

# Adapting to shifting resistance scores



*“Virtually all varieties are expected to be reclassified as susceptible to yellow rust at young-plant stage when the next RL is published.”*

JOHN MILES

Early sowing, forward growth and the almost complete breakdown in yellow rust resistance mean that growers will have to be on their toes with disease control this season. *CPM* gathers variety experts and plant breeder advice on how to keep crops clean.

By Mike Saull

**W**hile there are some exceptions, breeders agree that a T0 could be a prerequisite across most varieties and that keeping ahead of disease as the season unravels will be critical to maximise harvest potential.

Looking at C2 seed sales, six established varieties make up almost half of the UK wheat area. Leading the way is Bamford – a barn-filling Group 3 that takes 14% of the wheat area after

two years on the Recommended List.

Group 4s LG Beowulf and KWS Dawsum take a further 18% combined, while the quality wheat sector is dominated by Group 2 KWS Extase and Group 1s Skyfall and KWS Vibe; all three with a 6% market share.

According to John Miles, seed technical manager at Agrii, there are some ‘very big’ wheat crops that were sown early and which are growing strongly. Without a significant and

prolonged late winter period, they’ll likely require yellow rust and early septoria protection, he says.

This is because RL figures from December suggest 43% of the UK’s C2 wheat area now has a score lower than 5 for adult resistance to yellow rust. An even higher percentage is seedling susceptible, with just 13 out of 38 winter wheat having resistance at the young plant stage.

“As this resistance is likely to



## Not all bad news

Agrii's John Miles highlights that of the six most widely grown wheat varieties, KWS Vibe and Bamford seem safer when it comes to yellow rust resistance.

▶ be associated with the *Yr15* gene, virtually all varieties are expected to be reclassified as susceptible to yellow rust at the young-plant stage when the 2026/27 RL is published," highlights John.

"This means we're back to the days when the yellow rust susceptible Robigus and Oakley were dominant and a T0 became a necessary start to the spray season."

With a significant area at risk and a clear springboard for the disease to develop, growers in the East who've tended to focus on PGRs and nutrition at this stage of the season may have to consider fungicides as well, believes John.

The plus side is, that it doesn't take much to control yellow rust with actives such as tebuconazole or azoxystrobin.

"Looking at the six mainstay varieties, Extase was always seedling-susceptible to yellow rust, and even in its early days, we saw isolated incidences of the disease at the adult stage of the plant. Now though, with an identified Extase race for yellow rust out there, the disease will have to be factored in across the complete fungicide programme," he adds.

"We know Skyfall well with its 3 for yellow rust and appreciate it'll require a belt-and-braces approach, but fellow Group 1 Vibe, despite its good adult resistance (8), may also want a T0 start because it's seedling susceptible."

John highlights that of the six most widely grown wheat varieties, Vibe and Bamford are safer when it comes to the disease. "Bamford can

also get yellow rust, but currently not at levels that cause concern.

"Fellow barn-fillers Beowulf and Dawsum used to have seedling resistance, but this was also based on the *Yr15* gene and so they now require treating like a 2-3 rated yellow rust variety with little margin for error."

## SEPTORIA SCORES

On septoria, John says breeders have done well to improve resistance year-on-year and differences of 0.7 or so are quite significant. However, all six of the most popular wheats are just 0.3 apart, so there's little between them.

More of an issue this year is whether growers have drilled early or not, he suggests. This is because Agrii data

backs ADHB trials that suggest a 0.3 reduction in septoria rating for every week a crop is sown earlier than the typical drill dates for RL trials.

So, with the RL trials usually sown the second week of October, crops planted in mid-September will

have a 0.9 reduction in their expected septoria score. "Remember, these septoria scores refer to adult plant resistance, not seedling resistance, so what we see for disease levels early season may not reflect the scores on the RL," comments John.

"Those drilling in the higher risk septoria regions of the South and Southwest are already facing the prospects of a belt-and-braces fungicide programme. While Eastern County crops are much more exposed on yellow rust, given a big biomass in the field, there's high risk of septoria across all popular varieties here as well."

John raises that when Extase came onto the RL in 2019, it was the first 8-rated wheat for septoria, but now, its resistance has reduced. "Given its Continental growth habit and the fact it can motor through stem extension, it can catch you out so I hope growers haven't drilled it too early.

"If you have, then you could be at T0 10 days earlier in Extase than other varieties. Equally, Bamford is quite a vigorous, voluptuous variety so watch this too. In fact, all popular types are quite punchy when it comes to speed of development, and the winter thus far will have done little to check disease."

*"I did feel last year that Skyfall's yellow rust wasn't as bad as previously, but there's no doubt that the right fungicide at T0 puts you in charge."*

Forward growth could also have repercussions on PGR use and John suggests risks could be greater than they have been for some time. "Varieties haven't been truly tested for a while and yield potential is higher; this season could be different. There's also been good nitrogen mineralisation alongside strong growth, so don't ignore a PGR at T0."

Elsoms head of agriculture, Toby Reich, agrees that early yellow rust control will be important this spring to get the most from Bamford. "That's even more the case given the higher disease pressure due to the new race."

He puts Bamford's market leading position – at 14% of certified seed sales – down to its consistency across three

contrasting years and suitability across a wide drilling window.

"While we saw rust last year, Bamford was robust and still delivered, and a 6.3 rating for septoria certainly helps.

"It's one of the first varieties to

come to ear so is fast-developing, thus it can be early to harvest offering security for those looking at securing higher value Group 3 markets," says Toby.

Beowulf should also remain reliable provided crops are actively managed suggests Limagrain's Ron



## Consistent performer

Despite the rust shift last year, Bamford was robust and still delivered, says Elsom's Toby Reich.



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## Front-runner

KWS Vibe has the best yellow rust resistance rating of all RL Group 1 varieties alongside best-in-class protein yield, raises the firm's Matt Bull.

- ▶ Granger. "While it's now susceptible to the YR15 strain, careful monitoring and timely fungicide use should allow it to continue to perform.

"Early disease control is critical as part of a robust, protective fungicide programme using a range of actives throughout the season."

A T0, or even pre-T0, spray is recommended as a security measure, with tebuconazole providing a cost-effective option either alone or in combination, believes Ron. "Where yellow rust is detected, rates should be increased to eradicate infection quickly. It's a case of monitoring crops closely, tracking weather conditions, and making full use of spray windows to stay ahead of disease," he says.

## MIDDLE PERFORMER

Like several Group 4s, where many varieties share similar background resistance genes, Dawsum's yellow rust score was downgraded last year, points out KWS's Matt Bull. "It's also lost its seedling yellow rust resistance rating, but its adult plant yellow rust rating is still better than six other hard Group 4s, sitting right in the middle of the group.

"Compared with previous seasons, it may require a shift in approach to fungicide management, with a greater focus on early

season rust management."

He adds that Dawsum has been the UK's most popular wheat in recent years, so is a proven performer with its high yield potential, exceptional specific weight and good septoria resistance.

Over at RAGT, Andrew Creasy says Skyfall sits in an odd position compared with most other varieties. "Its yellow rust hasn't been great for some time, but after 10 years or so experience, growers know how to grow it and will be geared up to go with a T0. Skyfall, however, unlike others, isn't relying on the YR15 gene and we don't really know how those varieties which broke down to the new race will perform this year.

"I did feel last year that Skyfall's yellow rust wasn't as bad as previously, but there's no doubt that the right fungicide at T0 puts you in charge. Combine this with an 8 for brown rust and a 6.2 for septoria that hasn't really changed since 2014, and Skyfall looks relatively robust."

Matt adds that fellow Group 1 variety Vibe maintained excellent resistance to yellow rust last year, in what was an exceptionally challenging season. "In 2025 AHDB one-year harvest results, it had the third lowest level of yellow rust infection of all RL varieties with an average of just 0.8% across 20 sites," he says.

"Only two RL varieties were marginally better, and the highest level of yellow rust seen in the variety across all locations was just 3.5%. Vibe isn't rated as resistant to yellow rust at the

seedling stage and never has been, so our advice is the same as last year – keep aware, monitor crops, and adopt a 'see it-spray it' approach."

Matt points out that the variety still has excellent adult plant resistance. "But if last year showed us anything, yellow rust is a dynamic pathogen and adult plant resistance can't be solely relied upon for yellow rust control. That said, Vibe has the best yellow rust resistance rating of all RL Group 1 varieties, alongside best-in-class protein yield so should prove popular with both growers and end users."

As for Extase, he believes the variety has served growers well and is the only variety on the current RL with the same yellow rust score as it had last year (6.7). "It's has a good level of adult yellow rust resistance, but like Vibe, it's never had seedling yellow rust resistance.

"Extase's performance in last year's AHDB one-year harvest results underlines the sporadic and challenging nature of yellow rust. At only four out of the 20 sites did the variety have yellow rust levels above 5%, but these were spread out around the UK.

"So don't just base decisions on an average RL score – it's a much more complex process than that. Yellow rust populations are diverse and the virulence profile of the disease can vary from site to site. Start monitoring your own situation early in the season and be prepared to control if you see signs of the disease," he concludes. ●



## Known entity

RAGT's Andrew Creasy says while Skyfall's yellow rust score hasn't been great for some time, after 10 years or so experience, growers will be geared up to go with a T0.