

# Insist on a barn-buster?

“Having this inherent resistance also helps to give a little more flexibility.”

## Technical Insiders View

**A new hard Group 4 offering from Syngenta looks to provide a table-topping option for those who are looking to fill their barns this autumn. CPM reviews SY Insitor.**

**By Charlotte Cunningham**

**For those looking for high output, Group 4 hard wheats have long been the go-to.**

And marketed with the tagline, ‘you’re going to need a bigger barn’ SY Insitor is one of the latest offerings from the Syngenta stable, which has shot straight to the top of the hard Group 4 category.

Derived from a (Hereford x Oakley) x Hereford parentage, it’s perhaps no surprise that the standout feature of SY Insitor is its yield — coming in at a UK treated yield of 104% and showing particularly superior performance in the North at 105%.

SY Insitor was added to the RL in autumn 2019 and has remained the leading hard Group 4 variety, says Matt Bull, seeds technical expert at Syngenta. “We believe that SY Insitor

offers a real step-up in yield, while maintaining excellent grain quality.”

“That said, we know decisions are becoming based on a number of factors, other than just yield alone, and characteristics like disease profiles are something that growers are now basing much of their decision making on.

### Weather variability

“SY Insitor has a septoria score of 6.8 which is really helpful for growers, particularly when weather causes delays to operations. Weather variability can limit spray days, so having this inherent resistance just helps to give a little more flexibility.”

While quality isn’t an overly important decider in hard Group 4 decision making, Matt says SY Insitor’s high specific weight (78.4kg/hl) could help add value when it comes to end users. “There have been recent changes made to the E10 regulations, namely, the allowance of ethanol has increased from 5% to 10% in a bid to get more renewable energy into fuel.”

But what does this mean for growers? “Effectively, this opens up the options for varieties with high specific weights, like SY Insitor,” he explains. “Vivergo are planning on becoming the biggest ethanol producer in the EU and want a lot of wheat from the Yorkshire area, with a minimum requirement in terms of specific weight.

“For growers in this region, they could find themselves with more options when it comes to selling their grain.”

And while SY Insitor is suitable to grow across the whole UK, Matt says that northern growers and those on lighter ground, may find the variety to be particularly advantageous. “We’ve got individual trial data points for Scotland, and it has proven to be a fantastic option.

“We compared SY Insitor with a big market share competitor and within two weeks of establishment it already had a ▶



*Matt Bull believes SY Insitor offers a real step-up in yield.*

▶ longer rooting system — and it's this root structure which makes it perform so well on lighter land."

In terms of its rotational position, Matt says SY Insitor is a good option as either a first or second wheat, again, giving it that extra element of flexibility.

In last year's June issue of *CPM*, Frontier's Chris Piggott picked out SY Insitor as one of his 'resilient wheats' as UK agriculture heads towards the Brave New World of post-Brexit trade deals — which undoubtedly will have an impact on cropping and variety choice.

Speaking at the time, Chris said that sound wheat variety choice will play a key role in putting growers in the best position post-Brexit, in terms of meeting the demands of both domestic and export markets. "I think going forward, it's really important to look at what you can put in the ground that will either reduce your overall risk as a business or increase your marketplace opportunity.

"In terms of reducing risk, this may mean looking to more tolerant varieties, or something that could find a home in a number of markets to reduce reliance on a single end user.

"Looking to increasing opportunities, this again may be considering how your wheat choice could spread across the most profitable markets, or perhaps opting for something that gives you the chance to reduce exposure to some of the most yield-robbing diseases."

With these considerations in mind, Chris said SY Insitor was an obvious choice, but 12 months later — does he still think the same?

"Over the past year, SY Insitor has very



Tom Pask says he went for SY Insitor because, as well as rooting fairly aggressively, it seemed to tiller well.

much performed in the way we hoped and expected it to. It's suitable on a wide range of soil types/locations, but we knew it would be particularly useful for northern growers, and those on lighter land and it has done exceptionally well.

Something to watch for — across all varieties, not just SY Insitor — is yellow rust, warns Chris. "One thing we've learnt across all varieties this year is that yellow rust has been a challenge. This is an issue for most of the high-performing, high-yielding wheats, and it will require some extra attention."

## Good resistance

However, on the septoria front, SY Insitor ranks above many of its competitors. "If we were talking about a perfect variety, then yes, you'd want a combination of good yellow rust and septoria resistance. However, Insitor is one of the best for septoria, and actually this is the disease that's often more damaging than yellow rust, so it's reassuring to see such good resistance."

Disease-wise, SY Insitor also benefits from Orange Wheat Blossom Midge (OWBM) resistance, which Chris says has become a standard for Group 4 types. "This is something we've come to expect in wheats now and while some new additions don't have it, I think it's quite important as it protects against any late issues which could affect yield and quality."

In terms of agronomics, it boasts good vigour — another feather in SY Insitor's cap, says Chris. "Varieties that get up and away quickly cope better in poor conditions in the autumn, and Insitor fits the criteria nicely.

"It's quite fast developing, tall and tillers strongly which is great for later drilling, however, with that in mind, it's probably not something you'd want to be considering putting in that earlier drilling slot.

"That being said, it's very responsive to PGRs, so while it is on the taller side if left untreated, you can shorten it fairly easily."

High yield, good specific weight and the potential for vigorous rooting were all characteristics that attracted Suffolk farm manager, Tom Pask, to try the new winter wheat, SY Insitor this season.

So much so, Tom, who manages 1234ha of arable crops for the large-scale farming and fresh produce business, Frederick Hiam, plumped for around 100ha of the variety for harvest 2021. This was out of a total of 573ha of winter wheat grown.



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Overall, the business farms close to 2300ha. Soils are predominantly light — ranging from black sand to some heavy clay.

"Historically we used to grow Soissons because it suited our light soils, and we also got a premium on it," Tom explains. "But the premium went, so we were looking for a replacement.

"SY Insitor isn't as early-maturing as Soissons, but it seems to root fairly aggressively in the autumn, so we wanted to try it on our light land. The majority of this land is very drought-prone, and wheat can shed its tillers very quickly in dry

## SY Insitor at a glance

Yield (% treated controls)	
UK treated	104
UK untreated	78
North	105
Disease	
Mildew	6
Yellow rust	5
Brown rust	5
Septoria	6.8
OWBM	R
Agronomy	
Lodging (% +PGR)	7
Lodging (% -PGR)	6
Height (cm)	95
Ripening days (+/- Skyfall)	+1
Specific weight (kg/hl)	78.4
Protein content (%)	11
Hagberg falling number	273

[Source: AHDB Recommended List, winter wheat 2021/22]

conditions. We went for SY Insitor because, as well as rooting fairly aggressively, it seems to tiller well.”

Other arable crops grown include winter and spring barley, maize for anaerobic digestion and sugar beet. These all slot into the rotation between the company's vegetable crops of potatoes, onions, and parsnips.

Nine fields of SY Insitor, all as first wheat, were drilled between 28 October and 25 November on sandy loam soils at the business's farm at Tuddenham,



At 6.8, SY Insitor benefits from one of the best septoria scores in the hard Group 4 category. (not SY Insitor pictured)

north-west of Bury St Edmunds. The dry April meant Tom has been able to put SY Insitor's adaptability to both later drilling and lighter land, to a good test.

Although it looked a bit stressed initially, by May he says the SY Insitor had held on to its tillers better than other varieties and looked well.

Allied to this, the hope is that its high specific weight of 78.4 kg/hl will also come into its own on the lighter soils.

“We sometimes struggle with low specific weights and pinched grains on light land, especially if we have a hot and dry period. It's something we experience with most varieties, so we hope SY Insitor will be resilient to this.”

Disease-wise, septoria and yellow rust are typically the main problems in the area. In common with elsewhere, Tom says some yellow rust was present in most varieties earlier in spring, though SY Insitor appeared fairly clean. A three-spray fungicide programme was used. A plant growth regulator based on Moddus (trinexapac-ethyl) was also applied.

Overall, Tom has been comfortable with trying SY Insitor on a large scale. “We decided that if we were looking for a replacement for Soissons then we needed



SY Insitor has performed particularly well in the North and on lighter soils.

to try it across a range of light soils. There's a lot of soil type variability in individual fields.

“It was a bold move but we wanted to test a big enough area to see what it was capable of. Hopefully it will pay off as a variety that we keep in the stable going forward,” he concludes. ■

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ONE GIANT  
LEAP FOR  
BRITISH  
AGRICULTURE



- ✓ Optimise germination & establishment
- ✓ Increase root and shoot biomass
- ✓ “Endophytes” are living biology within the plant
- ✓ Fix atmospheric Nitrogen
- ✓ Enhance nutrient uptake throughout the season to maximise crop growth
- ✓ Reduce abiotic stress
- ✓ Solubilise and mobilise soil phosphorus into and within the plant
- ✓ Optimise green leaf area
- ✓ Maximise yield – average yield response 0.55 t/ha over equivalent farm standard