

# Solutions heading in-field soon

*“In wheat trials, Gilboa delivered superior septoria control compared with existing solutions.”*

BEN MILES

A fungicide active ingredient has recently been classified as having a unique mode of action in cereal crops, thus offering a potential boost for managing resistance concerns. *CPM* investigates this and some of the other pipeline prospects heading on-farm soon.

By Janine Adamson

**A**griculture is a long-term game, and when a new active ingredient or plant protection product finally lands in the marketplace, it's often been years in the making. Subsequently, when such a launch is officially revealed to growers and agronomists, any element of surprise has undoubtedly been quashed in the meantime.

Although in some ways this could dull a product's celebratory fanfare, providing a glimpse of what's to come could also be perceived as reassuring – that the R&D pipeline has promising solutions on its way, albeit subject to regulatory approval.

With this in mind, Great Britain is set to become the first territory to access a novel fungicide active ingredient – flumetysulfurim – which offers a unique mode of action for cereal crops.

Marketed as Gilboa by Adama, flumetysulfurim was recently classified as Group 32 by the Fungicide Resistance Action Committee (FRAC). This novel mode of action targets nucleic acid metabolism, a biochemical pathway that hasn't previously been utilised in cereal fungicides, explains the firm's Jonny Oosthuizen.

## SEPTORIA CONTROL

According to Jonny, Adama is focusing on positioning Gilboa initially in wheat, based around its activity against septoria. “It's widely recognised that septoria is a key, target disease which most fungicide programmes are built around. Although pressure from other foliar diseases may come and go, for example rust, the threat of septoria will remain,” he says.

It's expected the active ingredient may

also offer a viable solution for combatting ramularia in barley and sclerotinia in oilseed rape. But regardless, as a new mode of action, Gilboa represents a major step forward in fungicide innovation, providing growers with a



## Mode of action

The novel mode of action in Gilboa targets nucleic acid metabolism, a biochemical pathway that hasn't previously been utilised in cereal fungicides, explains Adama's Jonny Oosthuizen.



## Resistance management

Gilboa should provide diversity in disease control, which is especially critical as all recent cereal fungicide launches have been of similar modes of action, points out Adama's Ben Miles.

- new way to combat fungal pathogens, believes managing director Ben Miles.

"Its novel mode of action, along with its compatibility with existing fungicides, makes it a vital addition to disease management strategies. Gilboa should provide much-required diversity in disease control, which is especially critical as all recent cereal

fungicide launches have been of similar modes of action," he points out.

However, beyond this, the development work continues. To build a robust knowledge base of the molecule and how it can best contribute to sustainable septoria management in wheat, Gilboa is being evaluated through an extensive series of UK trials, explains Jonny.

"We have clear evidence of the exciting levels of septoria control that Gilboa can offer and continue to work to best position the active in fungicide programmes. The UK is an agronomist-led market and we want to be a piece of that story. Therefore, we'll be driven by its performance in the field, and steered by the outcomes of those trials," he comments.

So far, the data suggests a promising outcome, adds Ben. "In wheat trials, Gilboa delivered superior septoria control compared with existing solutions. It also provided extended disease control, with a lasting effect of up to 35 days after final application.

"Trials have also revealed that

more than 70% of the flag leaf area remained green for a longer period after the last treatment," he says.

Gilboa was submitted for registration in 2023 and is expected to receive approval in Great Britain in 2027, in the EU in 2029, and with further registrations planned for additional territories. "And while we're still a little way off bringing Gilboa to the GB market, new modes of action don't occur very often at all. We're confident this one will be worth waiting for," says Jonny.

## OPEN DAYS

In the meantime, this season is all about capturing data while showcasing Gilboa to as many individuals as possible, he adds. "This is the first year of our 'Adama in action' field events initiative – where we manage five trial sites across England and Scotland.

"As well as demonstrating our wider fungicide portfolio in-field, this will also prove an opportunity to see Gilboa. Aimed at agronomists and other interested parties, anyone interested in attending should contact their regional agronomy manager as soon as possible." ►

## Yellow rust resistance update

### Further investigations confirm Yr15 has failed

**A**s reported in the May issue of *CPM*, concerns have been bubbling away regarding the potential breakdown of an important yellow rust resistance gene.

The alarm bell was first raised by AHDB at the beginning of April, having identified symptoms of yellow rust on almost all Recommended List varieties classed as resistant at the young plant stage during trial inspections in the north of England.

As time went on, this was then backed by reports of similar scenarios within commercial settings too, at varying levels across the country.

To investigate further, high quantities of samples have been sent to the Niab-led UK Cereal Pathogen Virulence Survey (UKCPVS) for testing, to provide a better understanding of the situation at hand. The service has since confirmed that Yr15 has indeed failed.

Pathogen isolates from these samples not only infected a test variety known to carry the YR15 gene, but then proceeded to sporulate profusely. Niab-funded work also confirmed the presence

of the Yr15 gene, using molecular markers, in several of the varieties impacted at the young-plant stage.

According to AHDB, the initial investigation prioritised testing of varieties with a strong level of adult plant stage resistance (disease rating 8 or 9), according to RL 2025/26. This has found that hard Group 4 varieties KWS Dawsum, LG Typhoon and Champion (DSV) all carry the Yr15 gene.

Niab is now testing further varieties, with additional genetic screening being undertaken by the John Innes Centre and the Global Rust Reference Centre in Denmark.

"Adult plant resistance has clearly taken a knock, but the full impact will depend on a myriad of other resistance genes, which vary from variety to variety," explains AHDB's Paul Gosling.

"Some varieties appear to be fighting back, whereas others are recording unusually high disease levels. Although we haven't seen the unusual symptoms towards the South or West, it appears to be spreading fast.

"No doubt this will impact variety choice and disease management



### Long-term impact

AHDB's Paul Gosling believes recent developments in yellow rust resistance will impact variety choice and disease management across the UK next season.

across the UK next season," he says.

In further response, AHDB says as RL disease ratings are usually calculated from data sets of between three and five years, with evidence of a major change to the pathogen population, the data set will be limited to a single year (Harvest 2025) for the disease rating calculations in the next RL edition (2026/27).

# THE LUXIMOMENT OF TRUTH...



**LUXIMO® CONSISTENTLY  
DELIVERS OUTSTANDING  
BLACK-GRASS AND ITALIAN  
RYEGRASS CONTROL.**

**THAT'S WHY IT'S THE FIRST-  
CHOICE PRE-EM HERBICIDE.**

**Use as part of an IPM strategy  
to achieve unparalleled control.**

## **Luximo®**



**■ - BASF**  
We create chemistry

Across 78 BASF field trials, Luximo® achieved an average black-grass control of 85%, compared to 72.6% from Liberator®+Proclus® (Label rates applied). According to Kynetec data, Luximo® was applied on 36% of the UK winter wheat area in autumn 2024. Use plant protection products safely. Always read the label and product information before use. For further product information including warning phrases and symbols refer to [www.agricentre.basf.co.uk](http://www.agricentre.basf.co.uk). Luximo® is the brand name for the active ingredient cinmethylin. Luximo® is a registered Trademark of BASF. © BASF 2025. All rights reserved.





## Broadening suite

Two new fungicide options are on the way from Sumitomo Chemical, highlights the firm's Ruth Stanley.

- ▶ However, Gilboa isn't the only new fungicide product in the pipeline – UK growers should also have the option of two new solutions from R&D company, Sumitomo Chemical.

## INDIFLIN AND PAVECTO

Indiflin (inpyrflfluxam) is currently undergoing review by the Chemicals Regulation Division (CRD), explains the firm's Ruth Stanley. "This SDHI is already available overseas, for example, targeting rust in soya beans in Latin America. But for the UK market, it would be targeted at T1 or T2 applications in wheat for yellow and brown rust control."

Ruth adds that Indiflin is indicating high efficacy in UK trials, even when up against the severe brown rust infections that many growers experienced during the 2024 season.

Then also on the horizon, is new fungicide Pavecto (metyltetraprole). "This disruptive QoI fungicide is highly effective for the control of a broad range of diseases including septoria leaf blotch in wheat and net blotch and ramularia in barley. We're confident Pavecto will play an important role in resistance management," suggests Ruth.

She believes with the potential to lose some existing chemistry from the UK market during the next few years, new products, particularly those with alternative modes of action, will be of even greater importance. "This gives growers more choice and more tools to prevent disease development in the future." ●



## Symptoms

According to AHDB, there's little correlation between fusarium-damaged grains and the presence of mycotoxins.

## Mycotoxin rainfall risk tool

The AHDB tool has been activated for another season

**F**ollowing a prolonged dry spell this spring, with some growers battling drought conditions as a result, the weather has finally broken. Furthermore, the Met Office long-range forecast predicts wet conditions will truly set in, at least until this issue of *CPM* hits letterboxes.

But as well as crops welcoming this much-required moisture, so too will pathogens, including ear diseases during flowering. An example being fusarium species, which can cause ear blights and result in the production of mycotoxins.

As growers will understand, there's a legal obligation to ensure grain is safe for human consumption and in line with legal limits, covering the fusarium mycotoxins in wheat grain: deoxynivalenol (DON) and zearalenone (ZON).

According to AHDB, there's little correlation between fusarium-damaged grains and the presence of mycotoxins, therefore the presence of ear blight symptoms shouldn't be used as an indicator of mycotoxin risk. It says this is what led to the development of its mycotoxin risk assessment tool, which has recently been re-released for another year.

Covering hundreds of monitoring sites across the UK, the online tool shows

how much rain has fallen during the winter wheat flowering and pre-harvest periods. This information can then be used to help calculate the mycotoxin risk assessment scores required for combinable crops grain passports.

In winter wheat, the first rainfall risk period is during flowering (GS59 – ear completely emerged above flag leaf ligule) to GS69 (flowering complete). The second risk period is GS87 (hard dough, thumbnail impression held) to harvest.

Once the date range for each period is known, this is entered into AHDB's tool, which then calculates the amount of rainfall and corresponding risk score at each site. The scores are as follows, with the lower the number the better: score 9: >80mm; score 6: 40–80mm; score 3: 10–40mm; score 0: <10mm.

The mycotoxin risk assessment also details other factors that influence the total risk score, including the use of an appropriate dose of an appropriate, approved T3 ear fungicide.

And in a recent update, AHDB says usually, many winter wheat crops start flowering (GS59) from the beginning of June, however some have reached flowering earlier this year due to the relatively dry conditions.

To use the tool visit [ahdb.org.uk/mycotoxin-rainfall-risk-tool-for-cereals](https://ahdb.org.uk/mycotoxin-rainfall-risk-tool-for-cereals)

# Get a head start on Autumn weed control

The relatively quiet weeks prior to harvest are a good opportunity to start planning weed control strategies for autumn. Bayer Technical Manager Rachel Banks takes us through how to get a head start for autumn before combining starts.

## Map the problem

Weeds are currently visible in crops. Make a record of the weed spectrum and severity of any problems to support autumn planning. Different weeds have varying responses to cultural and chemical control, build the overall programme based on the target.

Delaying drilling is an effective tactic for controlling many problem grass weeds but does run the risk of poor establishment if it's wet like 2019 or 2023. Identify cleaner fields for drilling earlier and the highest weed pressure fields last. Last autumn, it worked out well for many because rain in September forced many farmers to delay. This was followed by good conditions in October and November for drilling and herbicides went on to moist seedbeds which helped efficacy.

Plan the herbicide programme based on the target. Proclus®(aclonifen) + Liberator®(flufenacet + diflufenican) provides a good

base for controlling all main grass weed species. Then look to add other actives depending on the problem like tri-allylate for black grass and wild oats, prosulfocarb for ryegrass or pendimethalin for brome and black grass.

Metribuzin co-forms like Alternator® Met and Octavian® Met are another option for bringing diversity into the programme at the pre-em. or peri-em. timing. They contain three modes of action providing good grass weed and broad leaved weed control.

## Plan cultivation

There are many reasons to cultivate after harvest – weed control, residue management or removing compaction to name a few. Thinking about weeds, a good rule is that in dry conditions it is better to hold off cultivation and let UV light and predation get rid of weed seed, any cultivation is likely to cover seed and protect it from danger. In wetter conditions, a light surface cultivation promotes seed to soil contact

and a chit of weeds which you can spray off with Roundup®(glyphosate).

Ploughing is the ultimate form of cultivation. It buries seed where there is a high weed burden and is very effective for brome control. Thankfully, there aren't that many heavily infested fields around this season but it's a useful tool to have.

## Refresh your memory on glyphosate stewardship

Earlier this year, the first case of glyphosate resistance in Italian rye-grass was confirmed in the UK. Preventing the development of more cases is a priority for the whole industry. Don't take glyphosate for granted and focus on the correct timing, rate and application technique for every application to maximise control. In low disturbance systems, be particularly mindful

of any weeds in the stubbles that have carried over from last season. They are likely to be bigger and need a higher rate.

Choosing the best glyphosate formulation contributes to better overall control. Trials show that Roundup® provides consistent control in all situations due to the formulation technology.

Bayer Technical Manager  
Rachel Banks

