



WELCOME



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Stephen Swainston
(Managing Director)
joined BBRO in May
2025

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INTRODUCTION

STEPHEN SWAINSTON

2025-26 has been a year of transition, collaboration and renewed focus for BBRO. Having joined the organisation in May 2025, I have been privileged to witness first-hand the dedication of our growers, industry partners, board members and staff, all working towards a common goal: ensuring a profitable, resilient and sustainable future for UK sugar beet production.

As we entered the final year of our 'Delivering for our Growers Strategy (2022-2025)', many of the challenges identified at its launch remain highly relevant today. Growers continue to face increasing pressure from evolving environmental legislation, climate variability, rising production costs and the ongoing need to improve crop resilience. Against this backdrop, BBRO has remained focused on delivering practical, science-led solutions that support grower decision-making and industry competitiveness.

Research has continued to focus on grower priorities. Virus yellows (VY) remains a major threat, and BBRO has maintained its commitment to sustainable, integrated disease management through the development of tolerant varieties, improved forecasting and evaluation of new control approaches.

The increasing frequency of extreme weather events has also reinforced the importance of crop resilience. Recent seasons have highlighted the impact of flooding, drought and temperature extremes on crop performance. As a result, our research programme has placed greater emphasis on plant resilience, soil health and agronomic practices that help crops perform in more variable conditions.

Knowledge exchange remains central to our work. Growers consistently tell us that timely, practical advice is as important as the research itself. During the year we expanded engagement through technical events, demonstration sites, digital communications and direct grower support. We are particularly pleased with the launch of our new website and interactive Recommended List (RL), with additional features and tools planned to further enhance their value to growers and stakeholders.

This work would not be possible without the continued support of our levy payers and industry partners. Their investment enables BBRO to deliver independent research focused on the priorities of the UK beet industry. As agriculture undergoes significant change, collaboration between growers, processors, researchers and policymakers is more important than ever.

Looking ahead, we will build on the achievements of the past three years with a refreshed strategy and clear vision for the future. Our focus remains on delivering value through high-quality research, effective knowledge exchange and support for the industry's evolving challenges and opportunities.

Finally, I would like to thank everyone who has welcomed me to BBRO and continues to contribute their expertise, experience and support. Together, we are ensuring the UK sugar beet sector remains productive, profitable and well positioned for the future.

Stephen Swainston

Managing Director, BBRO



BBRO BOARD

Changes to governance

In 2025, the decision was taken to undertake a review of BBRO's governance arrangements. As part of this process, Colin MacEwan and Stephen Swainston were appointed to the BBRO Board, bringing additional leadership and strategic oversight to the organisation.

As part of these governance changes, the Stakeholder Committee was stood down and replaced by a new science-focused Technical Committee. This committee has been established to provide expert guidance and challenge, helping to ensure that BBRO adopts the most effective methodologies, scientific approaches, and best practice in order to deliver the highest quality research outcomes and maximum value for the industry.



COLIN MACEWAN

CHAIRMAN



KEITH PACKER

MANAGING DIRECTOR
BRITISH SUGAR



DANIEL GREEN

HEAD OF AGRICULTURE
BRITISH SUGAR



DANIEL STONEMAN

HEAD OF AGRICULTURE
FINANCE
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DR JAMES NORTHEN

HEAD OF NFU SUGAR



KIT PAPWORTH

NFU SUGAR BOARD
CHAIRMAN



SIMON SMITH

NFU SUGAR BOARD
VICE CHAIRMAN



STEPHEN SWAINSTON

BBRO MANAGING
DIRECTOR

FINANCE 2025-26

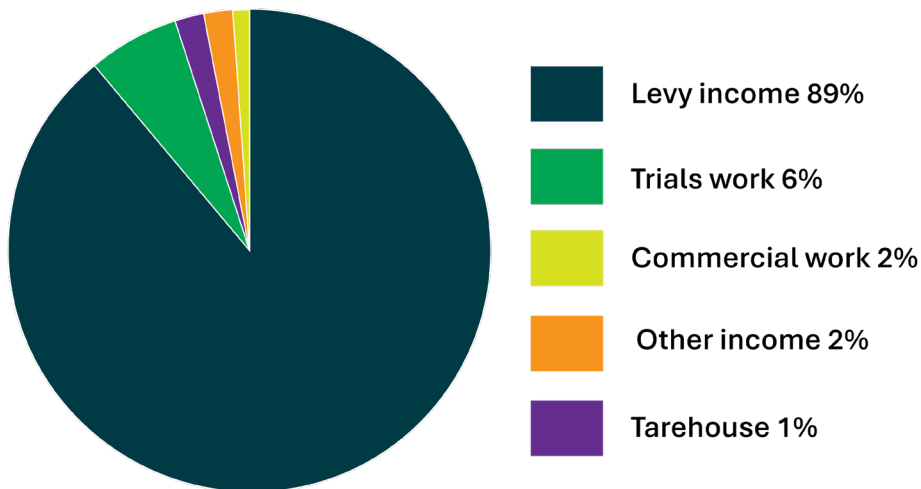
LAURA KEELEY

Revenue for the year exceeded budget, principally reflecting strong crop performance. Although drought conditions presented some challenges during the middle of the growing season, yields across many areas proved resilient, supporting a higher tonnage base and, consequently, higher income than anticipated.

The BBRO team have continued to make strong progress across its research and knowledge exchange programme, with around 30 projects active during the year. These projects span a broad range of priorities, across both crop production and protection. The scale and breadth of the work reflect BBRO's commitment to delivering practical, science-based solutions for growers while ensuring a strong pipeline of future research and development activity to support the competitiveness and resilience of the UK sugar beet industry.

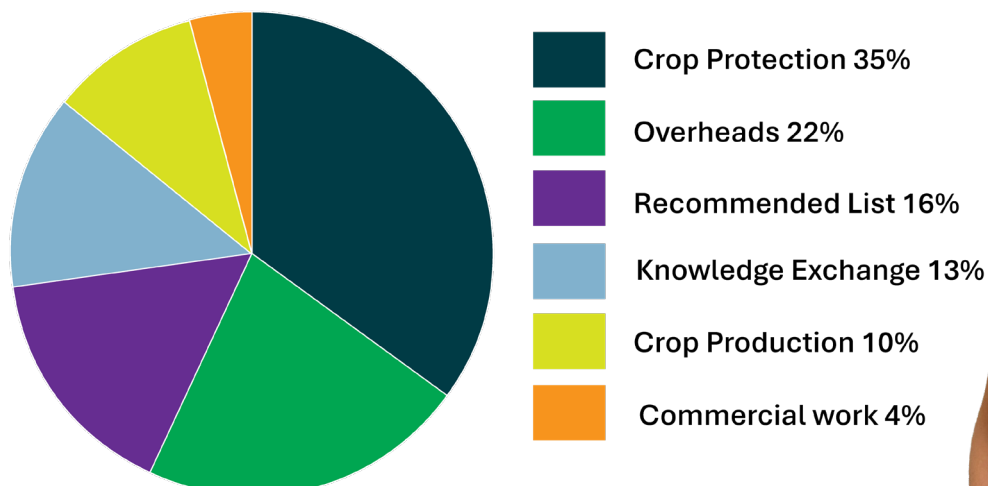
Overall, 2025/26 was a strong financial year for BBRO, providing a solid platform from which to fund and progress our project portfolio into the next financial year.

Income



Pie charts shown indicate the percentage of income and expenditure attributed to the areas outlined

Expenditure





CROP PRODUCTION

DR GEORGINA BARRATT

The 2025-26 crop production research programme brought together a wide range of sugar beet projects covering soil health, crop nutrition, greenhouse gas emissions, drought tolerance and on-farm innovation. Many of the projects were in their second year, and the data generated provided valuable insight ahead of the final year of trials.

Cover crop work included replicated strip trials, exploring how different mixes could improve soil health, nutrition and yield. Soil management research included trials to refine tillage and harvest practices, alongside the flux tower project measuring greenhouse gas emissions and carbon dynamics. The PhD project at the University of Lincoln, undertaken by Abhishek Tanwer, continues research into sustainable soil management, including root residues, rotational effects and post-harvest management of beet tops.

Nutrition continued to be a key focus with projects investigating nitrogen placement, low-carbon nitrogen fertilisers and nitrogen-related biostimulants. Together, these projects will contribute to evidencing how nitrogen inputs can be optimised whilst maximising yield.

Drought-related research remained a priority, with the project to assess drought tolerance in UK varieties ongoing. This is supported by the PhD project at the University of Essex undertaken by Myo Wai, further developing phenomics technologies for rapid drought screening.

Grower-led innovation was also undertaken with further strip trials and involvement in a regenerative agriculture trial.

Overall, the programme ranged from smaller on-farm trials to larger strategic investments, with several projects supported through external funding.

During the year, the Crop Production team has grown, following my promotion to Head of Crop Production and the recruitment of Dr James Milson as Crop Production Specialist. James joined the team in February 2026 and began his first full year of sugar beet trials, ahead of taking on a greater role in future projects. It was a successful year, and we look forward to delivering the final year of many trials in 2026-27 and sharing the key findings.



Crop Production Projects 2025 - 26	
Maximise soil health in sugar beet rotations	
Cover crop strip trials	Assess cover crop impacts on sugar beet nutrition and yield, identifying optimal mixes for soil health and crop performance
Optimising sugar beet tillage and harvest practices to maximise soil health	Support reduced tillage before sugar beet through field data and on-farm demonstrations, assessing the performance of cultivation systems ranging from high-low disturbance cultivations and strip-till approaches
Cover crop and digestate trial	On-farm trial assessing optimal cover crop mixes and organic manures to enhance sugar beet growth, nutrition and yield
Optimise nutrition in the crop whilst protecting the environment	
Optimising nitrogen application to sugar beet using placement and banding of fertiliser	Assessing nitrogen use efficiency and crop performance of broadcast vs. placed fertiliser in combination with different fertiliser blends whilst maintaining yield and reducing impurities
Identifying low carbon nitrogen fertilisers, compatible with the demands of production	Identifying if high organic matter slow release fertilisers perform as well as traditional sources in sugar beet, reducing overall nitrogen use whilst maintaining yield and reducing impurities
ADOPT - Unlocking PoteNtial: precision sugar beet nutrition	Assessing nitrogen use efficiency and crop performance of broadcast vs. placed fertiliser in combination with different fertiliser blends and with the use of a phosphate release product
Commercial trials looking at N related biostimulants	Identify and test biostimulant products which have a sound scientific basis for enhanced N availability potentially reducing bagged N requirement
Ensure GHG emissions are minimised, whilst maintaining crop performance	
TMAF flux tower project	Produce data on Green House Gasses (GHG) emissions, measuring the carbon dynamics of sugar beet crops with different management approaches and the subsequent impact and comparisons on the following crop
PhD - Exploring sustainable soil management approaches in sugar beet production	Identify management techniques which can reduce GHG emissions from sugar beet production on farm and identifying how much root is left after harvest and the impact on soil health/carbon. Assess rotational impacts of sugar beet on soil health and how best to manage sugar beet tops post harvest to optimise soil health and reduce GHG emissions
Be the preferred organisation for information on sugar beet physiology and impacts of abiotic stresses (drought)	
Assessing drought tolerance in UK sugar beet varieties	Provide data for a descriptive list score for drought tolerance Identify drought tolerance in RL varieties and support breeders in identifying drought tolerance in breeding lines for the UK market
PhD – Phenomics technologies to improve sugar beet water use efficiency	Generate descriptive drought tolerance scores, evaluate the feasibility of screening RL varieties at seedling stage, assess the relationship between seedling and mature plant drought tolerance, develop spectral models for drought tolerance and water-use efficiency, and establish rapid field-based screening methods for drought tolerance
Empower farmers to undertake their own trials to accelerate adoption of new practices	
Development of strip trials harvester	Develop a BBRO strip trials harvester for more robust assessment of tramline scale trials and expand farm led trial network, ensuring on farm trials are correctly designed and answer the questions posed
Assessing regenerative agriculture approaches	Assess performance of sugar beet grown under different regen systems, ensuring on farm trials are correctly designed and answer questions posed

On-farm trials

One of the longest running trial series in Crop Production is the tillage trial. First undertaken at Holkham Estate in 2023 the trial has evolved over the years and was one of the first strip trials that BBRO undertook in recent years. Initially looking at ploughing but now comparing to strip till the trial has been undertaken for three years. In 2025-26 the trial data supported the previous two years and led to a change of practice. Traditionally Holkham have undertaken deep tillage ahead of a cover crop followed by tines and discs in the spring. The trials have shown that shallow discs in the spring are as effective and Holkham have adopted this approach.



Tillage trial at Holkham Estate

Many aspects of crop production research are best suited to being tested on farm in the system in which the change is being assessed. Differences in rotation, soil type, crop inputs and machinery mean there are multiple variables that are only representative on any given farm. Unlike crop protection approaches which are less influenced by these factors, tillage, nutrition and cover crops are heavily affected. For this reason, on farm strip trials, backed up by small plot trials, are the best way to test these new approaches. BBRO is keen to support more on farm strip trials and is already working with seven growers on a range of topics. The BBRO team can help design the trial in a scientifically robust way which is practical to implement on farm alongside trials assessments including final yield. So, if there is something you want to change on farm but want more evidence that it is the right thing to do reach out to the Crop Production team and we can help you get the answers to your questions.

Fertiliser product

The second year of the small plot trial assessing alternative fertiliser products is progressing well. Only one of the two sites delivered reliable data due to poor crop establishment but the data from the single site, coupled with the two sites the year before is sufficient ahead of the third year of trials. Organic matter-based fertilisers such as CCm appear to perform as well as traditional ammonium nitrate and urea. Both years the weather conditions have been good for nitrogen uptake so the dry conditions in the current trials will provide an interesting contrast.

Fertiliser placement

There were three placement fertiliser trials in 2025-26. One assessed nitrogen rates and placement compared to broadcasting. The other two were focused on placement and product choice. More data are needed to draw conclusions, but one observation was that the placement of 100kg N/ha at drilling did not have an adverse effect on the crop.



Fertiliser placement trial, Morley

Flux tower - carbon monitoring

The flux tower project at Morley Farms is measuring CO₂ emissions post cereal harvest through the following sugar beet and spring barley crops. Two fields are managed differently to compare and contrast the difference in emissions between them.

In February 2024, the first round of measurements had been completed following the spring barley harvest. This provided a full dataset showing carbon emissions from a sugar beet field through to the following spring barley crop. The full report is now available on The Morley Agricultural Foundation (TMAF) website. A key observation was the impact of the resistant ryegrass in one of the fields. Over the season, this suppressed sugar beet growth and meant the field took up less CO₂ than the field without ryegrass pressure. Overall, once the exported sugar beet crop had been accounted for, both sugar beet fields were small net sources of CO₂. In 2024, the following barley crop showed little difference in CO₂ dynamics between the two fields. Yields were also similar, suggesting there was no lasting effect from the difference in management strategy.

The next phase of the flux tower project began after harvest in August 2024, when the two systems were dismantled and moved 2.5 miles to two further fields at Morley Farms for the next cycle of beet and following spring cereal.

In 2023, a delay in the equipment arriving meant measurements did not begin until after the beet had been drilled, so the planned comparison between cover crop and stubble ahead of drilling was missed. This was not the case for the next cycle. The flux towers were installed in time on one field left as stubble and another established with a cover crop, providing an opportunity to compare carbon dynamics between the two approaches. The data collected so far shows the cover crop to be a small sink of CO₂ of around 1t CO₂ ha⁻¹. The sugar beet was once again a net emitter whilst the barley was a net sink but straw offtake was unaccounted for.

Overall, the project is showing that yield is a key driver of emissions and maximising yield through good, environmentally aware crop management is the best way to optimise GHG emissions per tonne of beet produced.



Flux tower measuring carbon emissions



CROP PROTECTION

DR ALISTAIR WRIGHT

It was another interesting year in Crop Protection at BBRO. The season got off to a dry and warm start, which posed a challenge for emergence. It was the first year since 2021 without a derogation for use of Cruiser SB, resulting in foliar applications of insecticides being exclusively relied upon for chemical aphid control. Thankfully, virus yellows (VY) pressure was rather low (forecast in March at 17%, 66% lower than in 2024), helped by a combination of a relatively cold winter, windy weather during the migration and control from foliar sprays when required. This March, in time for the 2026 crop, we were able to launch a new format VY and aphid forecast. This is part of the BBRO-Rothamsted Research StatBeet project. For the first time we were able to not only forecast aphid risk on the 1st of March but understand the level of confidence in the forecast and apply in-season revisions during March and April, before the first aphid actually arrived.

Foliar disease pressure in 2025 was well controlled with fungicides and would have caused inconsequential levels of yield loss. Rust crept into canopies as we moved into autumn and earlier in the season (July) we saw some alerts for Cercospora from our Daily Infection Value forecasting. Lesions could be seen across a range of our CropWatch sites by mid-August, but the disease was thankfully kept at bay due to the dry summer and never reached severe levels. However, it proves that Cercospora is now an established problem on our shores and highlights our need for greater understanding about this disease.

Whilst the drought conditions prevented Cercospora in July and August, it did instead favour our latest pest, beet moth. Lighter and sandier soils bore the brunt of the damage caused by the caterpillars and by September evidence of infestation could be widely seen in most fields. With limited options to control the larvae, we, alongside colleagues at NFU Sugar and British Sugar gained an Emergency Authorisation in July for the use of Coragen (chlorantraniliprole).

A great example of when an emerging threat develops, we can act swiftly as an industry to secure options. Longer term, we hope our beet moth strategy (outlined on page 15) will develop sustainable and integrated solutions for beet moth.

One topic remains constant when we look at crop protection. It featured heavily in our messaging throughout 2025-26 and continues to be one of the most important aspects of farm management where growers can make a real impact: on-farm hygiene. This is, and will continue to be, one of our most effective crop protection strategies.



Crop Protection Projects 2025-26	
Weeds	
Annual broad-leaved weeds - Herbicide trials	Trials series to look at options for broad-leaved weed control on three different soil types experiencing a range of weed pressures. Testing new actives and options without existing chemicals
Pests	
Soil pests – options without Tefluthrin	Collaboration with IIRB partner institutes to investigate the viability of alternative chemicals to control soil pests
BCN Identification PhD	Project with University of Hertfordshire to develop a rapid, quantifiable and in-field diagnostic for BCN
Monitoring leaf hopper populations around the UK sugar beet crop	Surveying of populations of the SBR/RTD key vector species (<i>Pentastiridius leporinus</i>) on coastal reeds and adjacent sugar beet populations
Aphicide trials	BBRO trial series to assess efficacy and longevity of new and existing aphicide products
Developing solutions to combat beet moth	Research to understand the lifecycle and behaviour of beet moth, methods to trap it, cultural management and chemical control
Diseases	
Yield impact of Cercospora	Inoculated trial of 2026 RL varieties to assess yield impact of Cercospora and compare to variety scores on RL
Fungicide trials	BBRO trial series to compare and assess the efficacy of fungicides to major foliar diseases e.g. powdery mildew, rust and Cercospora
Seedling disease ID	Development of a suite of diagnostics to use within BBRO and on-farm to diagnose the presence of specific species of soil-borne diseases which cause black-leg and damping off
Virus Yellows	
Integrated methods to manage VY	Test novel solutions (Attractants, Beneficials, Camouflage & Deterrents) to manage VY to reduce reliance on insecticides
StatBeet	Refinement and regionalisation of Rothamsted/Broom's Barn aphid and VY models. Including the annual VY forecast on 1st March
Endophyte grasses – Defra ADOPT	Adopting resilient sugar beet at farm scale - Working with Niab and Morley Farms to support soil and crop monitoring of endophyte grass and strip tillage field trial
CropWatch	
Aphid monitoring	Yellow water pan network operated at 20 sites alongside wider aphid counts at 50 sites in the spring
Spore trapping	Spornado network to trap spores of cercospora and rust and assess QoI resistance in CLS.
Beet moth monitoring	Trapping of beet moth at the 20 CropWatch sites using traditional sticky traps and AI automated traps from XFarm
Weather stations	Deployment of new weather stations to record conditions across the growing area

Project Goliath

In 2025 we delivered our seventh year of BBRO's Project Goliath, our variety test bed for tolerance against the very serious problem of VY. We once again reared well over 500,000 aphids, enough to inoculate over 50,000 plants with either beet yellows virus (BYV, causing up to 50% yield loss), beet mild yellowing virus (BMV, up to 30% yield loss) or beet chlorosis virus (BCHV, up to 25% loss). We tested

24 varieties and saw good early symptoms of disease develop into July. Unfortunately, the drought conditions of the season led to much more severe yield loss than we would expect, effectively invalidating the trial. Lessons have been learnt for 2026, and we are now ensuring the trial can be irrigated allowing us to deliver this vital variety information in the future.

Now that we are starting to see a range of varieties on the market with claims against VY, BBRO are still planning to release information on our yield observations from Project Goliath to better guide the uptake and use of VY tolerant varieties in the future.

Variety Tolerance Classifications

	Controls				VY Tolerant Candidates							
	Marancha KWS	BTS 1915	Duplona	Morgan	10	11	12	13	15	16	17	
Uninoculated Adjusted Yield (t/ha @ 1000 Sugar)	87.6	101.5	101.6	104.3	95.0	93.8	95.0	97.7	95.8	101.4	100.5	
BCHV	3	10	17	14	4	12	6	9	11	13	12	
BMV	9	20	19	21	12	19	16	16	9	22	12	
BYV	24	37	45	42	29	31	28	35	35	36	38	



Alistair presenting findings at BeetTech

Soil pests

As most readers will be aware, we are heavily reliant on Force ST (Tefluthrin) for control of insect pests during establishment of our sugar beet. BBRO has worked with our international counterparts via the IIRB (International Institute of Sugar Beet Research) soil pest working group for a number of years to investigate possible alternatives to Force ST.

In 2025 we delivered trials looking at both aphid and wireworm control which builds on a range of trials hosted in the UK, Belgium, Denmark, Sweden, Finland and the Netherlands between 2022 and 2025. Collectively, the findings show that no forthcoming treatments offer the level of control against soil pests that we see from Force ST treated seed. Ultimately, it is important we keep this product available to us for as long as possible whilst adopting alternative control measures (cultural, rotational and hygiene) to minimise pest development ahead of sugar beet.

Weed control

With support from Pam Chambers and British Sugar, BBRO delivered a range of herbicide trials in 2025. Once again these highlighted the importance of the correct dosages and programmes for weed management and emphasise just how important getting this step right is to maximise the yield of our crops. We also held a weeds seminar in February 2026 which gathered together a range of specialists from across the industry. This has helped structure the research areas of our new integrated weed management strategy which will be delivered over the next five years with important target areas being identified such as ALS weed resistance, loss of crucial chemistries and precision spray technologies. With Pam retiring at the end of July 2026, we thank her for all her help, knowledge and enthusiasm for weed control in sugar beet over her career. BBRO are pleased to now bring this work in-house with help from our new Crop Protection Technical Specialist, Libby Alexander.

Virus Yellows IPM

Developing integrated and practicable management strategies for VY is a core activity in managing this disease in the future. Our strategy is split into four categories which we hope will harmonise with the use of novel varieties and sustainable aphicides to protect your crops into the future.

Beneficials: Quantifying the impact of naturally occurring beneficial insects (such as ladybirds and lacewings) from environmental features found on farm. We are grateful for the help of Dewar Crop Protection to gather a vast array of data once again, helping build up the picture of just how beneficial a beneficial insect can be.

Camouflage: One of our most promising areas of IPM. We repeated our field-dye approach in 2025 at a range of sites. Once again, we have seen useful reductions in aphid levels where dyes are used and plan to scale this up to field level studies from 2027.

Deterrents: We collaborated with French company AgriOdor for a second year in 2025. BBRO spread strips of their aphid-repelling beads (infused with scent to dissuade aphids from landing) at eight fields across the sugar beet area. Testing the product is tricky as it relies on timing the application with aphid migration and the strips are so large we cannot undertake traditional replicated trials. Our results were mixed and inconclusive in 2025. Thankfully, this product is under investigation across Europe so we can also see how it performs elsewhere and assess if it could be a helpful addition to our pest management arsenal.

New Project: Extending on previous BBRO trials, we are excited to collaborate with Morley Farms and Niab as part of a Defra ADOPT project to assess the impact of using endophyte grass to manage aphids in sugar beet. The grass was sown in late summer 2025 and grew well into the winter. We now await the findings from how the sugar beet grow during 2026 and, crucially, any impact on aphid population development in the spring from the alkaloids which are produced by the grass and should then be taken into the following sugar beet as it rots down.



Dyes may provide a form of crop camouflage



AgriOdor being applied to sugar beet crop



Following its launch at BeetTech 2025, we pulled together our crop monitoring activities under one name for the first time this year – CropWatch.

We now aim to provide you with one central hub to see what's going on in crops local to you be it aphids, moths, fungal spores or weather. We invested in 16 weather stations from Delta-T devices to supplement BBRO's existing 4 stations; these are essential for pest, disease and crop modelling in the future. We also expanded the number of monitoring sites to 20, ensuring we get the best possible spread across East Anglia and the East Midlands. Finally, a big thank you to the team who run the sites (counting aphids, changing spore traps and checking equipment 30+ times during the season) as well as Dr Kate Orman who pulls all the data together back at Norwich. Without the help of the site managers and the lab team we wouldn't be able to provide this service, and we are excited to see how it continues to develop in the future with localised dashboards, forecasts and alerts.



CropWatch site at Brettenham with monitoring equipment.

Front to back:

Silver-Y moth Delta Trap

Yellow water pans for aphids

Automated XFarm beet moth trap

Weather station

Spornado spore trap (also shown right)





In 2025 it became clear that beet moth has now become an established problem in UK sugar beet crops, after our first major outbreak in 2022.

This species favours warm and dry conditions, which, with climate change are appearing to impact our crops more regularly and to a greater degree of severity. When sugar beet canopies wilt they allow the moth to lay eggs on and around the heart of the sugar beet. These then hatch into larvae which can feed on the leaves and crown and cause a great deal of damage.

BBRO have launched our beet moth research strategy to understand more about this pest and ways in which we can control it in the future. The strategy comprises four main areas:



1. Quantifying the length of the moth's lifecycle and where the females lay their eggs. These findings will allow us to better predict when caterpillars will be active in the crop

2. A network of smart pheromone traps from XFarm across the sugar beet growing region to help understand if discrete generations are seen and correlating this with in-field plant damage

3. Assessing the influence of variety on severity of beet moth damage as well as any impact of tillage to prevent over-winter survival

4. Investigating the interaction of different spray timings and insecticides to understand which are best suited to form part of an integrated beet moth management strategy

Rest assured, BBRO is taking this issue very seriously. This work represents an investment of over £250,000 in trials and research between 2026 and 2028. We are determined to find practicable controls and as soon as any findings are available, we will share them for on-farm deployment to help protect your crops and support the development of integrated solutions for beet moth management.



FIELD TEAM

STEPHEN ALDIS

Reflecting back on the season is always a useful exercise although sometimes I am sure we all try to avoid it. The weather was very favourable at the start and end of the year, but lacked moisture in the middle, and so 2025-26 proved another challenging year to deliver the quality of trials we require and expect from ourselves.

Drilling

A good start to drilling on the 20th of March, gave a 5 day headstart on 2024 with all main sites drilled by the 4th of April with little disruption. With the late Easter it meant the whole field team could enjoy the bank holiday weekend. Drilling conditions were consistently very good, and predictable weather allowed us to plan movements and keep pace with host growers whether for our small plot work or our newer strip trials programme.



BBRO's two tractors working together for the first time

If only it had rained!

I am sure no one will be surprised to hear me mention the dry spring, but despite an excellent set of seedbeds and run of drilling, plant establishment would be our biggest challenge. A lack of rain post drilling ultimately lost us a range of trials, especially those on heavier soils due to uneven emergence. This proves to be an ongoing challenge in dry springs and continues to be an area of focus for us to improve, either through cultivation type, timing, drill set up or drill specification.



Harvest

The start of harvest progressed very well, good lifting conditions allowed for consistent trials output, even allowing BBRO to lift some additional commercial trials in October and November. With the introduction of the late lift Recommended List trials, the number of January lift plots increased significantly. On paper, harvesting capacity isn't a problem; however, the wet weather in January did prove a challenge for us, along with many commercial harvesters I know. Fortunately with plenty of communication with host growers and contractors we managed to capitalise on three breaks in the weather. With the last trial lifted on the 28th of January, allowing time for Niab to process the data and get the information out in February.

A slight variation on our normal harvest work is the introduction of the fertiliser placement strip trials, discussed in Crop Production (page 8). Working closely with the growers, harvesting contractor and Ben Burgess we were able to utilise the yield monitoring system being evaluated to see if we could find a difference in the trial. It was exciting to use the technology in this way and whilst we need more data for the trial to draw conclusions, I think we can safely say that operationally it was a success along with minimal disruption to the commercial harvesting process. We must thank all those involved and we hope to continue to work with them and the technology, to explore what it can offer the industry as a research tool.



Fertiliser placement strip trial

Continuing to invest

With ever increasing hire costs, extended seasons and a wider range of summer jobs, BBRO now operates two of its own tractors. The first purchase of a 6135R John Deere in 2023 has proved very capable, being large enough to run out trials harvesters, but still light enough to operate the beet drills and hoes. A second 3-year newer machine has been added with both machines performing very well.



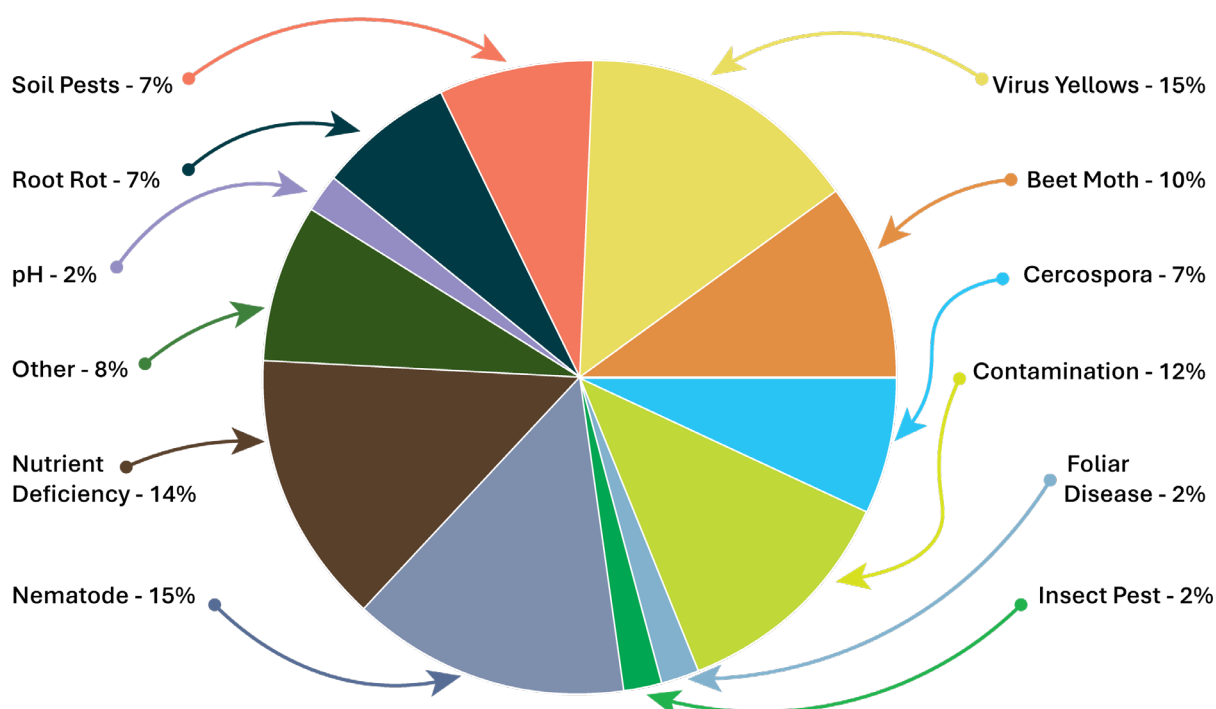
Plant clinic is your free service to help diagnose problems and their causes in your sugar beet crops. The lab was busy again in 2025 with a total of 61 cases received and the busiest months being June and August. The majority of plant clinic cases in 2025 season related to either nutrient deficiencies, nematodes or VY. However, there was a wide range of cases across the whole season. In line with our developing research activities into beet moth and Cercospora, we saw increasing numbers of cases with these problems in 2025.

The plant clinic service is administered by Libby Alexander with support of all of the BBRO science team. We can help with a range of diagnostic tests including:

- Microscopic investigation of foliar diseases, soil pests and beet cyst nematode
- Confirmation of VY infection via ELISA
- Germination tests
- Soil pH checks
- Investigations of nutrient deficiencies & root rots
- Expert advice and contacts with external laboratories for all other issues

To raise a case with us please complete the online form, Libby will then contact you with requests for samples or further information.

2025 Plant clinic cases



RECOMMENDED LIST

PROF MARK STEVENS

The annual BBRO Recommended List (RL) is the UK sugar beet industry's primary independent variety evaluation programme. Its purpose is to assess the genetic potential, agronomic performance and disease resistance of new sugar beet varieties and provide growers with clear information on the best options for commercial production. The programme is funded and managed by BBRO, with data generated through a network of carefully controlled field trials.

The 2027 RL was published in February 2026 and one of the most significant developments has been the transition towards evaluating commercially primed and pelleted seed products rather than solely assessing the underlying genetics. This change reflects grower demand for information that more closely represents the seed products actually delivered and planted on farm. The 2027 RL is the first list to include such data derived from these commercially prepared seed lots.

The BBRO RL combines data from both RL and Varietal List (VL) trials. While the VL is a legal requirement before a variety can be marketed, the RL provides additional performance information that helps growers make informed commercial decisions. Varieties are assessed for key characteristics including sugar yield, root yield, sugar content, bolting performance, establishment, and tolerance or resistance to important pests and diseases such as rhizomania, beet cyst nematode (BCN), rust, powdery mildew and VY.

Another important feature of the latest programme is the growing emphasis on trait-based selection. Recent RLs have included increasing numbers of varieties with specialist traits such as BCN tolerance, ALS herbicide tolerance and VY tolerance. This reflects the industry's response to increasing pest and disease pressures and the need for more resilient cropping systems. Growers can now use the interactive RL platform launched in February 2026 to aide and simplify decision making to filter varieties according to specific traits and drilling dates, thereby making variety selection more targeted and efficient.

More recently, the RL has also expanded its data offering through untreated disease trials and late-lift trials. Untreated trials help quantify disease susceptibility and yield retention without fungicide protection, while late-lift trials provide insight into the performance of varieties harvested later in the season. These additions support more sophisticated management decisions and help growers maximise profitability under different production systems.

Overall, BBRO RL continues to evolve to provide a comprehensive decision-support tool. By incorporating commercial seed technologies, expanded trait information and enhanced trial data, it provides UK sugar beet growers with robust, independent evidence to improve variety choice, crop resilience and long-term productivity.





INTERNATIONAL INSTITUTE
OF SUGAR BEET RESEARCH

INTERNATIONAL COLLABORATION

The International Institute of Sugar Beet Research (IIRB) is dedicated to advancing sugar beet production through scientific research, innovation, and knowledge exchange. The institute brings together researchers, agronomists, plant breeders, growers, and representatives of the wider sugar industry from around the world. Its primary aim is to improve sugar beet cultivation and promote sustainable, efficient, and productive beet growing. It has eight study groups (highlighted below) and many of the BBRO team are involved in these. In January 2025, Prof Mark Stevens became its President for the next two years.



Agricultural engineering

The aim of this group is the stimulation of the development and evaluation of economically and environmentally sustainable machinery systems for sugar beet production



Seed quality & testing

Discusses methods to evaluate seed quality in laboratory germination tests and studies on field emergence and the assessment of all seed quality parameters influencing agronomic factors (field establishment)



Communication techniques

Aims to improve information transfer within the sugar sector by learning from the communication techniques and tools used in each country, including AI developments



Beet quality & storage

Studying the parameters affecting beet quality during the growing season, harvest and storage of roots and of all factors that may improve the internal and external quality of sugar beet under different climatic conditions



Genetics & breeding

Focuses on the genetic improvement of sugar beet regarding yield and quality parameters and resistance to biotic and abiotic factors. The evaluation of traits and variety testing methodology are topical issues, including the management of genetic resources and the discussion of breeding techniques



Plant & soil

Focuses on the combined effects of factors and processes in the seed seed-plant plant-soil system on the growth and yield formation of sugar beet. This includes topics from soil science, plant nutrition, irrigation, agronomy and crop physiology



Weed control

Evaluates new and existing weed control strategies in the sugar beet crop with considerations to the entire rotation. Monitoring and effect on weed flora, development of herbicide resistance as well as herbicide phytotoxicity



Pests & diseases

Aims to improve crop protection strategies and to minimise environmental impact. Covering all areas of phytopathology, virology, zoology and germplasm and pathogen resistance

Advanced BASIS Sugar Beet Technology Course 2026

**Gain a clear understanding of the needs for growing,
developing, and managing sugar beet crops.
Make decisions that are agronomically effective,
economically sound, and efficient**

27th - 28th October (British Sugar, Peterborough)

Day 1: Markets, genetics, seed & crop physiology

Day 2: Soil health, cultivations, cover crops & crop nutrition

3rd - 4th November (BBRO, Centrum, Norwich)

Day 3: Crop protection – soil pests & weed control

Day 4: Crop protection – foliar pests & diseases

11th November (Wissington Factory)

Day 5: Harvesting, storage and processing

Exams:

23rd November – online written exam

25th or 26th Nov - online Viva exam

**Limited places available
Enquiries to: info@bbro.co.uk
£1150 including BASIS exam**



GROWER ENGAGEMENT

CHES BROOM

New communications plan launched

We asked growers what improvements we should make to our communications. The words relevant, timely and key were regularly used and helped to form the basis of our new communication plan, including: clearer branding and identity, improved access to information and concise messaging. This led to a new website (page 24), the introduction of Fact Files to replace the Reference Book and most importantly more timely bitesize information to support growers and agronomists.

Advisory Bulletin

The Advisory Bulletin also underwent a rebrand, providing important and timely information with easy-to-navigate links for those requiring more in-depth knowledge. The bulletin also highlights the most relevant Fact File, helping to keep the fundamentals of good beet growing in focus.

BeetCast milestone

In March 2026, the BBRO monthly podcast 'BeetCast' celebrated the release of its 50th episode. With an average of 274 listeners per episode, it has become a well-established and valued component of our knowledge exchange delivery programme.

The summer editions proved particularly popular, likely reflecting the longer hours many growers spend in tractor cabs during this period. Standout episodes included an interview with agronomist Penny Oakes, which attracted 321 listens; a broader crop discussion on wireworms with agronomist Martyn Cox, which received 303 listens; and a pest and disease special highlighting key threats and control strategies, which achieved 331 listens.

These figures demonstrate the continued value of BeetCast in providing timely, accessible technical information to the sugar beet industry.



Growers feedback helped to shape our communications plan



The first new Advisory Bulletin was issued on the 11th March 2026



Grower events

BeetTech events continue to be popular. Growers particularly enjoyed the 'Beet Box' presentations, delivered through headphones. We were pleased to be joined by Prof. Simon Pearson MBE from the University of Lincoln, who spoke about the changing face of agriculture and the emergence of new AI-driven technologies coming to market. Other topics included CropWatch, on-farm trials, weed control, the Recommended List, beet moth strategy, and the launch of our Beet Your Best initiative (see page 26).

We also attended the Morley Innovation Farm in June 2025 to promote pest and disease control and on-farm hygiene to both sugar beet growers and wider industry.

483 people attended our spring and autumn demo farms to hear vital in-season information which built on our theme 'Detail Delivers'. We also organised a special 'Northern Tour' for growers and agronomists in the north to ensure they had equal access to information and the BBRO team; this comprised of 3 separate events over a 2-day period with over 90 people in attendance.

In-depth knowledge transfer

Our Advanced BASIS course was once again over subscribed with 13 participants, 12 of which completed the Advanced BASIS certificate. This 5 day course is aimed at agronomists and sugar beet advisors, although we would also welcome any growers that would be interested in hearing all aspects of the crop (see page 21).

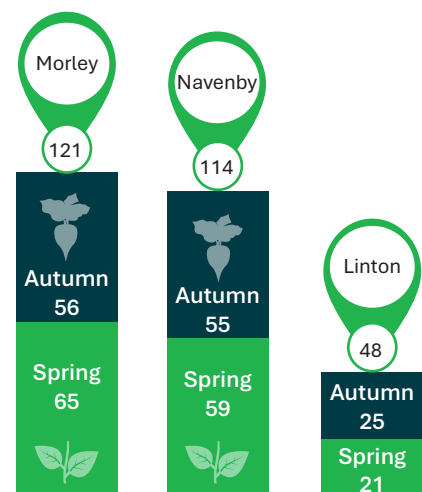
We also hosted part of the Sugar Industry Programme (SIP) where members heard about every element of BBRO from trials to data, crop physiology, and pests and diseases. We also took the opportunity to quiz SIP members on what they wanted to see from their BBRO.

Industry promotion

As part of our public awareness strategy we supported the Royal Norfolk Show, sponsoring the Farming Innovation Hub and showcasing BBRO work monitoring carbon emissions with the aid of a model farm, complete with little lego beet in field. We were joined by Terhi Riutta from the UK Centre for Ecology and Hydrology (2nd left) who demonstrated how the data were collected and interpreted from the flux tower network.



Growers listening intently with the aid of headphones at BeetTech26 (Feb)



BeetField attendance over the year



SIP members at the BBRO offices, Centrum, Norwich Research Park.



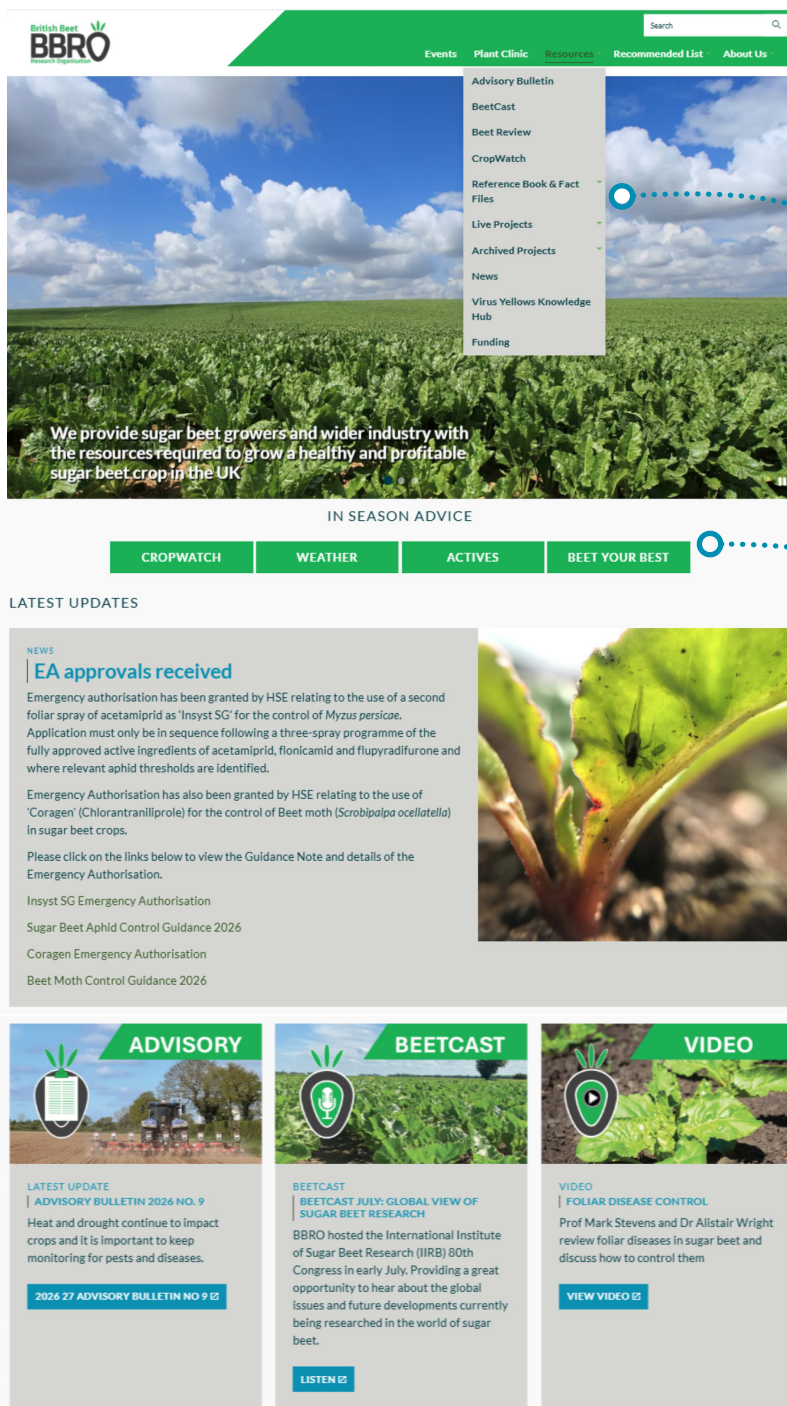
Royal Norfolk Show stand

NEW WEBSITE

www.bbro.co.uk

Following a survey of BBRO knowledge exchange activities and a review of vehicles for key messaging, a project to redevelop the BBRO website was undertaken. The objective of this was to make the website more intuitive and easier for the user to navigate. The aim was also for the website to be more interactive and provide a better search function.

The new BBRO website now has a professional and sleek style. Clear tabs at the top of the page make navigation to key areas simple and quick to navigate. There is also a new 'search' box which by entering key words carries out a search of the entire site and linked documents.



Powerful Search

Find information quickly



Streamlined Navigation

Fewer clicks to key resources, including Beet Review library



In-Season Advice

One-click links to the info you need



Latest News & updates

Stay informed with the latest announcements and alerts



Expert Advice, BeetCast & Videos

Timely updates, insights and practical guidance

This will be invaluable as the number of varieties and traits increase, with the industry providing more options in the way of seed treatments and traits.



[Events](#)
[Plant Clinic](#)
[Resources](#)
[Recommended List](#)
[About Us](#)

Interactive List 2027

The Recommended Lists (RL) below allows varieties to be filtered to only compare varieties with specific trait claims or time of drilling rather than the whole RL. Multiple traits can be selected and only varieties with all traits selected will be shown

The Interactive table also enables supplementary data from the previous 3 years to be viewed for each variety.

To view the supplementary data for varieties, click the arrow to the left of the variety name.

FILTERS

Showing 46 of 46 items

COMPARE VARIETIES

Click checkboxes to select rows

0 varieties

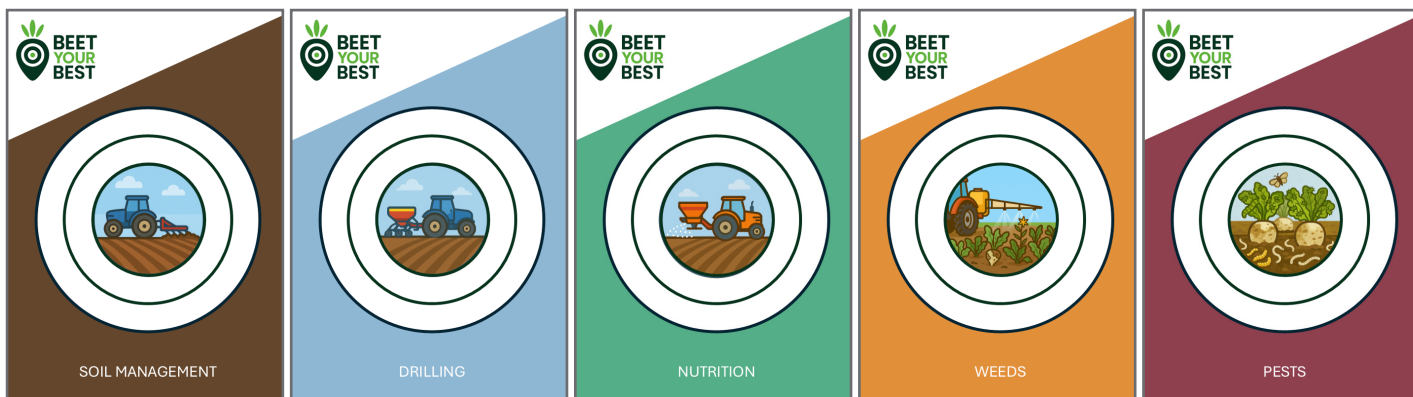
2 selected

- The new interactive RL contains the same data that growers will be familiar with*

[illegible]

We continue to develop our website, replacing the old style Reference Book with a library of Fact Files. These will make it easier to search and find the information required and provide reassurance that the material you are viewing is the latest information available.

25



Launch of Beet Your Best

During the year, BBRO developed the Beet Your Best initiative in response to stakeholder feedback calling for a more coordinated and structured approach to knowledge exchange. The strategy provides a clear framework for delivering timely, practical and targeted information to growers, ensuring that BBRO's activities are aligned and focused on the issues that have the greatest impact on crop performance.

By bringing together technical guidance and industry messaging, Beet Your Best aims to support growers in maintaining and improving sugar beet yields while strengthening crop resilience in the face of evolving challenges.

The strategy launched with ten priority focus areas that reflect the key stages of sugar beet production and the principal factors influencing crop performance:

- | | |
|---|---|
|  Soil management |  Foliar disease management |
|  Drilling |  Cover crops |
|  Nutrition |  Harvest and storage |
|  Weed management |  Seed selection |
|  Pest management |  On-farm hygiene |

These priority areas provide the foundation for future knowledge exchange activity, including the new website and Fact Files, and will continue to evolve based on grower feedback, emerging research findings and changing industry priorities, ensuring the messaging remains relevant and responsive to the needs of the UK sugar beet sector.

