



## Fit for the Future

# Barley benefits

**In an era where growers are looking to cultivate sustainable rotations which combine farm practicalities with economic returns, experts believe winter barley may increase in importance. CPM finds out more.**

**By Charlotte Cunningham**

**While the perfect formula for a sustainable rotation that encompasses productivity and financial resilience is perhaps the great unknown for many farmers, winter barley is a crop that should be strongly considered.**

This is according to KWS' Dr Kirsty Richards, who says with increasing input costs and grain price volatility, many growers are looking to minimise outlay and mitigate risk — winter barley offers a wealth of management, economic, operational and rotation benefits to help to achieve just that.

"Drilled in late August and early September, winter barley can help take some of the pressure off when drilling winter wheat — the key crop on many arable farms. Given the often-challenging

weather conditions at this time, that's a real benefit in ensuring the planned area of autumn crops is established successfully."

Kirsty adds that the benefit of timeliness applies through to the spring, as the crop reaches its optimum timings for T0, T1 and T2 applications approximately 2-3 weeks before winter wheat, helping to spread the workload and achieve optimum spray timings for the winter wheat.

### Earlier harvesting

There's also the advantage of an earlier harvest date when it comes to winter barley, which in turn reduces the pressure in terms of combining following crops and potentially avoids harvesting delays as the weather worsens at the end of the season, she says. "Being the first of the new season cereals to be combined, winter barley also creates significant marketing opportunities as there's often a range of diverse homes for it — depending on region — and usually several off-combine export prospects.

"This frees up valuable storage and helps cash flow, while the value of the straw can provide a useful financial boost."

One grower making the most of the benefits of incorporating winter barley in the rotation is Peter Hitchcock. As well as the 750ha family farm on the Hertfordshire-Essex border, Peter is an agronomist at Prime Agriculture, looking

**“Reliability is fundamental when we're talking about resilient, sustainable varieties.”**



*Being the first of the new season cereals to be combined, winter barley also creates significant marketing opportunities as there's often a range of diverse homes for it, believes Kirsty Richards.*



*Higher and more stable yields are among the benefits of hybrid barley, says Kate Cobbold.*

after around 4000ha of crops across the county.

On the home farm, the rotation is based on combinables with winter barley a core part of the line up. “When it comes to cropping, essentially, we’re wanting to minimise risk in the rotation as much as possible. We like growing straw-based crops because we know we can grow them relatively successfully as they perform well on our heavy soils. Break crops are really tricky for us, so the less of them we can grow, the better. We want every crop to give us a margin.”

In terms of the typical rotation, Peter says it tends to be based around four ‘white-strawed’ crops. “This often looks like wheat, wheat, spring barley, winter barley and then into a break crop. The winter barley has been a mainstay in the rotation as it’s the one crop which we can get in the ground and drill early, which helps to spread workloads hugely at busy times.”

At the opposite end of the season, Peter also likes the fact that winter barley is an earlier harvested crop. “It’s good to be able to get the combine in early when there’s not much else to do and it’s also a good entrant for oilseed rape. As well as this, it seems to perform consistently well and our five-year average is 9.4t/ha which we’re pretty happy with.”

When it comes to the variety of choice, Peter says he tends to stick with Memento and KWS Tardis. “We always opt for two-row varieties and we’re looking for something that’s high-yielding, strong, stiff strawed and has a good disease resistance package.

“KWS Tardis ticks all of these boxes. It’s a good yielder — particularly in the East and on heavy land — it has great specific

weight and good standing ability. With the weather periods we tend to get now, you just never know whether a crop is going to stay standing or not, so Tardis’ lodging score helps bring a bit of reassurance.

“We did find last year when we put the combine in that there was a lot less on the floor where we’d drilled Tardis.”

Peter is not alone when it comes to his enthusiasm for Tardis — the variety accounted for 40% of the declared drilled barley acreage this year, continues Kirsty.

## Combo of characteristics

While it no longer holds the top spot on the Recommended List for yield, Kirsty believes it’s the combination of characteristics that makes Tardis outstanding in its field. “For growers choosing a winter barley it’s really important to have a combination of yield, standing power and specific weight. They have to get something to grow well, stand through to harvest and then have a good spec weight to enable the best marketing opportunities.

“I think the lodging score is another reason people have stuck with Tardis, too — it’s the only winter barley on the Recommended List with a zero for lodging with PGR. Last year, in particular, I think this benefit really shone through.”

Olivia Bacon, KWS UK conventional crops technical manager says the standing power of Tardis was something which was highlighted in trials last harvest too. “It was quite a high lodging year, but Tardis came through as a variety which continues to stand up well despite the conditions.

“We ran a large trial with Scottish Agronomy where we were looking at PGR programmes and different nitrogen rates, comparing both conventional and hybrids to essentially see if we could push them over,” explains Olivia. “Across two sites in Scotland, Tardis was very similar in yield to competitor variety SY Kingsbarn, but Tardis had about 2.5% lodging while Kingsbarn was around 25%.”

Thinking about the wider trials picture, while yield is still king, it’s the whole package which makes a variety truly sustainable, believes Olivia. “We’re still breeding for yield — it’s always going to be key for us and that’s essentially how breeders get varieties onto the Recommended List.

“However, with winter barley there are often a combination of factors required, such as good all-round agronomics and disease resistance. With Tardis, it’s a



*Olivia Bacon says the standing power of KWS Tardis was particularly strong in trials last harvest.*

reliable variety, you know what you’re going to get, and it just seems to perform well year-on-year. That reliability is fundamental when we’re talking about resilient, sustainable varieties.”

As for what’s on the horizon for the breeder, KWS is aiming to strengthen its portfolio of varieties with the launch of its first hybrid barley into the UK market later this year.

The new range of hybrid barleys being launched as part of the #NextLevel campaign complements the existing conventional programme, and hybrid crops product manager Kate Cobbold says there’s a place in the market for both. “Depending on the end market and local growing conditions, farmers have options for finding the most appropriate barley solution and that’s the real benefit of the KWS position.

“In a typical year, 450,000ha of winter barley is grown in the UK each year, of which roughly 25% is hybrid barley, so we see huge opportunities in the future with the crop bringing many benefits to growers.”

Firstly, there’s the potential for higher and more stable yields, continues Kate. “Farmers are increasingly under pressure in terms of increasing production costs and volatile grain markets and a good way to mitigate against these pressures is to have varieties that deliver high yields consistently year after year.

“Increased productivity also helps with sustainability as more efficient use of land and resources is made.”

Growers are also looking for varieties with robust disease resistance packages and good grain quality, and hybrid varieties can excel in this area too, she points out. “As farmers increasingly battle ▶



*Inys is set to be the first hybrid barley to be launched in the UK by KWS.*



*Looking at its statistical performance so far, Inys was the highest yielding winter barley in both its NL1 and NL2 trialling years.*

▶ with blackgrass, hybrid barley can help reduce grassweed pressure. This is because it has a larger root system than conventional barley and gets going very early in the spring which allows it to better compete with grassweeds.

"While hybrid barley is a useful option for growers to help reduce blackgrass pressure and minimise seed return, it can't be solely relied on its own and must be a

part of an integrated approach in order to combat blackgrass."

Hybrid barley is also a great addition to crop rotations, usually being the first cereal to start harvest, she adds. "Thanks to its early harvest maturity, hybrid barley is an ideal crop to sow before OSR, giving farmers the opportunity to drill earlier and spread the workload during a very busy time of the year."

Although a newcomer to hybridisation in barley, KWS has years of experience of hybrids across sugar beet, maize, rye and OSR with the move into barley being a natural progression, notes Kate.

"Our history with hybrid breeding stretches back to the 1960s with maize and we've been steadily and successfully adding new hybrid crops and varieties to our portfolio since then. Our approach is that when we do commit to make something happen, we don't have to be first, but we do want to do it properly and bring genuine improvement and opportunities to growers.

"Barley is one of the most important cereals crops worldwide and KWS has a long history of successfully breeding exceptional varieties."

## Yield advantage

A series of UK-based field trials is showing some exciting benefits for Inys — the first hybrid barley to be launched in the UK by the company, adds Kate.

"There seems to be a definite yield advantage for Inys over the leading hybrids currently available in the UK with good yield stability plus we're seeing thicker plant stands and deeper rooting, which is exactly what we were hoping to see.

"There are indications that Inys also has a much more vigorous growth habit in the early stages of development with up to 40% greater ground cover over winter being seen in some instances."

Looking at its statistical performance so far, Inys was the highest yielding winter barley in both its NL1 and NL2 trialling years. "Its yield is very strong in the West ([114]%), with high yields in the East (109%) and North ([106]%) too," says Kate.

"Coupled with a high untreated of [93]%, Inys is a step up in yield from all current hybrid barley varieties."

This is teamed with Inys' good all round disease profile with a 7 for mildew and 6 for rhynchosporium, net blotch and brown rust in NL trials. "What's more, it's early to mature ([-1] days +/- KWS Orwell) making it an ideal entry for OSR and delivers a good specific weight of 69.6kg/hl. It has also shown no lodging in the two-year NL report 2023 and low levels of brackling (7%) compared with other hybrids.

"Inys is a great first variety with significant potential and there are more KWS hybrid barleys in NL trials, which will hopefully be commercialised over the coming years in the UK." ■

## Fit for the Future

In this series of articles, CPM has teamed up for the seventh year with KWS to explore how the cereals market may evolve, and profile growers set to deliver ongoing profitability. The aim is to focus on the unique factors affecting variety performance, to optimise this and maximise return on investment.

It highlights the value plant genetics can now play in variety selection as many factors are heavily influenced and even fixed by variety choice.

KWS is a leading breeder of cereals, oilseeds, sugar beet and maize. As a family-owned business, it's truly independent and entirely focussed on promoting success through the continual improvement of varieties with higher yields, strong disease and pest resistance, and excellent grain quality. We're committed to your future just as much as you are.

