AHDB

WINTER 2024

ARABLE FOCUS

THE JOURNAL FOR THE CEREALS AND OILSEEDS INDUSTRY

How varieties get recommended

Eight new Monitor Farms

SEND YOUR IDEAS

What questions would you like your levy to answer?
Go to the back cover

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Contents

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AHDB is a statutory levy board, funded by farmers, growers and others in the supply chain. We equip the industry with easy to use, practical know-how which they can apply straight away to make better decisions and improve their performance. For further information, please visit **ahdb.org.uk**

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AHDB

Welcome

View from the chair

Following the UK's wettest 18-month period in recorded history, we saw the second worst harvest of all time (Page 16). Most of us were glad to see the back of the 2023–24 harvest year. My winter crop yields were appalling and what I scraped off the fields was riddled with ergot (Page 12). The plight of oilseed rape, once a staple of rotations, also continues to worsen (Page 17). At least spring crops were not as disappointing. As the days shorten and the leaves fall, this wet and misty autumn bears our heavy hopes for a fresh start, a second chance and renewal.

Against this backdrop, the sector council's mission to deliver value back to you is clear and urgent. None of us can control the weather, but we can all try to create the best possible conditions, recruit the best possible talent and deploy the latest thinking to make farming more profitable. In the spirit of hopeful renewal, AHDB has also made a fresh start.

I warmly welcome our eight new Monitor Farms (Page 22). They will open their gates to provide new thinking, new solutions and new connections, ensuring as many people as possible benefit from their journeys. Ollie Johnson now leads our regional Knowledge Exchange team, which also oversees the new cover crop champion network (Page 26). We have also appointed a new Sector Director, Sarah Woolford, to provide a stronger focus, engagement, accountability and transparency with our levy payers. Sarah worked with farmers in the grain trade of Western Australia for many years – where sustainability means profit, not subsidy.

As promised, we have made a fresh start to our research, where you direct where we invest your levy (Page 4). Ana Reynolds is working with farmer James Standen to deliver a reinvigorated research programme designed to help you farm even better.

Our core research programme has been spruced up too. For example, we have changed the way varieties get onto the Recommended Lists – now (Page 6) and, potentially, in the future (Page 8). We are also refreshing how we update the Nutrient Management Guide (RB209) to provide more specific practical advice, not just blanket prescriptions (Page 14). In addition, we will support more trials to identify how best to use fertilisers in commercial situations, not just on paper (Page 24).

As the cushion of subsidy is removed, farming risks sharpen. We continue to invest in Farmbench and discussion groups that use the power of peer-to-peer learning to share real solutions and drive efficiency savings. Julie Clark highlights some of the key learnings from thousands of participants (Page 18).

AHDB can only do any of this because of the levy funds we all contribute.

Finally, as always, a sincere thanks to Jason Pole, who nurtures this magazine into existence with exceptional care and dedication.

Tom Clarke
Cereals & Oilseeds sector council chair and AHDB board member

Levy payers seed **research investment**

A new farmer-led initiative is directing AHDB investment. Ana Reynolds explains how it works.

Levy-payer focus

We always put levy payers at the heart of our business. A high-profile example is when thousands of levy payers told us their investment priorities in 2022 (as part of the Shape the Future process). This confirmed that research and knowledge exchange (R&KE) activities remain important to the AHDB Cereals & Oilseeds sector.

We used the feedback to develop the sector plan (2022–2027), which prioritises investment in core R&KE activities. The Recommended Lists (RL), fungicide performance and the Nutrient Management Guide (RB209) are well-known examples of core research. Monitor Farms, Strategic Cereal Farms and Arable Business groups are among our well-known KE activities.

The sector plan also allows the funding of other activities that improve farming practices. To help us identify the best activities, a new approach has been established that lets levy payers seed investment decisions. It pivots around a new farmer-led R&KE committee, which:

- Considers levy payer ideas* for R&KE activities
- Reviews R&KE ideas
- Makes R&KE funding recommendations (to the sector council)
- Oversees R&KE activities

Your ideas

A good stock of ideas for R&KE investment is essential for the approach to work, so we have made it easy to submit an idea by emailing: **research.ideas@ahdb.org.uk**

It is advisable to talk with a member of staff to help develop your idea (**ahdb.org.uk/meet-the-team**). Whichever route is taken, it is important to be as specific as possible, including why the topic is important. Here are three examples (increasing in specificity) for the subject: Are biostimulants worth it?

Basic: I need more information about biostimulants, please.

Better: Biostimulants are being pushed at farmers. Many of us want to cut back on chemicals, but we don't know what is in these products. Nobody appears to be testing if they work.

Best: Biostimulants are being sold to farmers, but we often don't know what is in them or if they work. I have used biostimulants in some split-field trials, but the results have been inconsistent. I don't know if I am wasting my money. Questions I would like answered:

- Can biostimulants supplement fungicides?
- Do micronutrients improve plant resistance to disease with/without biostimulants?
- Can amino acids improve yields with or without nitrogen fertiliser reductions?

First proposals

Based on hundreds of ideas for R&KE investment from levy payers at events, the first tranche of investment proposals was considered at the inaugural R&KE committee meeting in May.

Ergot management (up to £30,000)

The EU recently revised the limits for ergot sclerotia and alkaloids in grain, with adoption in UK law being considered (see Page 12). Ergot was a significant challenge for harvest 2024 crops. As the industry needs a better understanding of the causal fungus, we have commissioned a review to help revise UK ergot management guidelines.

Cover crops (up to £60,000)

We have commissioned a mix of on-farm demonstrations and evidence reviews to help farmers integrate cover crops in their rotations. The funding will establish a national network of commercial farms to demonstrate cover crop approaches (see Page 26). Combined with the evidence reviews, the work will develop independent information associated with many aspects of growing cover crops, including destruction methods, nutrient management implications and long-term benefits.

Weed management (budget TBC)

With herbicide-resistance concerns and the adoption of less-intensive cultivation systems, the integrated management of grass weeds in cereal crops is increasingly raised by levy payers. For example, there is interest in pre-planting solutions (such as varietal competitiveness) and in-crop solutions (such as mechanical weed control). It is a complex topic. The R&KE committee has asked the AHDB team to provide more information on potential project approaches and costs before it can make investment recommendations.

Note: All investment figures are inclusive of VAT.

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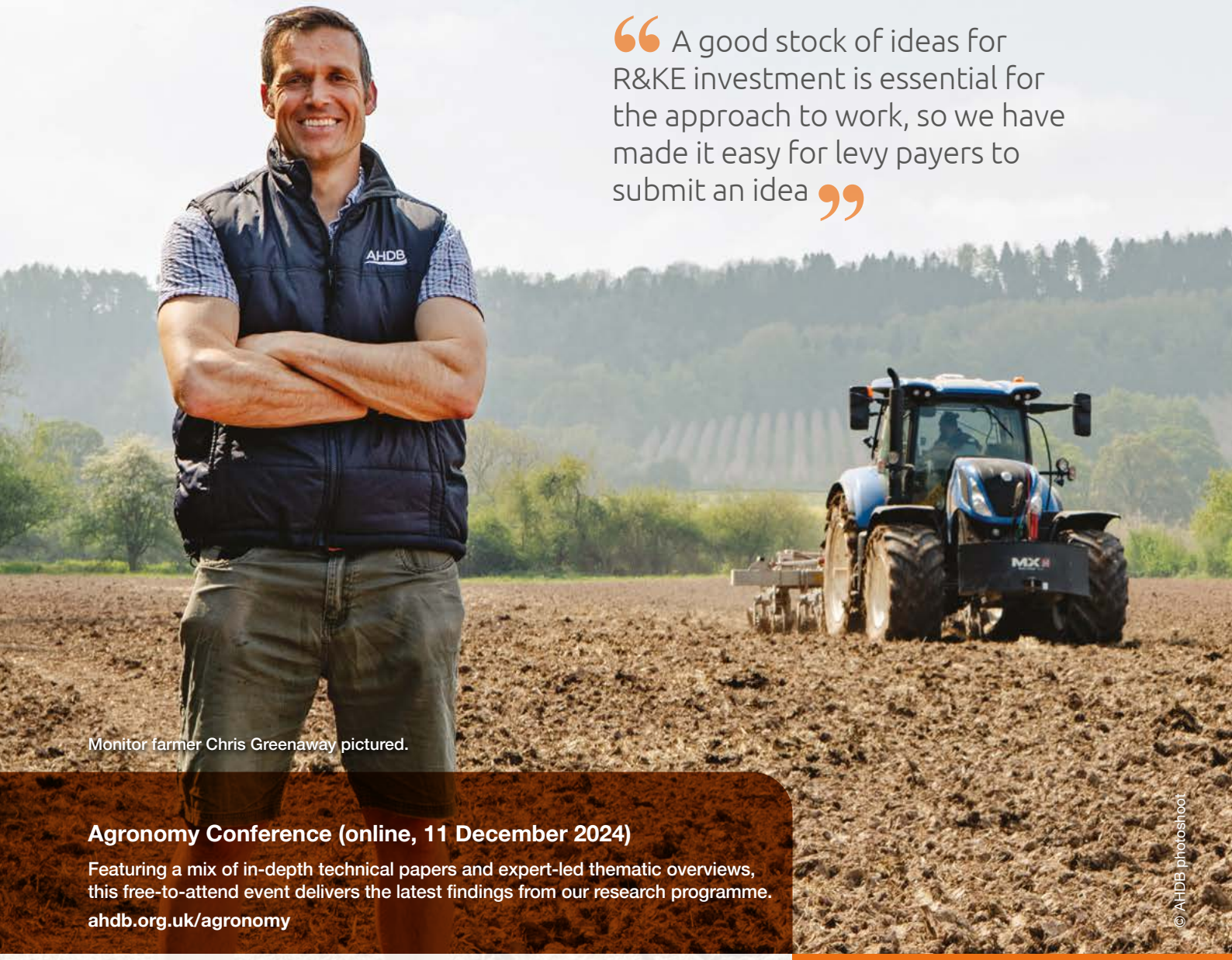
*Note: We also welcome ideas from non-levy payers but do not accept speculative research proposals.



> A good stock of ideas for R&KE investment is essential for the approach to work, so we have made it easy for levy payers to submit an idea

Monitor farmer Chris Greenaway pictured.

Agronomy Conference (online, 11 December 2024)

Featuring a mix of in-depth technical papers and expert-led thematic overviews, this free-to-attend event delivers the latest findings from our research programme.

ahdb.org.uk/agronomy

Visit the research ideas web page for:

- Tips on how to develop ideas
- Details about the process (including timelines)
- Information on proposals and approved projects**

ahdb.org.uk/research-ideas

Keep up to date with the latest research and agronomy news from AHDB Cereals & Oilseeds by signing up for the monthly Agronomy Focus eshot: **preferencecentre.ahdb.org.uk**

**Several other topics have been considered since the inaugural meeting, including cabbage stem flea beetle monitoring (see Page 10), BYDV management, measuring crop physiology (including vigour), mycotoxins in oats and biopesticide efficacy.

ABOUT JAMES STANDEN

James chairs the R&KE committee and is a member of the AHDB Cereals & Oilseeds Sector Council. He is the Farms Director for Newcastle University Farms and farms on tenanted land (both feature arable and livestock enterprises).

James said: "The new R&KE commissioning approach puts farmers at the front and centre of investment decisions. With ideas usually considered quarterly, it also makes investment decisions more responsive to evolving priorities."

Tighter variety RECOMMENDATIONS

Jenna Watts provides an overview of recent changes to the way varieties get recommended.

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Although the number of varieties on the Recommended Lists (RL) is sometimes the subject of discussion, most (about 80%) farmer respondents to the latest RL review felt that the number of varieties was about right. However, the review did identify opportunities to refine the recommendation approach to better meet levy-payer needs, with some changes applied in time for the next RL edition.

How do varieties get recommended?

The RL project board and crop committees follow strict processes to answer a key question: Will this variety potentially provide a consistent economic benefit to the UK cereals or oilseeds industry? The approach to answering this question has changed subtly.

Until this autumn, it was possible for very high-yielding varieties (at least 2% higher than the yield target) to get an automatic recommendation, if minimum standards for disease and agronomic features (such as lodging) and end-use market specifications were met.

Now varieties need to meet more stringent requirements and will always be reviewed by a committee. The requirements include new target specifications, which raise the bar compared to the long-established minimum standards, and more scrutiny of any significant weakness in a criterion of high or very high importance.

This year, new target specifications were introduced for mildew and brown rust in winter wheat and all winter barley and oat diseases. We also increased the importance of fungicide-untreated yield in wheat and barley, as well as mildew and crown rust in oats – all from medium to high.

If a variety fails to meet the targets, it will need to have a strong balance of features (compared to established varieties) for it to gain recommendation. Put simply, it must offer something different that outweighs any major weakness.

This approach isn't a radical departure, but it is a further step in a direction we have been moving towards for some years.

Lower-input varieties?

Most RL trials aim to limit the influence of factors that may hold back genetic potential. For example, we aim to keep disease as low as possible in fungicide-treated trials. As part of the drive to reduce inputs, the RL review also identified demand for data on the performance of varieties in situations closer to on-farm practice.

RL 2025/26 RELEASED ONLINE 2 DECEMBER 2024. ahdb.org.uk/rl

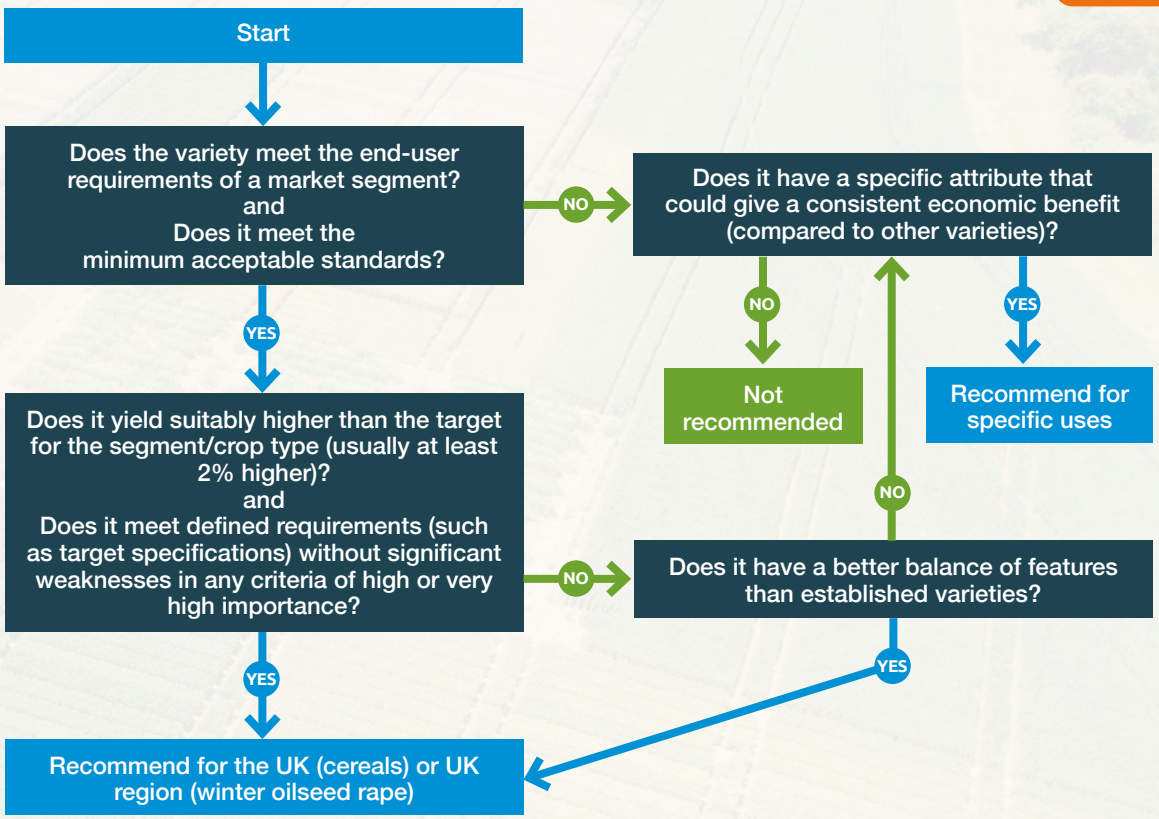

Figure 1. Adapted version of the recommendation decision tree published in the RL Crop Committee Handbook

With a focus on nitrogen and fungicides, we commissioned two scoping reviews, which concluded earlier this year. These revealed the challenge associated with developing and measuring varietal performance under reduced input levels. As such traits are often controlled by multiple genes, it adds further complexity.

Naturally, additional RL trials would come at a cost. For example, if we introduced winter wheat 'mid-point' fungicide trials to locations that have both treated and untreated RL trials, it could easily add £500,000 to the five-year RL project budget. Such a programme would still fail to match those used by most farmers, meaning it may not be the best use of resources. The review did consider a computer model as a cheaper alternative, but it needs development and may still fail to provide a fair test of varietal performance.

There is evidence that breeding in a reduced nitrogen environment can lead to improvements in nitrogen use efficiency (NUE). To deliver such traits, it is essential to collaborate with all key players in the variety selection pipeline. The first hurdle is to define sustainability traits that can be selected by breeders and reliably measured.

Then we need to ensure that such traits make it through to the RL trials and are not filtered out as part of the GB and NI Variety Lists (which are managed by the Animal & Plant Health Agency (APHA)).

We are also examining how non-RL projects could help with the selection and management of varieties, including through our fungicide performance, Nutrient Management Guide (RB209) and Strategic Cereal Farm activities (see Page 24).

ahdb.org.uk/rl-review

WINTER WHEAT ON TRIAL

We were also asked to provide more information about the RL processes. This growing season, you can follow our team on a journey to harvest 2025. They will bring the protocols and decisions to life as we grow one of the UK's most complex winter wheat crops at an RL trial site in Norfolk.

Discover how we:

- Select varieties for sowing
- Design the trial
- Approach trial agronomy
- Assess and harvest trials
- Decide which varieties to recommend

ahdb.org.uk/rl-trials

RL 2025/26 RELEASED ONLINE 2 DECEMBER 2024. ahdb.org.uk/rl

The future of **variety selection**

Paul Gosling considers how variety selection may change in the next 20 years.

The Recommended Lists (RL) has delivered variety data for 80 years. During this time, average UK wheat yields increased from 2.7 t/ha to 8 t/ha. Will the next 20 years bring more of the same? Well, the UK climate is likely to favour cereal production until at least 2080. Certainly, there will still be a hunger independent variety performance data.

For many decades, the RL's emphasis was on treated yield improvement, but the focus has shifted. Climate change is increasing year-on-year variation, with seasons flipping from one extreme to another. For example, harvest 2024 crops rode one of the wettest growing seasons on record, whereas harvest 2022 crops contended with very dry weather and record heat.

We now need varieties that de-risk growing. It is now more about resilience, with a good disease-resistance profile being a priority. For breeders, it is about searching through an increasing pool of genetics for new resistances and traits, and testing varieties over multiple years and locations to deal with waterlogging and drought, for example.

Breeding techniques

In the last few decades, plant breeding innovation has progressed faster than at any other point in history, according to the British Society of Plant Breeders (BSPB). Rapid developments in genomics, including faster computer speeds, mean more powerful and faster ways to manage crop genetics and track genes. This may improve access to the huge genetic diversity available in landraces, crop wild relatives and long-discarded varieties.

Last year, the Genetic Technology (Precision Breeding) Act passed into law, unlocking modern breeding techniques, such as gene editing. The industry has learned from genetically modified organisms, with caution now applied at every step to keep consumers informed and supportive. It will help make sure the technology delivers what society needs.

Predicting the future

To focus on the right targets, plant breeding companies horizon scan. For example, Richard Summers, Head of Cereal Breeding and Research at RAGT, says this can help highlight novel genetic material, citing sources of septoria tritici resistance in varieties from western France. Scanning is also important for the RL, helping us to identify long-term industry needs and separate it from short-term 'noise'.

Of course, the RL is just part of the variety selection pipeline. The GB and NI Variety Lists (VL) are an essential component too. Sitting between breeders and the RL, it grants permission to market varieties in the UK. If the RL is to deliver new traits, those traits need to go into the VL and out the other side. Collaborative working is increasingly important (see Page 4).

Since Brexit, the UK and EU systems have been diverging, with examples where variety registration is achieved in the EU but not in the UK. Chris Guest, Managing Director at NPZ-UK, is clear that the variety registration system must protect intellectual property but not disadvantage UK farmers' access to the best genetics.

Genomic technologies could also speed up the variety registration process. APHA's Michael Brown said the international UPOV convention (to which the UK system belongs) sets the direction and any major change to the process requires international agreement but such approaches are on their radar.

New crops

With the rise of cabbage stem flea beetle, the viability of oilseed rape is being questioned. With acreages increasing and new varieties entering VL trials, winter linseed is a potential alternative. VL trials have also included some spring rye and durum wheat varieties. Some end users, such as brewers and distillers, are also looking at the potential of alternative crops with better sustainability credentials. Lists for such crops are some way off, but we are monitoring developments.

Technology takeover?

Although technology continues to advance, do not expect a complete takeover soon. For example, the COVID-19 lockdowns made us use drones for trial inspections. They were very good at some things but quite poor at others. It is important to have boots on the ground for the foreseeable future.

With the pace of change, it is impossible to predict where we will be when the RL turns 100 in 2044. In many ways, it is likely to remain similar. It will stay data-driven and focus on the needs of levy payers. Technology will develop and the way varieties are trialled and tested could be very different. Maybe we will also see an AI-powered RL. Watch this space.

JOIN THE RL TEAM

The three RL crop committees (covering wheat, barley oats and other cereals, and oilseeds) are made up of industry experts and representatives, including farmers and agronomists.

If you think you could play a positive role in how the RL develops and which varieties are recommended, contact us at **rl@ahdb.org.uk** or look out for opportunities to join the committees at the end of the year.

ahdb.org.uk/rl-trials

80 YEARS RL
1944-2024

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> We are exploring how automated trapping could help deliver better monitoring data at a lower cost

Management of **MIGRATION MIGRAINES**

Sacha White reflects on the latest CSFB research.

The rise in cabbage stem flea beetle (CSFB) pressures, combined with wet weather (and tightening crop margins), underpinned the lowest winter oilseed rape area in four decades (Page 16).

Since the neonicotinoid withdrawal, we have continuously invested in work to assess the pest's impact and integrated pest management (IPM) approaches.

But what are the main lessons? Well, we know more than ever about the habits of the critter and how these can be manipulated to our advantage.

There are many strings to the IPM bow, which are detailed on our website. In this article, I will home in on beetle migration. Thanks to a series of monitoring projects, we have a much better handle on the main pest-risk period.

Migration matters

Typically, adult beetles migrate into crops in earnest in late August or early September, peaking soon after (early-to-mid September), before tailing off quickly towards the end of September. The migration pattern means that late August to mid-September is usually the highest-risk window for sowing because the arrival of the beetles coincides with the most vulnerable crop stages.

Crops sown before this window can develop enough leaf material to cope with beetle feeding (although they provide the greatest opportunity for egg laying, resulting in higher larval loads). Crops sown after it tend to emerge after migration has peaked (cooler temperatures also reduce egg numbers and larval populations).

Sowing dates

We will publish the latest AHDB CSFB IPM project report by the end of the year. The ADAS-led work included a trial that showed how shifting sowing dates by just a few weeks could be the difference between a 0 t/ha (total crop loss) and a more than 5 t/ha crop.

The trial used three sow dates: early (26 August), middle (6 September) and late (15 September). The middle treatment coincided with peak migration and got wiped out by adult feeding. In contrast, the early and late-sowing dates recorded just 7% and 3% leaf area lost (and 3.8 t/ha and 5.5 t/ha), respectively. As expected, the early sown crop had the highest larval pressure – 19 times higher than the crop sown on 6 September. However, if migration occurred slightly earlier or conditions were drier, then the early sown crop could have got hammered. The same logic holds true for delayed migration in later-sown crops.

What does this mean for practice? Well, at present, you need to assume that the year will deliver a typical migration pattern and use a range of sow dates to spread risk across your oilseed rape fields. In the future, we may be able predict migration better, if we continue to capture and build on good-quality field data that shows how CSFB migration varies annually and regionally (in response to local conditions).

Enhanced monitoring

This autumn, we added to our data set by monitoring CSFB activity at seven core locations in England, which included regular counts of adult beetles in yellow water traps and assessments of crop invasion by larvae. At one location (Hertfordshire/Essex), we monitored six sites to provide better data about regional variability.

Monitoring is a labour-intensive process. When Bayer launched an automated yellow water trap (MagicTrap) earlier this year, it piqued our interest. The trap uses an integrated camera and artificial intelligence to regularly identify and count contents before sending results to a computer or mobile device. It has the potential to speed up and scale up monitoring. We are exploring how automated trapping could help deliver better monitoring data at a lower cost.

In addition to providing in-season data about migration, the long-term data set will help us develop and validate a tool that predicts the start, duration and intensity of migration each year. It will help you identify the lowest-risk point to sow oilseed rape.

Latest guidance

Our website features top tips on how to layer approaches to manage CSFB. It includes evidence-based blogs on our latest IPM research. For example, these cover the latest monitoring data (autumn 2024 was generally associated with low CSFB pressures), companion crops (help consistently produce modest reductions in CSFB pressure) and volunteer oilseed rape trap crops (late-controlled trap crops can significantly reduce pest pressure and damage in adjacent oilseed rape crops). The latest results from our CSFB work will be discussed at the Agronomy Conference on 11 December 2024.

ahdb.org.uk/csfb

RESEARCH IDEAS

Levy payers and agronomists continue to highlight CSFB as a major concern. The NIAB-led monitoring project was one of the first to be recommended for funding by the new R&KE committee (see Page 4).

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Why and how we monitor **CEREAL CONTAMINANTS**

Kristina Grenz provides insight into our long-running monitoring project.

A contaminant is anything present (physical, biological or chemical) on or in grain that makes it unfit for consumption. The cereals levy has underpinned the independent monitoring of grain contaminants for about 40 years. Each year, hundreds of commercial intake samples are analysed, including wheat, barley and oats destined for food or feed uses, as well as samples of wheatfeed and oatfeed (co-products of milling).

In the first seven years of the current project phase (2016–2022), almost 2,500 samples were analysed for chemical analytes (nearly 7,000 kg of grain). With 220 different contaminants tested, the work generated over one hundred thousand results.

Most of the mycotoxins studied are associated with in-field pathogen infection, which include ergot alkaloids (produced by *Claviceps purpurea*) and fusarium mycotoxins (produced by fusarium species) – such as deoxynivalenol (DON), nivalenol (NIV), T-2 and HT-2, and zearalenone (ZON). The work also monitors storage mycotoxins, such as ochratoxin A (produced by various species of mould).

Most UK grain samples are usually well within the legal limits for all contaminants. In the rare cases where contaminants exceed limits, the supplier labs and trade associations are notified immediately. Subsequent investigations improve production practices, driving down exceedances even further.

Fusarium mycotoxins

For DON, most samples were well below the maximum levels (MLs), even the recently (1 July 2024) lowered levels that apply to grain traded in the EU. The highest levels were in feed grains, wheatfeed and oatfeed samples, which is not surprising, due to agronomic practices and the fact that mycotoxins concentrate in the outer grain layers.

Because of the robust analytical methods followed in the project, the industry uses the results to validate and benchmark the methods more commonly used to test commercial grain, such as DON lateral flow tests (LFTs). Thankfully, the results are usually consistent.

When the EU revised the MLs for DON, it also introduced new ones for T-2/HT-2 toxins (replacing indicative levels). Oats are most severely impacted by T-2/HT-2 toxins, with occurrences highest in oatfeed samples (but still usually within the limits).

Ergot

At present, GB has contractual limits for ergot by weight for feed grain and zero tolerance for all other grain. Once again, the EU introduced (1 January 2022) stricter levels for specific cereals and products traded in the EU, which include limits for ergot alkaloids for the first time. As alkaloids can be detected in grain with no visible ergot symptoms, they provide a much tougher test for grain quality.

We have several years of UK ergot alkaloid data. In most years, levels are low. However, we do detect spikes in some years and in some products. Subsequent investigations are helping the supply chain understand and manage risk better.

Ergot is associated with wetter growing seasons, like 2023/24. This year, we also saw many bare patches in fields, which boosted ergot-affected grass weeds (black-grass is particularly problematic). It was not surprising to hear reports of ergot-contaminated grain during harvest 2024. We plan to update ergot-management guidance in 2025 (see Page 4).

Glyphosate residues

Last year, glyphosate was approved for use in the EU for another 10 years, with nations retaining the power to authorise glyphosate-containing products on a case-by-case basis. An analysis of UK data (from several harvests) found no exceedances of the maximum residue level (MRL) for glyphosate in tests of food oats, malting barley and milling wheat samples. Milling wheat was generally associated with very low incidence and levels, whereas barley had the highest incidence and oats had the highest levels. Any glyphosate residues would have been due to pre-harvest use rather than pre-emergence herbicide use.

The long view

The project is helping the industry navigate the increasing divergence between EU and GB/UK regulations. Regular horizon scanning also puts us in a stronger position to react to other emerging issues.

The AHDB Cereals & Oilseeds Sector Council recognises the importance of investing in monitoring work. With the current project phase (led by Fera) nearly complete, we asked for views on the work earlier this year to help set the direction of the next project phase.

Our website features the latest reports, statements of support from the project's industry partners and information about the latest project review.

ahdb.org.uk/contaminants-review

THE PROJECT'S INDUSTRY PARTNERS

- Agricultural Industries Confederation (AIC)
- British Oat & Barley Millers' Association (BOBMA)
- Maltsters' Association of Great Britain (MAGB)
- UK Flour Millers (UKFM)

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RB209's future IN THE SPOTLIGHT

Amanda Bennett explains how a strategic review aims to future-proof RB209.

When we first took on the Nutrient Management Guide (RB209) from Defra, we conducted an in-depth review of its content and issued thoroughly updated guidance in 2017 (the first update in many years). The review also identified many gaps, with research commissioned to address the biggest priorities.

Following extensive feedback from levy payers in 2022, we knew it was important to continue investing in RB209. After seven years of research and technical updates, we felt it was important to take stock and look at the bigger picture. This will help us make sure the guidance meets the needs of our levy payers and the wider industry.

Your views

We kicked off a year-long, strategic review of RB209 in January with an initial questionnaire, which captured over 250 responses (mainly from farmers, agronomists and advisers). It revealed that most respondents use the hard copy RB209 publications or access the PDFs online, with many suggesting ways to improve the guide's format.

A desire for technical changes was also identified and nutrient use efficiency emerged as a key theme (like it did in the recent review of the Recommended Lists). RB209 users are hungry for information to help them tailor recommendations to specific systems, farms and fields. Perceived information gaps included nutrient availability (from soils and organic materials), optimum application strategies, as well as the use and interpretation of in-season nutrient tests and analyses.

There was also interest in broadening the scope of RB209 to include more crops, such as cover crops, more detailed nutrient data (beyond the high-profile N, P and K, such as micronutrients) and to help calculate the carbon footprint of fertilisers.

We used the initial comments to develop a main questionnaire, which was open over the spring and summer and received over 650 responses. We are currently analysing these, along with feedback from 35 stakeholder interviews. We will present options on how to improve the guidance to the RB209 review committee at the end of the year. The committee is led by David Bell, a mixed farmer in East Fife and member of the AHDB Cereals & Oilseeds Sector Council.

Your partnership

Overseen by the Crop Nutrient Management Partnership, RB209 is a carefully coordinated operation. Involving many organisations and individuals, the partnership decides how best to generate independent, scientifically robust and practical data on crop nutrient management. At the core of this partnership is the Steering Group (which has overall responsibility for RB209) and two Technical Working Groups (TWGs) that cover arable crops and grass and forage.

We always want to hear from passionate and knowledgeable people who can join the partnership and help direct RB209's future.

To access RB209 and learn about partnership opportunities, visit: **ahdb.org.uk/rb209**

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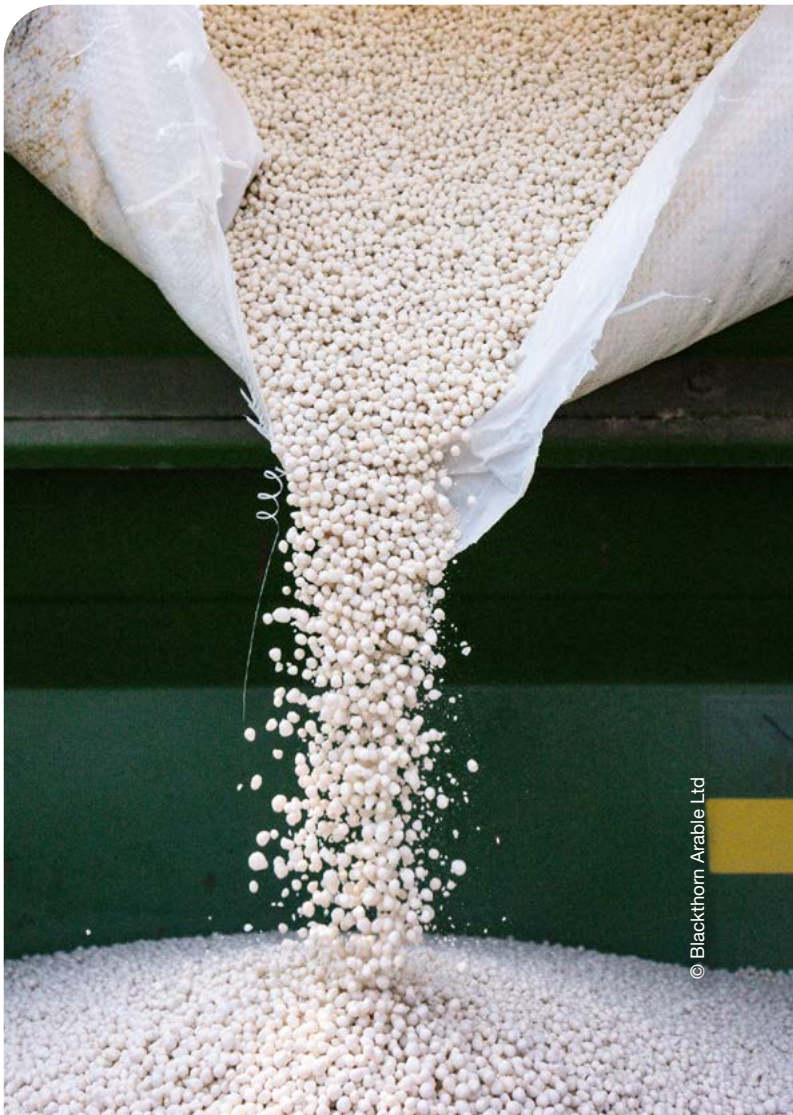

Markets and insights

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- **Weekly Market Report**
- **Analyst Insight**

Harvest 2024 production swings

Production estimates reveal the season's winners and losers. Helen Plant explains the impact on crops.

In mid-October, Defra and the Scottish Government released provisional estimates for arable production in England and Scotland. In this article, we use historical data and trends for Wales and Northern Ireland to complete the national picture for harvest 2024.

With the second wettest August through February since 1837 (when records began), winter crops had a very tough start. With planting hampered, it underpinned large falls in winter cropping areas. For example, we saw the second smallest total wheat area since 1981 (at 1,530 Kha), the lowest winter oilseed rape area in four decades (at 287 Kha) and the winter barley area (at 383 Kha) drop 7% below the five-year average.

Differences in soil type, drilling date and rainfall also led to highly variable crop condition. It was not uncommon to see bare patches and large gaps in crops. The weather also hindered input applications. However, many crops improved in the second part of the growing season, taking the edge off an otherwise disastrous season for many.

Wheat

Weather was favourable during most of the wheat harvest. Eighty-eight per cent was cut by 28 August – well ahead of the five-year average at this stage (60%) – although rain and humidity slowed harvest's tail end.

With average yields estimated to be down (by 11% at 7.2 t/ha) and the small cropping area, UK wheat production is estimated at 11.1 Mt – a decrease of 2.9 Mt compared with harvest 2023 and 21% below the five-year average (13.9 Mt). However, it is above 2020's disappointing 9.7 Mt crop. The largest predicted production falls are in North East England – down by as much as 32% compared with last year. Scotland saw the smallest potential decrease (down by 12%).

Barley

Barley fared much better than wheat, with the total UK barley production estimated at 7.2 Mt. Although below the five-year average (7.5 Mt), it is still above 2023's result (6.9 Mt). Total production was pulled down by winter crop performance. The relatively small areas and yields (especially across England) pegged winter barley production estimates at 2.44 Mt – down 24% from harvest 2023 and 17% off the five-year-average pace (2.92 Mt).

Despite being planted later than usual, spring crops generally performed extremely well, with total barley production supported by a considerable increase in the spring barley area – 19% up on last year and the third largest area this century. Good yields were also reported across England and Scotland.

Table 1. Provisional arable production estimates (Mt) for the UK*

Crop	Five-year average (2019–23)	Harvest 2024	Difference
Wheat	13.9	11.1	-21%
Barley (all)	7.5	7.2	-4%
Barley (winter)	2.92	2.44	-17%
Barley (spring)	4.57	4.76	+4%
Oats	1.01	1.00	-1%
Oilseed rape	1.27	0.84	-34%

*Includes estimates for Wales and Northern Ireland, based on historical data and trends.

Source: Defra and the Scottish Government

For market information, visit **ahdb.org.uk/markets-and-prices**

We estimate that the UK's spring barley is 4.76 Mt – up 1.00 Mt compared with the 2023 harvest and surpassing the five-year average (4.57 Mt). Quality has generally been good for barley, with good germination scores. However, lower nitrogen levels have been recorded.

Oilseed rape

With a significant reduction in the oilseed rape area and lower yields in many parts of the UK, production levels tumbled. Yields are 9% down on average (at 2.91 t/ha) and extremely variable. Compared with 2023, yields were only higher in Eastern England (+2%), the South East (+2%) and the South West (+1%). Scottish yields may be down as much as 11% (3.6 t/ha).

UK production is estimated at 0.84 Mt – a 31% decrease from the 1.22 Mt harvested in 2023. At 34% under the five-year average (1.27 Mt), it is the poorest production result since 1983. Fortunately, quality has been generally good this season, with high oil contents recorded.

Oats

UK oat production is estimated at 1.00 Mt. Although up from the 2023 harvest (by 169 Kt), it is still 1% below the five-year average (1.01 Mt).

The performance of oats improved noticeably towards the end of the harvest, reflecting the shift from winter oats to spring oats. Oat production increased in all regions except the North East, which saw a 4% decline. Yield improvements were recorded in many areas of the UK, excluding some English regions (the North East, East Midlands and West Midlands).

Conclusion

Harvest 2024 saw relatively large variations in yield from region to region, even field to field. Those facing large drops may face significant cash flow challenges. Reduced UK output will also increase reliance on imports to meet domestic demand. Attention has now turned to the fortunes of the 2025 crop, with many aiming to drill crops earlier than usual (if and when the weather allows).

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FARMBENCH: An icebreaker for business

Is your business trying to tell you something? Julie Clark explains how you can use Farmbench to 'listen' to your business.

In 2017, we launched a whole-farm benchmarking tool called Farmbench, replacing the crop-specific CropBench. Thousands of our levy payers have now entered their data into the secure, free-to-use online tool. Today, it is a rich, robust source of anonymised farm-performance data, which can reveal how any farm compares to similar businesses. It can also highlight areas for improvement and guide a farm's direction.

Breaking the ice

Although it is possible to 'go it alone' with Farmbench, the most valuable lessons are often found among peers. There are about 40 AHDB-supported Arable Business Groups (ABGs) in the UK. At these groups, Farmbench reports provide excellent icebreakers for discussions. Together, attendees get to grips with production costs, learning how each enterprise contributes to overall business profitability.

No topic is off the table either, with the debate driven by group interests. Common topics include fertilisers and machinery. For example, members review their fertiliser application strategies or determine whether it would pay to use contractors (instead of using their own machinery). This season, a hot topic has been the Sustainable Farming Incentive (SFI).

Business benefits

Almost 300 people attended one of 41 ABG events last season (November 2023 to February 2024). Many attendees (151) provided feedback, with most (65%) making changes in direct response to attending, including:

- A closer scrutiny of costs (30%)
- Adapting fertiliser approach (22%)
- Making rotational changes (18%)
- Adjusting cultivation approach (10%)
- Better record keeping (9%)

Almost a quarter (23%) said they had made large savings (£10,000–£30,000). Attendees cite many other reasons why they find the meetings useful, including general discussion (58%), making comparisons with similar farms that use different methods (34%), openness and honesty between group members (19%) and reassurance that they are not alone in their scenarios and challenges (18%).

Data lessons

Anonymised and aggregated Farmbench data can also reveal key trends. For example, those linked to average variable costs, overhead costs, income and full economic net margins per hectare. In the following analyses, we examine data for the past five production years (2018–2023) for wheat and oilseed rape. In recent years, two headline-grabbing patterns have emerged: significant fluctuations in income and increasing costs.

Wheat results

The chart for winter wheat is based on a minimum of 400 UK wheat enterprises each year. With its high total income (£2,552/ha) and strong average net margin (£1,097/ha), 2021/22 stands out. Tight global wheat supplies and the start of the war in Ukraine drove strong market prices.

Since then, prices have dropped, with net margins in 2022/23 much closer to those seen in 2018/19 and 2019/20, at around 15% of total income. With an underlying trend of increasing variable and overhead costs over the last three years, there is concern that net margins will continue to be squeezed.

Increased fertiliser costs and, to a lesser extent, crop protection costs are the main variable cost culprits. The average fertiliser cost for wheat crops in 2022/23 was £432/ha, compared with an average of £226/ha over the previous four years (a 90% increase).

Oilseed rape results

We have also analysed over 200 UK oilseed rape enterprises each year. In 2019/20, relatively low yields – 12% under the five-year Farmbench average yield – contributed to poor performance. On average, crops lost £114/ha. Yield reduction was potentially even greater, according to Defra (down 22%), suggesting an even larger fluctuation in net margins across the UK.

Like wheat, strong market prices underpinned higher net margins in 2021/22, as well as 2020/21. When market prices fell in 2022/23, it exposed the impact of increasing costs, with oilseed rape losing an average of £201/ha. In this production year, fertilisers were associated with 64% of the total variable costs (previously, they were typically under 50%).

Overhead costs

For both crops, rising overhead costs are associated with a broad range of categories, including labour, machinery, equipment, property and energy. Over the five-year period evaluated, such costs increased by an average of 15% to 20%.

We are currently analysing results for 2023/24, which will be discussed at ABGs this winter.

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JOIN THE COMMUNITY

- Develop your potential
- Learn from and alongside your peers
- Get expert insight
- Understand production costs
- Investigate pricing strategies

Visit our website for information, including how to use Farmbench and to join an ABG:

ahdb.org.uk/farmbench

ahdb.org.uk/arable-business-groups

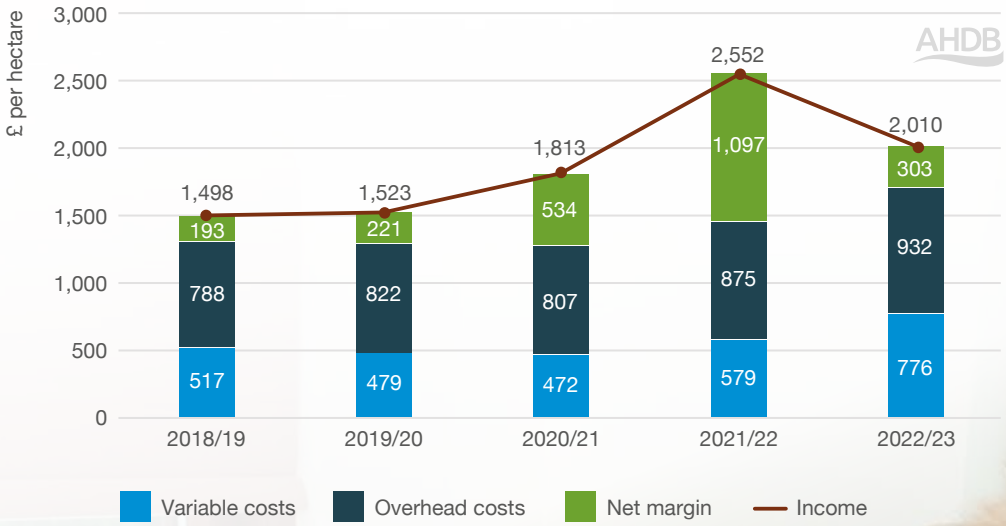

Figure 1. Wheat results - Cost production to income for wheat (five-year trends). Oilseed rape chart is available via ahdb.org.uk/farmbench

Capturing accurate ENVIRONMENT DATA

A pioneering pilot project is revealing the real story of farming. Chris Gooderham explains.

When it comes to demonstrating the environmental impact of farming, agriculture faces the biggest challenge of a generation. A challenge amplified by a lack of accurate, on-farm GB data. Solving this conundrum is the task of a new Environment Baselining Pilot. Led by AHDB, with support from Quality Meat Scotland (QMS), the project will start to capture:

- The scale of natural carbon stocks and potential for sequestration
- The industry's progress towards net zero
- The impact of agriculture on the environment

Big response

Over 500 farmers expressed an interest in the pilot (322 with a cereals and oilseeds enterprise). This autumn, applications went through a comprehensive three-stage selection process (including interviews and data optimisation) to narrow down the list to 170 (our target number).

In the mix, we have captured the variation in systems, soils and land management across GB agriculture. Additionally, we made sure that the pilot farms represent those setting out on their environment journeys, as well as those firmly down the track.

This November, the first stage of the five-year project officially gets underway. Participants will get one-to-one support to help create tailored action plans focused on improving their farm's environmental performance. On-farm activities (covering cropped and uncropped land) include:

- Assessment of above-ground carbon stocks (in trees and hedges) and run-off risks
- Calculations of soil carbon levels and soil health analyses
- Carbon audits and action planning

Rewriting the narrative

This project is more than a pilot. It is a movement towards more informed action and debates about British agriculture and to help redefine how farmers are recognised for delivering both food and public goods.

With data securely held and analyses anonymised, the project will deliver an honest and accurate account of the impact of farming on the environment. It will help us track changes in greenhouse gas (GHG) emissions and provide a deeper understanding of carbon stocks, their relevance and the potential to increase them. It will guide how best to measure industry progress towards net zero, as well as how to improve biodiversity, run-off risks, water quality and soil health.

The pilot pushes the boundaries of measurement technology too. In addition to the use of aerial light detection and ranging (LiDAR) scanning, the work will tap into the potential of remote monitoring from satellites, which could help us take measurements more frequently and at a lower cost.

Ultimately, the pilot will pinpoint critical elements and the coordinated effort needed to roll out the approach to the whole of GB agriculture. The goal is to provide accurate on-farm data and evidence to safeguard the future of UK agriculture with fair recognition and reward.

You can follow the journey at: **ahdb.org.uk/baselining**

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CARBON FOOTPRINT COSTS

Farmers typically take about 8–16 hours to complete a carbon footprint, although it often takes much longer in the first year, according to a recent AHDB survey. Most respondents created a carbon footprint because of supply chain commitments. Time was cited as the main cost (by far), with an increase in on-farm admin cited as a key challenge. This related to bookkeeping, locating the required data and information, as well as collecting and analysing new data. Many felt that there was a need for more recognition of the time–cost implications to farm businesses.

FARMEXCELLENCE

AHDB

Find your nearest **Strategic or Monitor Farm**

1 Scotland
David Aglen

2 Limavady
Alistair Craig

3 North Yorkshire
Joe Dugdale

4 North
David Blacker

5 Beverley
Will Jones

6 Altcar Moss
Cameron Edwards

7 Leverton
Joe Vickers

8 Bingham
Joe Fisher

9 Norwich
Michael Balls

10 East
David Jones

11 Cambridge
Matt Redman

12 Bedfordshire & Buckinghamshire
Will Maclennan

13 Hereford
Chris Greenaway

14 Cheltenham
Andrew Walters

15 Vale of Glamorgan
Richard Anthony

16 Kingsclere
Tim May

17 Pilton
Neil and Michael Christensen

18 Kent
Tom and Debbie Reynolds

19 Camborne
Pete Olds

Monitor Farm
England, Wales and Northern Ireland

Monitor Farm Scotland
Managed in partnership with QMS

Strategic Farm

*Approximate locations shown

To find your nearest farm meeting, visit:

ahdb.org.uk/cereals-oilseeds-ke-events

Eight new **MONITOR FARMS**

Ana Reynolds introduces the Monitor Farms that joined the network in 2024.

The Monitor Farm programme started in Scotland in 2003* before expanding to cover the whole of the UK in 2014. Ten years on and the network is going strong, providing a welcoming, no-pressure space to talk and make better business decisions.

Following our annual recruitment campaign, we have carefully selected eight new farms to represent their regions over the next three years. The cohort covers several arable farms, mixed farms, as well as our first organic Monitor Farm. They reinforce a 16-strong network.

It takes a special mix of qualities to be a monitor farmer, including a willingness to scrutinise their business, being open to new approaches and sharing the details with other farmers. With the support of regional AHDB knowledge exchange managers, monitor farmers host several open meetings each year. The first farm walks took place at the new farms during the summer.

Your new Monitor Farms

North Yorkshire

Host: Joe Dugdale (Crathorne Farms, North Yorkshire)
Farm size: 1,000 ha (650 ha arable)
Rotation: Winter wheat, oilseed rape, winter beans, winter oats and winter ahiflower (a source of omega-3)
Non-arable enterprises: Dairy (and milk vending)
Ambitions: Decrease artificial inputs, further reduce cultivations and improve drainage infrastructure

Altcar Moss

Hosts: Simon, Lisa and Cameron Edwards (Goose Meadow Farming, Merseyside)
Farm size: 372 ha rented land (345 ha arable)
Rotation: Wheat, barley, oats, beans, oilseed rape, potatoes and grassland
Non-arable enterprises: Rotational grassland for grazing and hay
Ambitions: Explore alternative weather-resilient crops and systems that protect soil carbon stocks

Leverton

Host: Joe Vickers (four farms, Lincolnshire)
Farm size: 1,500 ha (1,200 ha arable)
Rotation: Combinable crops for milling, malting and feed, as well as potatoes and sugar beet
Ambitions: Explore diversification options and maintain/improve staff performance and productivity

Hereford

Host: Chris Greenaway (Garnstone Farms, Herefordshire)
Farm size: 1,400 ha (880 ha arable)
Rotation: Wheat, spring linseed, herbage seed, tenderstem broccoli, maize and wholecrop oats (the last two for an AD plant)
Non-arable enterprises: Six-year-old beef enterprise (grass leys provide grazing for the estate's Aberdeen Angus suckler and rearing herd)
Ambitions: Tackle rising input costs, build on the farm's flexible approach to cultivation and make the most out of farm payment options and grants

Pilton

Hosts: Neil and Michael Christensen (Steanbow Farms, Somerset)
Farm size: 615 ha (354 ha arable)

Rotation: Winter wheat and maize (multi-species cover crops before a crop) and short-term grass
Non-arable enterprises: 180 dairy cows (on the Agri-EPI/CIEL unit), 485,000 broiler chickens, biomass boiler and solar panels
Ambitions: To make decisions based on evidence, produce high-quality food sustainably, including min-till on the farm's heavy clay soils (when conditions allow)

Kingsclere

Host: Tim May (Pit Hall Farm, Hampshire)
Farm size: 1,000 ha (440 ha arable)
Rotation: Fully organic wheat, barley, oats and beans grown as part of a four-year ley, four-year crop rotation (organic conversion started in 2017 building on regenerative approaches)
Non-arable enterprises: Dairy cows and laying hens (in mobile units on the grassland)
Ambitions: Try new site-specific approaches that reduce costs and increase yields

Kent

Hosts: Tom and Debbie Reynolds (two farms, Kent)
Farm size: 332 ha (158 ha arable)
Rotation: Wheat, beans, oilseed rape and grass seed
Non-arable enterprises: Suckler herd and substantial silage contracting business
Ambition: To become more climate resilient and build biodiversity (uses no-till and has a Higher Tier Countryside Stewardship agreement and Pasture for Life cattle)

Camborne

Host: Pete Olds (Cornhill Farm, Cornwall)
Farm size: 200 ha (140 ha arable)
Rotation: Winter wheat, winter barley, cabbage, cauliflower, potatoes and maize
Non-arable enterprise: 14,000 laying hens (80% of eggs sold locally). Also has a grain storage operation
Ambition: To focus on the arable business and raise average yields

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10 YEARS MONITOR FARMS 2014–2024

*Monitor Farms in Scotland are managed by QMS, supported by AHDB and funded by the Scottish Government. Newbury, Wisbech, Wolverhampton, Chathill, Salisbury, Penrith, Ripon, Wainfleet and the previous Hereford Monitor Farm left the network in 2024.

MEET OLLIE JOHNSON

Ollie is the new lead for the AHDB Cereals & Oilseeds engagement team, taking up the baton from Ana Reynolds (who now leads the research and development programme). Ollie joined AHDB this year, after nearly a decade as an agronomist, advising arable and mixed farmers across more than 6,000 ha. He is BASIS and FACTS qualified and holds a BASIS Diploma in Agronomy. When not walking fields in South Warwickshire, he often flies over them in a light aircraft. He also supports his former Young Farmers' Club and manages a Scout troop.

Adapting nitrogen at **Strategic Cereal Farms**

Henny Lowth explains how nitrogen trials had to flex to the wet growing season.

Nutrient use efficiency (NUE) is a large and complex subject, even when focused on one major nutrient – nitrogen. How nitrogen behaves in farming systems is often variable and hard to pin down, which is why it is frequently a focus for Strategic Cereal Farms.

Strategic Cereal Farm North

David Blacker (pictured), who hosts Strategic Cereal Farm North (Shipton, York), had clear ideas about what he wanted to get out of his harvest 2024 crops. But, as they say, man plans, God laughs. The UK went on to experience one of the wettest growing seasons since records began. Not good news for David's winter wheat (Champion), which had been earmarked for some interesting NUE trials.

Initial plan

David wanted to optimise nitrogen use without unacceptable yield/quality penalties or generating lush biomass that could encourage foliar disease. The initial plan was to test the efficiency of foliar-applied liquid nitrogen compared to soil-applied nitrogen and study the impact on disease pressure.

With crop condition and growth patchy and very high soil moisture levels in the spring, the replicated tramline trials were deemed unlikely to provide a fair test of the planned treatments. Additionally, the crop failed to show signs of a response to the 70 kg of nitrogen applied at the first split. Even after three weeks, the crop stayed yellow and was losing tillers. A soil mineral nitrogen (SMN) test suggested that most of this nitrogen was probably lost to the atmosphere by denitrification (to N_2 gas) or in drainage water.

Adapted plan

To help rescue the crop, we shifted the trial approach to make sure the remaining nitrogen applications hit the mark. We put more focus on a slow-release foliar product (based on N-methylene technology) that has the potential to reduce the total nitrogen dose needed. With roots compromised after sitting wet, the season provided a fantastic opportunity to assess the merit of foliar applications.

The farm standard nitrogen treatment was 200 kg/ha, applied to soil across three splits (adjusted for expected yield, as per RB209 guidance). Two foliar treatments were also tested. Both received the 70 kg of soil-applied nitrogen at the first split with a further 50 kg/ha applied at either the second or third split. When a split had no soil-applied nitrogen, the equivalent of 40 kg/ha of foliar-applied nitrogen was applied instead. The total applied nitrogen in the foliar approach was 160 kg/ha. The approach was reviewed throughout the season, taking crop demand and nitrogen limits (N-max) into account.

Strategic Cereal Farm Scotland

In its fourth year of a six-year tenure, Strategic Cereal Farm Scotland (located near Fife) is currently the longest-running farm on our books. Host farmer David Aglen bases his decisions on evidence, which is why he is keen to run nitrogen management trials.

Like David Blacker, his multi-season trials also compare foliar nutrition with the farm standard. The current trial treatments include two ammonium nitrate (AN) applications, a single AN application combined with two or five foliar nitrogen applications and no AN with six foliar nitrogen applications.

Another experiment uses in-crop measurements – derived from a Brix meter (which measures plant sugar status) and SPAD (which measures leaf nitrogen status) – to tailor nitrogen applications. A no-fungicide treatment has been overlayed in these trials to gauge the impact of tailored nutrition on disease levels. The impact of seaweed applications is also being assessed.

Strategic Cereal Farm East

Our newest Strategic Cereal Farm is the second one in the East, this time in Norfolk at Morley Farms. Once again, nutrient management investigations feature prominently in the trials hosted by David Jones (for details, see Arable Focus Summer 2024).

Thanks to its close ties with the Morley Agricultural Foundation (TMAF), the farm has Soil and Agronomic Monitoring Study (SAMS) sites. These provide an excellent source of site-specific, long-term (2018–23) soil health and yield data that cover high-, low- and variable-yielding areas. The current winter wheat trial will add to the data set and specifically investigate NUE. As with other Strategic Cereal Farms, trials will also compare soil-applied nitrogen with a foliar-applied product.

Assessing the impact

Each winter, we release the latest results from the farm network on our website. Reports will provide details of all 14 trials across the network, including those at Strategic Cereal Farm South, which leaves the network this year.

For the latest information, visit:
ahdb.org.uk/strategic-cereal-farms

The Monitor Farm network also features many NUE trials. From adapting RB209 recommendations to using 'miracle' products, foliar nitrogen, micronutrients and grain nutrient data, there is a lot to discuss. Find your local meeting this winter at: ahdb.org.uk/monitor-farms

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Championing cover crops

Amy Catling introduces a UK network set up to evaluate cover crop approaches.

Interest in cover crops has ramped up over the last decade. The recent surge in popularity has been driven, in part, by Sustainable Farming Incentive (SFI) opportunities.

Undeniably, adding cover crops to the arable rotation can deliver many environmental, soil, crop and economic benefits. These have been relatively well documented. The major challenge is that the best cover crop choice depends on the farm's aims and objectives and how well it fits the system.

With the choice broad and the systems diverse, farmers who attended our events during 2023/24 often told us that a lack of good-quality information hampers their cover-crop decisions, including which species to grow and how best to establish, grow and terminate them.

Earlier this year, this feedback was discussed by the new R&KE committee at its inaugural meeting (see Page 4). It led to the AHDB Cereals & Oilseeds Sector Council approving up to £60,000 to fund work in this area in the current financial year.

Part of the funding has been allocated to a new UK network of cover crop champions. First pioneered in the USA, cover crop champions tackle the complexity associated with cover cropping and share their experiences with other farmers.

Each farmer champion will establish, grow and terminate a cover crop during the 2024/25 growing season. They will follow a common framework (including measurements), which will help us interpret the findings, build a bigger picture and make sure the network is as relevant to as many people as possible.

Introducing your cover crop champions

Scotland: David Fuller-Shapcott, Sweethope Farm, Scottish Borders. This trial will test if a biostimulant seed treatment (based on endophytes) can improve the germination and establishment of two simple cover crop mixes.

Northern Ireland: Chris Gill, Caledon Estate, County Tyrone. Chris will use sheep to graze a hybrid kale cover crop at two grazing intensities (high and low, with the option for a second graze on the latter).

North East: Robbie Stephenson, Crawleas Farming, County Durham. Robbie will test a bespoke cover crop mix to boost biomass for sheep grazing ahead of planting potatoes (it will be compared with the farm's traditional mix and a no-cover area).

North West: Charlie Copley, Reaseheath College Farm, Cheshire. Charlie will use various cover crop mixes and compare them with overwinter stubble. The trial will underpin discussions with students about using cover crops to protect and improve soil after a maize crop.

East Midlands: Ian Matts, Brixworth Farming, Northamptonshire. Ian will use sensors to track soil nutrients and moisture to assess the impact of cover crops (such as how well legumes fix nitrogen and buckwheat scavenges phosphorus).

East Anglia: Jonathan and Jane Clarke, Bury Farm, Essex. Relatively new to cover cropping, the Clarkes will explore various establishment techniques to identify the best approach for their farm.

South East: Rob Waterston, Welford Estate, Newbury. Rob will use a multi-species mix to deliver diverse root architecture and strong biomass (with potential for grazing), with the ambition to reduce artificial nitrogen inputs in his spring malting barley.

South West: Bob King, Lower Baynton Farm, Wiltshire. Bob will use a diverse, multi-species cover crop for grazing by sheep during winter before direct drilling spring crops. The trial will quantify the wider benefits of cover crops.

We will create evidence-based case studies that chart their unique journeys, which will be published on our website and social media channels.

Beyond Farm Excellence

The cover crops champion initiative is one example of how we are pushing the boundaries of the Farm Excellence network, which includes Monitor Farms and Strategic Cereal Farms.

We are also working in partnership with the creators of the Cover Crops Guide to secure the guide's legacy and keep guidance up to date and accurate. Recently, the guide's expert steering group identified development priorities, including the provision of practical case studies, which the cover crop champions will provide.

Yorkshire farmer Angus Gowthorpe, who led the first phase of the Cover Crops Guide (with funding from Innovate UK), said:

"The Cover Crops Guide provides independent information to help farmers select, establish and terminate cover crops. It was co-designed by farmers with the help of the Yorkshire Agricultural Society's Farmer Scientist Network. The AHDB-funded cover crops champions align with the guide's practical approach and will further strengthen the practical, independent information available to farmers."

With many evidence gaps identified, we are also using the cover crop funding to invest in a scoping review to examine the long-term impact of cover crops on soil health and destruction methods. The review starts in November and reports in spring 2025, with revised guidance available in summer 2025.

Our cover crops web page features in-depth information, including cover crop champions, the Cover Crops Guide, research investment and general guidance.

ahdb.org.uk/cover-crops

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