

# Hybrid Rye - UK pig producers and arable farmers could mirror European counterparts says KWS

**Hybrid Rye (*Secale cereale*) hybrids as a substitute feed grain are proving popular with pig producers in Denmark, says breeding company KWS.**

**“That same feeding regime is now gaining traction in the UK too. But rye for food and baking use is also a growth area due to its health aspects”**

## Future acreage to displace imports

“From an arable perspective – Hybrid Rye has been grown on a limited basis – for Ryevida” – says KWS’ product manager John Burgess.

“The Ryevida area is limited to around 7- 9,000 hectares. With another 20,000 hectares now established for AD/biogas on top of that. Now that the expansion of AD is limited due to tariff regression and RHI tapering, a growth in UK area will come from feed and food use to displace imports”

“With sterling exchange rates, livestock prices, restrictions on chemical use and the need to re-balance imports to UK domestic production, Hybrid Rye as a high yielding grain crop is in the ascendancy”

## Grain yields up to 13t/ha with less inputs

KWS UK has been conducting trials for whole crop for the biogas market for 3-4 years now, but our attention is turning to grain with increased demand for information from farmers, pig producers and millers.

“For grain we’re selecting based on harvest index, standing power and grains/ear. Our current hybrids such as KWS BONO and KWS DANIELLO are



also stiffer and around 20cm shorter than the biogas hybrids. For combining an additional PGR is needed, and a top up ear wash as T3 (GS 51 - 59) is recommended.

2018 will see the launch of more grain hybrids with higher spec weight and grains/ear too – whilst grain sampling for hagberg and other characters desirable for milling use is also on-going”.

Our trials from 2014-15 over the 2 years average 11.5 t/ha with a specific of 78 – 80. Hagbergs for milling and baking are around 200 – 250 on average. Top grains yields are upto 13 t/ha, with a maximum N requirement of 180 kg/ha.

Rye is harvested for feed grain on over 5 million hectares worldwide.



Farm assurance for home mixing and food use – rye is covered by the current TASCC and Red Tractor farm assurance schemes.

## Bishop Burton College study points to welfare benefits in pig feeding

Rye could be used as a cost-effective substitute for wheat in pig rations and offer health and welfare benefits too, a recent trial at Bishop Burton College has demonstrated.

In a joint project by plant breeder KWS, Bishop Burton College and agronomy specialist Agrii. A batch of more than 100 pigs, weighing 60kg at the outset, was split into two groups. One was fed a complete compound, which included a winter hybrid rye variety, and the other group was fed a standard, wheat-based compound.

Pig behaviour was monitored for 30 minutes daily by a Bishop Burton student for eight weeks, with unwanted behaviour such fighting for food, biting and nose charging individually noted.

- The pigs on the rye diet achieved an average DLWG of 1.13kg compared to 1.07 for the group fed wheat, although other European trials with higher rye inclusion levels have indicated that the two cereals have similar performance potential.
- Fighting over food almost halved within the rye group and biting, nosing, charging and nipping was also markedly reduced.

Researchers believe rye left the pigs feeling fuller for longer and therefore less prone to exhibiting aggression.



## Unique characteristics of rye grain

- Higher lysine:protein ratio in comparison to other cereals
- Low Glycemic Index (GI) and high satiety
- Decreased gut ulceration
- High dietary fibre %
- Increased welfare and occupation. Reduced stress and boredom (nipping, bruising, mounting etc.)

## Home Mixing Pig Units

- Reduced feed cost
- Higher welfare



## Rye Feeding Recommendations

(LW basis and % Rye inclusion)

### Fattening pigs

(28- 40 kg) **30% Rye**  
(40 – 60 kg) **40% Rye**  
(60 kg +) **50% Rye**

### Sows

**25% Rye**

### Piglets

**10 - 20% Rye**  
(min. 15 kg LW +)

Source: KWS Joint Feeding Trial w Bishop Burton College & Agrii – 2016 and DLG Feeding Recommendations (2006)

## Want more information?

If you would like to know even more information about rye please visit our website

[www.kws-uk.com](http://www.kws-uk.com) You can also contact John Burgess, [john.burgess@kws.com](mailto:john.burgess@kws.com)

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