**, which has again increased its market share.

End users who look for hulling losses below 30% have found that **Mascani** has met this target every year since its introduction, while growers have had success with it regardless of growing and harvest conditions.

With its high kernel content of 77.8% and its specific weight of 54.5kg/hl, **Mascani** has remained popular as the demand for oats for human consumption has soared.

As Tom Yewbrey of **Senova** explains, hullability is a characteristic that isn't found on the **AHDB Recommended List**, but it is very important in determining the uptake of any oat variety by the millers.

"Dehulling refers to the physical process that takes place when the husk is separated from the groat in the mill," he says. "Some varieties dehull better

than others and **Mascani** leads the way among the winter oats."

"The combination of high hullability and low screening losses helps to explain why **Mascani** remains in favour, even after fourteen years and a number of new variety introductions."

For growers, **Mascani** also offers good resistance to lodging and is less susceptible to mildew than other varieties.

Another established **Senova** winter oat variety, **Dalguise**, offers the same yield as **Mascani** and has one of the highest specific weights on the **Recommended List**.

There are also new varieties in the pipeline, as **Senova** continues to work with the **IBERS** breeding programme. These are likely to bring agronomic advantages and specialist traits, so expanding oat usage in a range of markets.

### Winter Beans

A new winter bean from **Senova**, **Vespa**, has joined the **PGRO Pulse Recommended List** this year, with a P1 provisional recommendation.

With a yield of 102, some 4% above **Wizard**, **Vespa** is an early, short and stiff type, with the pale hilum and large seed size needed for the human consumption market.

At the same time, **Bumble** has progressed smoothly through the testing system to become fully recommended, offering a yield of 103 and joining **Wizard** and **Honey** in this category.

"Winter bean growers now have real choice with varieties and can pick the one that is most suited to their growing conditions and intended market," summarises Tom Yewbrey.

As is customary with the pulse recommendation process, new varieties are given a provisionally recommended status so that growers can start to introduce them and see how they perform in relation to older types.

For example, **Vespa** is short strawed and has better standing ability and a bigger seed size than **Tundra**, the current market leader, points out Tom.

"Growing for the export market, which is where the premiums are, means producing beans which have the required grain size, a pale hilum, smooth skins and are free from bruchid beetle damage and staining," he reports.

"**Wizard** and **Bumble** have already proved their credentials with buyers from the Middle East – now there's a chance for **Vespa** to be assessed and see if it can make inroads into this market."



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The Grainco range of grass ley mixtures are specifically designed to incorporate some of the best available varieties, tried and tested in U.K. conditions



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Every care is taken in the preparation of this booklet, however it should only be used as a guide and GrainCo cannot accept any responsibility for any losses incurred as a consequence of this information.  
Data from the AHDB Recommended List except where otherwise stated: Full database available at [www.ahdb.co.uk](http://www.ahdb.co.uk)