



SERVING THE INDUSTRY FOR MORE THAN 30 YEARS

POTATO

REVIEW

MARCH/APRIL 2025

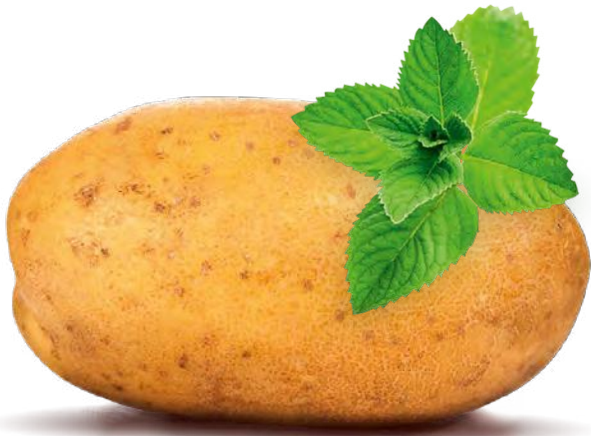
FIRST COVER CROP COMPETITION BY POTATO SUPPLIER

**MIGHTY MICROBIALS
MAKE A BIG DIFFERENCE
IN TRIP PROJECT**

**BOOSTED TUBER NUMBERS
FOR SCOTTISH SEED
GROWER - INNOVATOR'S
TOP PERFORMANCE**

COMMON SCAB & LIMING | LATEST WEED ALERTS | NEW AWARD CATEGORIES

Why biox-m®?



The only completely
natural product.

Stand-alone.

Truly sustainable.

Excellent efficacy.

Sequesters carbon
during growth.

Flexibility of timing.

Minimal weight loss in store.

Curative and preventative.

No MRL.

One day withholding period.

No persistent residues
on crops or in stores.

Approved for use on organic crops.

May be used in multi-use stores.

The logical choice.

Technical
Manual



Peter Hall

peter@junopp.com
07973 172 722

Nick Tapp

nick@junopp.com
07775 785 748

MAPP 16021
www.junopp.com

Editor's letter

THE optimists are telling me that spring is in the air but at the time of writing this there was a distinct 'nip' in the air and the potential for frost is still something to be alert to.

We have some extensive sections on disease and nutrition in this issue, alongside some interesting news and announcements.

In our regular seasonal advisory feature, Andrew Goodinson looks at late strategies for blight control, powdery scab and herbicide, offering key insights into how to achieve the best efficacy.

The future of mancozeb now hangs in the balance following a recent EU ruling, but in the meantime experts look at other methods of keeping blight strains at bay in our disease section. We also detail how a new multi-million-pound project will aim to determine how pathogens cause blight and other potato diseases, and share insights into why it's time to revisit the relationship between pH and common scab.

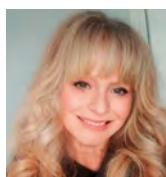
In our weeds section, we learn why we need to keep wild-growing Italian ryegrass on our radar and are given tips on latest control strategies.

The positive effects of using silicon biostimulants in trials, how microbials are making the big difference in a TRIP project, how biology is adapting and why there is potential for improving seed potato production through strategic tweaks to production systems, are all covered in our fertilisation/nutrition section.

In our pests section, Tom Harrison at HDF Farming Ltd shares his experiences of managing potato cyst nematode (PCN) as part of an IPM system, while other PCN updates include a garlic-based product distribution agreement, alongside soil testing and best practice alerts.

The storage section features an advisory article for suppliers to protect high-value potato seed from diseases, alongside latest findings from the CIPC Residues Monitoring Group (CRMG) and our resources and legislation section discusses how to prepare for 'The Great Potato Revolution', with some key dates to be aware of.

Plenty to keep you occupied over a cuppa when you come in out of that frost!



Stephanie Cornwall

Editor

04 News updates

08 Seasonal agronomy tips

12 Disease

14 Weed control

21 BPI awards & show

28 Fertilisation



36 Pests



40 GB potatoes

42 Storage

45 Events



46 Legislation & Resources

48 Machinery

51 Agtech



52 International markets

54 Appointments



Update your subscription preferences here

Let us know if you'd like to subscribe or continue receiving a copy of our bi-monthly British Potato magazine, weekly news e-letter bulletins and be kept up to date with show and awards news. **Just scan the QR code to update your preferences →**



British POTATO REVIEW

March/April 2025

Editor

Stephanie Cornwall 01778 395055
stephanie.cornwall@warnersgroup.co.uk

Sales Manager

Victoria Brown 01778 392046
victoria.brown@warnersgroup.co.uk

Publisher

Juliet Loiselle 01778 391067
julietl@warnersgroup.co.uk

Design

Dean Cole
deanc@warnersgroup.co.uk

Subscriptions

01778 392464
subscriptions@warnersgroup.co.uk

Subscriptions & advertising copy

British Potato Review,
Warners Group Publications,
The Maltings, West Street, Bourne, PE10 9PH

www.britishpotato.com

ISSN 3050-1849

© AREMI Ltd 2018

The publishers are not necessarily in agreement with opinions expressed in this journal. No responsibility can be accepted for statements made by contributors or advertisers.

BRITISH POTATO REVIEW is published by:
Warners Group Publications,
The Maltings, West Street, Bourne, PE10 9PH

Printed by Warners (Midlands) Plc
Manor Lane, Bourne, Lincs. PE10 9PH



This publication is printed by Warners Midlands PLC
Telephone: 01778 391000

WCM acquired by AKP Group

UK potato supply chain specialist, AKP Group, has announced the acquisition of Yorkshire-based Whole Crop Marketing Ltd (WCM).

Established in York in 1999 by Richard Arundel and Bruce Kerr, AKP Group is a potato grower, marketing group and supply chain specialist, working with partners in retail, processing and food manufacturing.

Whole Crop Marketing Ltd, established in 2008, specialises in marketing potatoes and ensuring a maximum return. The business supports growers by offering services including seed supply and marketing solutions tailored to their customers in the pre-pack and crisping sectors.

Whole Crop Marketing Ltd has built a reputation for its extensive grower base and Managing Director of AKP Group, Richard Arundel, said he was

'delighted' to incorporate the company within the AKP Group.

"By combining our expertise, infrastructure and resources, we aim to strengthen the supply chain for our customers, minimise risks for our growers, and support the long-term success of UK agriculture," he said.

Chairman of Whole Crop Marketing Ltd, Philip Dunn, reassured WCM's partners and customers that the acquisition marked "an exciting new chapter", with both sharing the vision of maximising profitability of potato production and creating sustainability in the sector.

"Together, we can enhance our offering, provide more comprehensive support to our growers, and deliver even greater value to our customers," he said.

WCM will continue to operate under its established name within the AKP Group, maintaining its current team, headed up by Richard Arundel in his role as group MD.



Salt reduced in premium crisps

PEPSICO has reformulated its premium Walkers Sensations Thai sweet chilli crisps to reduce salt content by 18%.

Research and development experts at the Leicester headquarters carried out seasoning reformulation and product innovation work which has resulted in the new offering.

Thai Sweet Chilli is the latest flavour in the Sensations range to be classified as non-HFSS, joining crushed sea salt and black peppercorn, mature cheddar and chilli chutney, and balsamic vinegar and caramelised onion.



Brits still favour spuds

NEARLY half the British population (47%) prefer to stick to potatoes, as well as other staples like carrots and broccoli, rather than try other types of vegetables, according to latest findings. Organic veg box company Riverford revealed this trend after carrying out consumer research.



Wireworm research collaboration now in second phase

ENIGMA, Fera's collaborative research model looking at ways of combatting future wireworm threats, is entering the second phase of its research.

The first Enigma project, launched in 2022 to address wireworm damage in potato crops and advance Integrated Pest Management (IPM) techniques for growers, has continued to achieve significant breakthroughs, according to the project's team members.

Wireworms, the larvae of Click Beetles (Elateridae), represent a continued and growing threat. As pest populations grow, and climate change alters their behaviour, their threat necessitates the need to develop novel integrated pest management (IPM) strategies.

Wireworms can remain in the soil for up to five years and a field can be home to all stages of the wireworm lifecycle, all feasting on roots, tubers and organic matter in the soil.

Last year marked a series of pivotal milestones for the Enigma team in developing a sustainable solution for wireworm control, reinforcing its impact on pest management strategies. Modelling suggests that wireworm will become more prevalent in northern areas of the UK, and at higher elevations, as a result of the rising soil temperatures caused by climate change.

Following thorough identification processes, including DNA barcoding, the team's experts have been able to produce maps that show the current geographic ranges of the five wireworm species of most concern to growers across the UK.

By modelling wireworm activity, the team can predict how these geographic ranges are likely to evolve between now and 2040, forecasting where the pest could become an issue for growers in the future, and which species they need to look out for.

Using life history studies in lab cultures and from field samples has enabled Fera to model wireworm populations throughout the year. This allows the team to provide its partners with up-to-date information on where and when to target sustainable pest control methods to be most effective at protecting crops.

The second phase of the research will involve working on an individual basis with project partners, aiming to use the outputs from Enigma I to tailor more effective IPM strategies on-farm.

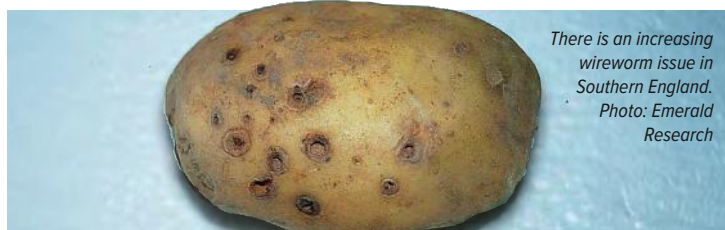
New partners are being sought to join the project and continue the research into better pest management and anyone interested in being involved is urged to get in touch with Collaborative Research Projects Director, Adam Bedford.

In 2024 the project team launched another Enigma project, which is set to improve the knowledge of Tobacco Rattle Virus (TRV) epidemiology and develop an improved predictive diagnostic service that can be offered to the UK potato sector, putting Spraying control in the hands of growers. It's hoped the service will bring faster turnaround times and reduced costs for growers, helping them to improve yields, and promote a sustainable and successful business.

Further projects are planned for 2025.



*Wireworm feast on roots and tubers, causing considerable damage, which two current projects are seeking to address.
Photo: Emerald Research*



*There is an increasing wireworm issue in Southern England.
Photo: Emerald Research*

Grower featured in broadcast series

A SHROPSHIRE potato grower features in a new three-part series exploring how farmers are feeding Britain while safeguarding the environment.

Jim Bubb, who provides processing potatoes for McCains, appears in the second episode of a podcast supported by Lloyds Banking Group, entitled 'Making Sense Of Sustainable Farming'.

The series has been produced by Tortoise Media and explores innovative approaches and solutions that balance food production with environmental stewardship and fair incomes for farmers. Tortoise Media is a British news website co-founded in 2018 by former BBC News director and The Times editor James Harding and former US ambassador to the United Kingdom Matthew Barzun.

Innovate UK funds wireworm control

EMERALD Research Ltd (ERL) and a South West potato grower have won an 18-month Innovate UK project to tackle wireworm damage in potatoes.

The £56,000 project will evaluate several soil improvers that are rich in prebiotic polysaccharides and other naturally-occurring, environmentally-safe biochemicals. These have initially shown positive results in stimulating the reproduction and development of

normal soil microflora as well as providing antagonism or deterrence to wireworms.

Since Mocap® (ethoprophos) was withdrawn from the market in 2019 due to its high soil toxicity, farmers and growers have been left with trying to mitigate wireworm damage by cultural means and by using products based on specific botanical extracts with biocide activity, which has had inconsistent results. Potato losses to wireworm can range from 15-35%

Southern England is known to have an increasing wireworm issue, which is also thought to be spreading north and ERL is undertaking field-scale trials in the South West, testing three different candidate products. The project will look to document a post-treatment level of wireworms in the fields, while also recording the effects on soil health, tuber damage and marketable crop yield.

• Turn to page 36 for latest pests updates.

Movie promotion on supplier's packs

POTATO supplier Albert Bartlett has teamed up with film entertainment company Warner Bros Discovery for 'A Minecraft Movie' to carry an on-pack promotion, ahead of the film hitting cinema screens on April 4th.

The on-pack promotion is running from now until April 6th. It is the first chilled product promotion Albert Bartlett has undertaken and the company hopes the movie partnership will attract new customers into the chilled category.

The on-pack promotion will run on fresh and chilled potato ranges for the first time, with Albert Bartlett Original Rooster and Butter Gold featuring imagery from the movie in fresh and Parmentier Potatoes in chilled. Consumers can scan the on-pack QR code to enter their details in a weekly and grand prize final draw at the end of the promotion on April 6th. Prizes will include movie merchandise such as Minecraft plushies and caps, Xbox consoles and the grand prize of a UK adventure holiday for four.

Senior Brand Manager at Albert Bartlett, Thomas McNally, said: "We look forward to inspiring both new and existing consumers into crafting the ultimate meals with our potatoes."

'A Minecraft Movie' will take audiences into the world of Minecraft, where four misfits find themselves struggling with ordinary problems when they are suddenly pulled through a mysterious portal into a cubic wonderland that thrives on imagination.

Surge in chilled interest for Valentines

POTATO supplier Albert Bartlett saw a surge in demand for its chilled potato products in the run-up to Valentine's Day on February 14th.

Since launching its chilled division in 2018 it has seen continuous growth in demand and expanded production capabilities and this year the company made millions of chilled potato products in the week running up to Valentine's Day at its factory in Airdrie, Scotland, with the event marking the biggest demand it had seen for its dine-in meals. Luxury mash was the most popular, while its heart-shaped rostis, parmentier and chips were also in demand.

The supplier said societal shifts around Valentine's Day have expanded the market for its chilled foods when customers choose to 'trade up' to its premium, locally-sourced products for dining in.

William Agnew, who oversees chilled production at Albert Bartlett, said: "Choosing a favourite product is like picking a favourite child – it's impossible! But I must admit, I'm partial to a crispy-on-the-outside, fluffy-on-the-inside potato croquet."



HARVEST THE BENEFITS OF

ORDER YOUR 2026 PLANTER TODAY!

GRIMME Potato Planter isn't just about buying a machine; it's about securing higher yields, better efficiency, and long-term reliability.

Unmatched Precision for Higher Yields:

GRIMME planters feature advanced planting technology that ensures accurate seed placement. This results in consistent crop emergence, leading to stronger, healthier plants and increased yields at harvest.

Smart Technology for Modern Farming:

GRIMME integrates intelligent precision farming technology, including GPS compatibility and ISOBUS control systems, ensuring seamless operation with your existing farm machinery. This not only improves accuracy but also reduces seed waste and optimises input costs.

Strong Resale Value and Dealer

Support: When you invest in a GRIMME planter, you're not just getting a machine – you're getting industry-leading support and a machine with strong resale value. GRIMME's extensive dealer network ensures you have expert assistance when you need it, keeping your farm running smoothly.

Now is the Best Time to Buy!: With the GRIMME Early Order Promotion (March 1st – May 31st, 2025), you can save up to £6,250 when ordering in March, up to £5,500 in April, and up to £4,500 in May.

£6,250

MAR

£5,500

APR

£4,500

MAY



Supplier says educational project as ‘invaluable’

A PRIMARY school-based initiative aimed at teaching children about potato growing and supply has been hailed as an invaluable project.

Potato supplier Branston, which is again sponsoring the annual ‘Grow Your Own Potatoes’ initiative, urged everyone in the potato industry to offer its support to the project, whose theme this year is Growing For A Greener Future.

Designed to educate children about where their food comes from, how to grow potatoes, and how they form part of a healthy, balanced diet, the project has seen more than six million children take part to date.

Kits have been provided to participating schools containing two varieties of seed potatoes as well as a packet of wildflower seeds to emphasise the importance of biodiversity and supporting pollinators and children began chitting their seeds before planting them this month.

Over the 14 weeks of growth, children will observe, care for, and learn about the potato-growing process before harvesting their crops in June, gaining valuable insights into food production and sustainability along the way.

Branston’s Sales and Marketing Manager Lucia Washbrook said: “It’s a brilliant initiative that provides vital education for children. It’s important to learn about growing produce and the benefits

of a balanced diet from a young age, so for children to gain this hands-on experience is a fantastic foundation for them to build on.”

She said she and her colleagues were looking forward to seeing the harvested potatoes later in the year.

“Grow Your Own Potatoes is a wonderful programme,” she said, adding: “The skills children can learn from taking part in the growing process are invaluable.”

Once harvested, participating schools are also encouraged to take part in a nationwide competition that will see them submit the weight

of the potatoes they have grown, as well as photos to celebrate their achievements.

Project Manager at Grow Your Own Potatoes, Sue Lawton, said: “This free project is a fantastic way to inspire children to learn where their food comes from, explore healthy eating, and develop essential life skills through fun, hands-on learning, as well as support local agriculture and promote environmental stewardship. We’re very grateful for Branston’s continued support.”

For more information about GYOP and how to get involved, visit www.growyourownpotatoes.org.uk/about-gyop/



F EARLY PLANNING



www.grimme.co.uk

The savings shown are based on a new full spec GB 430 ordered for delivery in January 2026, other savings may vary depending on model and specification.

GRIMME

Knowing the field history and what is in the seed bank helps build an effective strategy, said Andrew.

Seasonal strategies to beat blight and more

This month **Andrew Goodinson** looks at late strategies for blight control, powdery scab and herbicide, offering key insights into how to achieve the best efficacy.

Andrew Goodinson, Agronomist and Potato specialist at Hutchinsons, offers advice and insights to help growers ensure the best results from their potato crops. Based in Herefordshire, Andrew has been working for Hutchinsons for 18 years and looks after 8000 ha of farmland, including farms in the Welsh borders, south Shropshire and Worcester. Most of the potato crops he looks after are destined for the crisping or processing markets.



SEQUENCES of different actives from different fungicide groups are key to effective late blight control, while because they have different modes of actions, there will be a reduction in the likelihood of increasing resistance, according to Andrew.

“The loss of mancozeb, a multisite active, will make blight strategies even more crucial and make blight control decisions more challenging because it has been such a cost-effective cornerstone to blight control strategy,” he said.

New potassium phosphonates, which are looking to be effective when co-formed with blight actives, could offer a future solution. These have a different FRAC code to other products.

“We need to adapt, learn and move on when an active is withdrawn,” said Andrew. “Of course, we also need to minimise resistance developing, so no blight programme should use single active applications. Fungicides should be used in mixes or alongside alternating partners – and stewardship guidelines should always be followed.

“The choice of fungicides depends on the conditions in the field at the time and we also need to follow the Fungicide Resistance Action Group (FRAG) guidelines.”

Last year EU_36 was the most prevalent blight strain in GB, followed by lower levels of EU_6 and EU_13. So far, anti-resistance strategies have kept OXTP-resistant blight genotype EU_43_A1 (EU43) at bay, but there were outbreaks of the strain in Wales and Scotland and some of these were not sensitive to OXTP.

Andrew warned growers not to take chances with blight control this year.

“It is best to start blight control programmes when the crop is at the rosette stage, and continue at seven-day intervals following a strategy that alternates actives across the different fungicide groups so we can avoid putting a single active under pressure.

“Effective blight control is about building up the product in and on the crop as it develops, so to minimise missed blight sprays during wet weather, it is often a good idea to start the seven or 10-day spray programmes on a Monday.



2024 findings from EuroBlight

IN 2024 the EU_36 genotype dominated in Europe, but so far there has been no indication of reduced sensitivity of these clones to fungicides.

Incidence of the EU_43 genotype decreased in countries where it was problematic in 2022-2023, but it has spread to other countries, including Poland, Austria, Serbia and southern Germany. This clone has resistance to CAA fungicides and also the OSBPI (oxysterol binding protein inhibitors) group of fungicides.

The incidence of EU_46 genotype has increased slightly and has now spread into Belgium, Denmark, Wales and Scotland.

OSBPI resistance has been found in EU46.

New fungicide resistant clones (EU43 and EU46) are present and spreading but seem to be controllable through modified fungicide control strategies.

“This means that if you miss a day or two, you are not then up against a weekend.”

When forecasting models indicate blight pressure risk is lower, cheaper fungicides can be used, but it is really important not to extend the intervals, he added. This is because spraying when a plant is already infected can encourage blight resistance.

Andrew said application techniques are important. Too-high speed and less-than-ideal water volumes reduce efficacy, as do applications, when the weather is hot and the stomata are shut down. →



No blight programme should use single active applications.



WEIGH IT. BAG IT. STACK IT.

Bagging and weighing machines from 10 to 25kg ▶ sealing systems with medium/heavy duty stitchers and a range of options including ▶ sack presenters ▶ powered in-feed belt ▶ Total Sack Control ▶ Palletisers



Exclusive agents for:



t: 01353 740666 • e: sales@davidharrisons.com • w: davidharrisons.com



Where crops are irrigated, he also cautions about the importance of not underestimating drying time after irrigation before spraying, and water in tramlines splashing leaves.

“When planning your planting, avoid areas where you cannot get in to spray, such as under trees, around obstacles and tight corners – you can usually identify these areas as they are full of weeds because your herbicides are unlikely to have covered them.”

Outbreaks of fluazinam-insensitive blight strain EU_37 (formerly known as Dark Green 37) have been less prevalent thanks to good stewardship practices, and he notes fluazinam still plays an important role in a blight spray programme.

“It needs mixing with co-actives, and should only be used after full canopy development in a mix at full rate (400ml/ha). We used to use fluazinam for the first spray, but we now tend to use for cyazofamid and for the second spray we often follow it with fluopicolide + propamocarb because they work well with the crop at this stage.”

Andrew finds mandipropamid remains a good-value fungicide, particularly when it is mixed with cymoxanil. It is also more rain-fast than other blight spray products, so can be switched into the programme when weather is showery. There may be cases of potential resistance but this has not yet been confirmed in the UK.

“The addition of adjuvants and drift retardants help improve cover, but will not affect any insensitivity already shown by a particular blight strain,” said Andrew.

At the early to mid-season slot (rapid canopy growth), he said he finds oxathiapiprolin (OXTP) very useful because it is effective, persistent and it moves well round the plant.

Andrew highlights the importance of choosing the right spray nozzle for the task. “The IDTA04 Flat Fan and the 3D Ninety nozzles offer the best coverage because they are designed to cover all of the canopy including the underside of the leaves.”

He reminds growers that some of the newer blight strains can incubate during colder periods, and that spores can travel a long way in the wind.

“We often underestimate the spread of blight inoculum from volunteer potatoes growing in other, as well as in allotments and gardens.”

Andrew often recommends strategic use of biostimulants to help reduce crop stress, noting that crop health and resilience play a role in plant health, therefore help the plant’s defences against disease such as blight. He reminds growers that when a plant is stressed, it uses the same pathway as disease response jamming its natural defence mechanisms.

“Product formulations containing manganese and zinc are being trialled to assess whether they can help reduce

infection,” he said. “Zinc reduces spore penetration, while manganese contributes to general crop health. However there is more work to be done in this area to refine our understanding and knowledge of how these elements work.”

He notes that while many growers are good at mid-season blight control, they are not pro-active enough at the beginning of the year or when the desiccation period is longer than normal.

“Ensuring you have a robust blight programme throughout the season is more essential than ever. As such, it is crucial to keep up to date with the strains prevalent during the season, and we can all help by sending in samples for analysis in the Fight Against Blight campaign.”

Powdery scab insights

Cool, wet summers and over-irrigation can exacerbate incidence of powdery scab (*Spongospora subterranea*), which is often present in the soil, Andrew points out, noting that PMTV is transmitted by the same soil-borne pathogen.

“Powdery scab can produce cankers and deformations on the tubers, and decimate a seed crop so that the only market is stock feed or anaerobic digesters (AD),” he said.

Andrew believes fluazinam is the only active that can reduce levels when applied in furrow, but is only recommended in seed crops.

"If you use fluazinam for powdery scab, it cannot then form part of a late blight control strategy, because of the insensitivity issues on some strains," he said.

Powdery scab can frequently be seen on seed. Once spores are released into the soil, it survives more than 15 years.

"The critical time for powdery scab development is tuber initiation, just when growers are irrigating to reduce the risk of common scab, because the powdery scab spores need soil moisture to move from mother tubers to daughter tubers. Clean seed is therefore crucial, particularly as spots of powdery scab can often be missed at planting."

He adds that field history is a good guide to risk, and recommends growers avoid poorly drained soils and over irrigation.

Top tips for devising a herbicide strategy

An early pre-emergence herbicide application is key not only to efficacy but also minimising the risk of holding back or scorching crops on the cusp of emerging, Andrew said.

"In the past, we used to spray just before emergence, but we now know that when the potato plants are just below the surface they can be adversely affected by a herbicide," he said, adding that potatoes are planted deeper than many other crops, which reduces the chance of damage until shoots are just below the surface. "Nevertheless, on lighter soils it is best to spray both residual and contact herbicides well before emergence."

Metribuzin is the backbone of most weed control strategies in potato crops, he said, pointing out that on fenland or mineral soils, it can be incorporated at around planting time, without compromising the young tubers.

"Most strategies are based around metribuzin as a general rule, with other products being added to the mix depending on weed spectrum and soils."

He notes that early weed control products carfentrazone and metobromuron offer effective control of broad-leaved weeds but are not effective on grassweeds and volunteer cereals.

"However, of course, seasons do not always go to plan, and when unexpected weather events result in a flush of weeds well before emergence, there is an option to use Roundup Flex immediately after planting. This is the only glyphosate product with approval for pre-emergence, and it should be used when the shoots are still well below the surface, and there is no ridge-cracking."

Should spraying be delayed, he advised, avoiding actives such as clomazone or pendimethalin because they can affect the growing point of the crop.

"In this case, opting for a mix of metribuzin + a sulfonylurea herbicide is an alternative because they work on small, actively growing weeds, and can target weeds at cotyledon four-leaf stage."

Moving on to talk about residual herbicides, he observes that they should be applied between 7-10 days after planting, and can be followed up around three weeks later with a contact herbicide and/or a second residual with a different mode of action (MOA).

"However, some varieties are sensitive to metribuzin, so checking tolerance with the breeder, or the variety list from the product manufacturer is always a good idea, particularly if you are growing a variety that you have not grown before."

For weeds that can be difficult to manage, such as cleavers, Andrew recommended a mix that includes metribuzin and prosulfocarb. "However, if you are growing varieties that are susceptible to metribuzin, metobromuron and prosulfocarb or aclonifen can provide an alternative."

He also reminded growers who are planning to plant a second crop, such as onions, to bear in mind that some herbicides can leave residues. "Prior to application, it is always advisable to check the label for the product's persistence in the soil."

Knowing the field history and what is in the seed bank helps build an effective strategy, although this can be more difficult for growers who rent land.

"If you find that pressure from black nightshade or cleavers is very high, bentazone can be particularly useful to add into your programme," he said, cautioning that getting the timing right can be difficult. "Moreover, care needs to be taken to ensure compliance with stewardship guidelines and ensuring the product does not get into groundwater."

He also reminds growers not to spray when heavy rain is forecast, because of the risk of run-off into water courses. "We must not allow ourselves to become complacent about run-off," he said. **PR**

If the crop is about to emerge, any delay in application owing to weather changes may result in a contact herbicide going on late with the subsequent risk of crop damage.



Life after mancozeb

As active's withdrawal is challenged, mixing action modes is the best way to keep blight strains at bay, experts say.

THE EU Court of Justice (ECJ) recently overruled a lower court decision on mancozeb's non-renewal in the EU, citing various procedural errors. It challenged the decision of the EU General Court, which supported the European Commission's decision to withdraw the authorisation of mancozeb in 2020.

Although this ruling is independent of the UK's approval process, and it is still not known what it will mean for mancozeb approval in the EU, it raises hopes that we might see a return of mancozeb in the future.

UPL confirmed that this ruling is independent of the UK's approval process and that it continually monitors the situation within the EU.

For now, the UK has side-stepped a major outbreak of the new fungicide-resistant blight strains that have challenged the European potato industry, according to Dr David Cooke, research leader at the James Hutton Institute.

The emergence of widespread outbreaks across Denmark, the Netherlands, Belgium, and Germany in 2023 caused by EU_43_A1 (EU43) and EU_46_A1 (EU46) shaped UK blight programmes last season. Despite Fight Against Blight monitoring detecting two cases of EU46 in Wales and Scotland, the spread was contained, and we have seen the incidence of EU43 and EU46 reduce in Europe.

Senior Agronomist at Scottish Agronomy, Eric Anderson, said we should take confidence and applaud the fact we haven't found EU43 in

the country, and the two cases of EU46 were found at the tail end of the season.

"Had we not undertaken an alternation and mixing strategy, then I would have predicted we should have seen EU43 and EU46 coming in long before the end of the season, given the inoculum pressure on the continent," he said.

A measure of how intense the blight pressure was last season is that Fight Against Blight ended up analysing double the samples it was contracted to do, according to David Cooke. "Especially toward the end of the season when we had the two findings of EU46. Blight pressure was still high, and we wanted to sample the late outbreaks to predict what would be around in the spring," he said.

It was Eric Anderson who sampled the EU46 discovery in Angus. "We can categorically say there was no association with any contaminated imported seed within the vicinity," he said.

"The crop didn't receive any oxathiapiprolin. It received two applications of Mandipropamid, but on both occasions, it was mixed with another mode of action at full rate. Therefore, we can also say no selection pressure was applied during the season. This means it could have happened to anyone."

David and Eric hypothesise that an unusually strong eastern wind in September may have carried spores from the continent and caused the Scottish outbreak. The timing correlates with when the lesions become visible, and Eric says that the lesions were only

present in the top of the crop on the newest leaves, indicating a new infection.

If correct, the same mass airflow event would have brought spores to the entire Eastern coast. "It would be a very brave person to say that because EU46 hasn't been found in the rest of the country means it isn't there," surmises Eric.

"This theory doesn't tie in with the Welsh outbreak. Inevitably, people are saying it blew across from Ireland, but we haven't found any samples of EU46 there," David added.

Resistance testing by James Hutton Institute on behalf of Fight Against Blight paints another promising picture for the UK blight population. David says that apart from oxathiapiprolin resistance found in the two isolates of EU46, all testing on contemporary lineages of EU41, EU6, and EU36 showed sensitivity to the other tested actives: Mandipropamid, propamocarb and cyazofamid.

Despite the understandable focus on EU43 and EU46, the prevalence of EU_36_A2 (EU36) continues to grow in the population, now making up almost two-thirds of the total. Its virulence and ability to withstand early-season temperatures mean that growers must maintain vigilance, even on resistant varieties.

"Unless we go back to spraying single modes of action and EU43 comes in, I can't see a major shift in the population. EU36 is difficult to manage, but it's the case of 'better the devil you know'," David said.



David Cooke, Research Leader, James Hutton Institute.



Eric Anderson, Senior Agronomist, Scottish Agronomy.



Geoff Hailstone, Potato Technical Specialist, UPL

Keeping the lid on EU43 and EU46 this season

Mancozeb, which European growers have been without for three seasons, has been a key tool for UK potato growers in the fight against fungicide resistance. As on-farm stocks are used up this year, 2025 is an opportunity to experiment with alternative programmes.

Mixing multiple modes of action in each application is essential to halting the spread of carboxylic acid amide (CAA) and oxathiapiprolin resistance. According to Dr Cooke, discussions within the EuroBlight community have attributed reductions in the prevalence of EU43 and EU46 in the Netherlands and Denmark to switching from single-product sprays to mixing modes of action.

"It is no longer a nice to have, we must have robust strategies of alternating and mixing," Eric said. "As (on-farm) mancozeb stocks start to dwindle and are depleted, what are people going to mix with single-site mode of action products?"

"Once you start to rationalise how many products you can use of each of the modes of action, and where you are going to sequence those, the complexity of blight programmes this season is daunting."

For growers with mancozeb to use up, Potato Technical Specialist at UPL, Geoff Hailstone, recommends prioritising their remaining stocks where blight or resistance pressure is greatest.

"It's difficult to know how much mancozeb is out on farm," said Geoff. "The likely answer is that some may have an entire season's worth, and others will have none."

"An obvious place to use mancozeb is with CAA-containing fungicides and oxathiapiprolin to help protect them from EU43 and EU46. It will also be a valuable tool to reduce fungicide programme costs since they have become more expensive as more products are tank mixed."

When looking at potential mancozeb replacement in programmes, Geoff advises growers to consider Proxanil (propamocarb +

cymoxanil), which he says is an ideal tank mix partner for more expensive single-site chemistry.

"Propamocarb is the only reliable anti-sporulant remaining," he says. "It has good movement in the plant and is in a unique resistance group. Additionally, cymoxanil is known to be one of the few actives with kickback activity and has a very low risk of developing resistance."

"When tank-mixed with a single site protectant fungicide such as cyazofamid, Proxanil strengthens the activity and gives excellent resistance management." **PR**

Fight Against Blight is still seeking support for its 2025 programme. Contact fab@hutton.ac.uk to find out more about how you can help.



Potato blight.



Stem blight.

PLACEMENT PRO GR

FEED WHERE IT WORKS

MADE IN THE UK
SUPPORTING BRITISH AGRICULTURE

- ▶ 1.2T hopper
- ▶ Stainless steel metering units
- ▶ Land wheel drive or GPS rate control
- ▶ 2 or 3 row models
- ▶ Depth wheels control exact depth
- ▶ Anti blockage system
- ▶ Discs in lieu of tines option

Techneat

Email: info@techneat.co.uk

Tel: 01353 862 044

www.techneat.co.uk



VIEW OUR WEBSITE

Time to dispel the liming myth?

Emily Whitmarsh says an apparent visual difference in scab symptoms matched a figure of a 50% reduction in scab incidence between treated and untreated plots.

Latest trials and data suggest it may be time we revisited the relationship between pH and common scab.

TRADITIONALLY, the application of lime before planting potatoes was believed to cause common scab and growers were advised to avoid it.

However new data suggests this isn't the case and it can actually reduce the incidence of common scab.

Caused mainly by the bacterium *Streptomyces scabiei*, common scab develops when tubers experience a dry surface during the critical three to six-week stage following tuber initiation. Maris Piper is widely recognised as particularly susceptible.

Emily Whitmarsh, Technical Sales Manager for LimeX, an agricultural liming product for the correction of soil pH, said it may now be time to rethink applications.

"Historically, going back to the 1890s, researchers have documented that increasing soil pH increases the risk of infection and severity," she said. "This led to recommendations to avoid increasing soil pH by practices such as liming."

Those recommendations are still widely believed and used, even when more recent reviews have pointed to benefits from

liming before potatoes for common scab reduction. A review of RB209 in 2016 even recommended removing the warning relating to liming before potato crops.

"Perhaps owing to the potato section not being updated after the levy payer's vote on AHDB Potatoes' future, that has never been implemented," said Emily.

One reason for this historical association is the discovery that analysing potato skins near the infected areas revealed a higher calcium concentration. This led to the erroneous assumption that excessive calcium in the soil caused the potatoes to absorb too much calcium, resulting in scab.

One of the roles of calcium within plant cells is to strengthen cell walls, so when an area has been infected by *Streptomyces scabiei*, the plant will transport calcium to that infected area to prevent the infection from spreading, says Emily. Therefore, supplying the soil with an abundance of available calcium will allow the tubers to uptake the nutrient and help the potato to defend itself better.



"We conducted trials with LimeX in the 2010s and again more recently which have shown that applications of LimeX before potato crops reduce the incidence of potato scab," said Emily.

"In 2012, applications of three rates of LimeX compared with an untreated control in a field-grown crop of Maris Piper reduced the incidence of scab to 29% compared with 42% in the control. The application rate didn't have a significant impact.

"Then in 2013, the trials were repeated on four sites growing Maris Piper on a range of soil types at 5-10 t/ha rates. In each case, there was a reduction in the proportion of scab on three of the sites. In these trials, a marketable increase in yield of around 10% or 6t/ha was found."

A more recent trial with a large potato grower last season found similar results, again with increases in marketable yields. LimeX was spread in strips at 7.5 t/ha and 10 t/ha in a field of Maris Piper. Each strip was separated by an untreated 12m buffer.

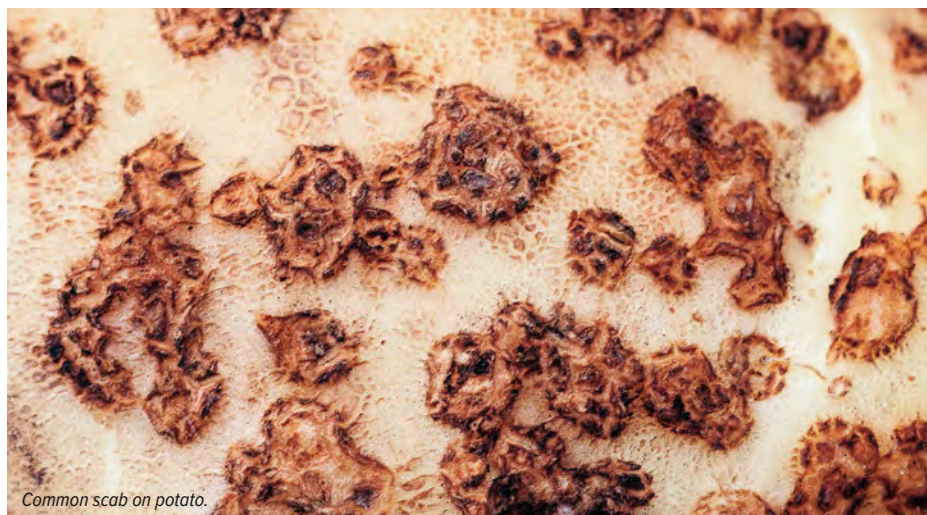
The results reinforced the previous findings. Emily says an apparent visual difference in scab symptoms matched a figure of a 50% reduction in scab incidence between treated plots and those receiving 10 t/ha of LimeX.

"LimeX application timing is flexible. Ideally, it would be post-ploughing, pre-planting and then incorporated, but it is better to apply when you have access to the field, rather than holding off for ideal conditions.

"The fine particle size of LimeX means it will begin to work to raise soil pH and increase available calcium to the root zone in just four to six weeks, which is critical when considering tuber initiation can be five to six weeks after planting," she said. **PR**

"In each case, there was a reduction in the proportion of scab on three of the sites. In these trials, a marketable increase in yield of around 10% or 6t/ha was found."

Emily Whitmarsh, Technical Sales Manager, LimeX



Common scab on potato.

BEGIN BLIGHT CONTROL BETTER



**A new potato late blight
product for the best
start to your programme.**

agricentre.basf.co.uk/privest

■ BASF
We create chemistry



Paul Birch and Petra Boevink have stressed the need for gaining greater understanding of the processes that are fundamental to infection.

“Identifying how pathogens subvert the plant’s immune defences will be crucial.”

Dr Sebastian Schornack,
Research Leader, SLCU

Pathogen exploration project kicks off

Scientific collaboration examining the infection structure surrounding blight gets under way following government cash injection.

A COLLABORATION between the James Hutton Institute, the University of Dundee, the Sainsbury Laboratory, University of Cambridge (SLCU) and Imperial College London is involved in a multi-million pound project that aims to determine how pathogens cause crop diseases such as potato blight.

The project was awarded £5.91 million from UKRI, for the five-year study that will start this spring.

Chief amongst these threats are fungal and oomycete pathogens, such as *Phytophthora infestans*, which cause potato blight and contributed to the Irish potato famine in the 1800s.

Phytophthora are a group of fungus-like microbes that cause many devastating plant diseases, most notoriously late blight

of potatoes. This fast-evolving pathogen has overwhelmed most resistant varieties, according to scientists.

Phytophthora produces an infection structure – the haustorium – which is formed intimately within living plant cells. This structure is a battleground where exchanges of virulence proteins from the pathogen, and defence molecules produced by the host, take place.

The successful delivery of these molecules by each protagonist determines the outcome of their interaction – successful infection by *Phytophthora* or effective defence by the plant.

This new study brings together a multi-disciplinary team of world experts who will determine how the haustorium is formed and how pathogens transform it to their advantage. New molecular, biochemical and cell biological techniques will be used to address how

molecules are exchanged between pathogen and the host. It is hoped that improving our understanding of haustoria could eventually lead to the development of measures that protect potatoes and other crops from disease.

Professor Paul Birch, Professor of Plant Pathology, at the University of Dundee, and a joint appointment with the James Hutton Institute, who will lead the study, said: “These infection structures present a real and present danger to crops that are staples of our diet.

“This is a truly exciting opportunity to make major advances in our understanding of how these key infection structures are formed and function. The funding will consolidate the UK’s leading position in this research area. The understanding that is likely to emerge from our studies will provide new ways to prevent diseases that threaten global food security.”

DISEASE

Dr Petra Boevink, an expert in the cell biology of Phytophthora-host interactions, and Dr Steve Whisson, a world-leading expert in Phytophthora biology, said the project aims to develop a greater understanding of the processes that are fundamental to infection at the intimate interface between plants and Phytophthora.

“The more we understand about their growth and activities, the more chance we have to develop novel strategies to block them,” they said in a joint statement.

They added that James Hutton Institute’s plant pathogen research facilities and imaging suite, which includes a bespoke super-resolution microscope, will be key to the success of the project.

Dr Sebastian Schornack, who leads a research group at SLCU investigating plant interactions with fungi and oomycetes, said: “Our success will depend on understanding how pathogens manipulate host plants to gain entry and establish haustoria inside living plant cells. Various molecular exchanges between the plant and pathogen influence the plant’s susceptibility or resistance and identifying how pathogens subvert the plant’s immune defences will be crucial.”

Dr Tolga Bozkurt, from the Department of Life Sciences at Imperial College London, said diseases like potato blight pose a real threat to growers’ livelihoods, local and national economies, as well as global food security.

“If we can understand how pathogens interact with the plant defence systems at the plant-pathogen interface, we move a significant step closer to developing new and effective ways to stop these diseases in their tracks,” she said.

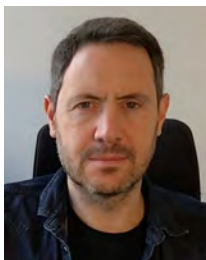
Doryen Bubeck, a Professor in structural Immunology at Imperial College London, described the collaboration as ‘world leading’.

“We bring new tools and techniques in molecular imaging to visualise this battle at the haustoria in unprecedented detail. Together, our research could help overcome one of humankind’s most pressing global challenges.” **PR**

*Phytophthora infestans infection of a potato field in 1997.
Photo: Howard F. Schwartz, Colorado State University*



Doryen Bubeck, a Professor in structural Immunology at Imperial College London, has described the collaboration as ‘world leading’.



Dr Tolga Bozkurt, from Imperial College London, said understanding how pathogens interact will be a major contributor to stopping blight.



Professor Paul Birch, Professor of Plant Pathology, at the University of Dundee, will lead the study.



Dr Petra Boevink is an expert in the cell biology of Phytophthora-host interactions.




- ✓ Fresh Potato Packers
- ✓ Processing Supply Chain Specialists
- ✓ Seed potato growers and suppliers

We are offering Fresh and Processing Potato contracts for 2025/26 and beyond

We're looking for growers to work with us.

**Please call Wayne on: 07872 806310
or email: contracts@cockerill.co.uk
www.cockerill.co.uk**

R S Cockerill York Ltd,
Dunnington, York, YO19 5AE

#thepotatopeople

You can't improve what you don't measure






Driving efficiency, ensuring quality

FARM ELECTRONICS

→ WWW.FARMELEC.CO.UK

Keeping an eye on resistant ryegrass

As weed shows potential to become a problem for potato growers, industry experts stress the importance of good stewardship and monitoring.



Roger Bradbury, Technical Specialist at Bayer.



John Cussans, Principal Consultant and Weed Specialist, ADAS.



Katy Hebditch, ADAS Weed Science Consultant.

HERBICIDE manufacturers are closely monitoring the discovery of a weed that is resistant to glyphosate and could become a future concern for potato growers, while the emphasis of good stewardship and avoidance of panic-applications is being re-emphasised.

While some potato growers who have barley in their crop rotation may inter-seed it with cultivated commercial Italian ryegrass, wild-growing Italian Ryegrass (*Lolium multiflorum*) is a less welcome presence in potato fields.

Whereas cultivated varieties can sometimes help to preserve soil quality, with their prolific roots scavenging nutrients and adding carbon to the soil until it is ploughed back in, wild populations can create problems in fields used for potato growing and require herbicide treatment.

Glyphosate is a herbicide applied to the leaves, as a favoured active to kill broadleaf weeds and grasses, including Italian ryegrass. It comes in liquid and solid forms and the sodium salt form of glyphosate is also used to regulate plant growth and ripen some crops.

The Weed Resistance Action Group (WRAG) recently announced that a glyphosate-resistant population of Italian ryegrass (*Lolium multiflorum*) had been confirmed on a farm in Kent. This is the first field population of any weed to have glyphosate resistance in the UK.

The discovery was made in Kent by a team of scientists from ADAS, an independent provider of agricultural and environmental consultancy, policy advice, and research and development, in a high risk scenario where large weeds were surviving high rates of appropriate glyphosate applications in the run-up to drilling.

In addition to this one confirmed case, three suspect populations of Italian ryegrass are still under investigation, with results expected later this year.

ADAS Principal Consultant and weed specialist John Cussans said: "We have come across several high risk cases before where we could rule out resistance following resampling and retesting. However, this is the first time we can confirm, after vigorous testing and multiple samples taken, that glyphosate resistance is present in a UK Italian ryegrass population."

Dr Faye Ritchie, Associate Managing Director of sustainable agricultural systems at ADAS, said: "The issue here is managing arable weeds in field where potatoes are grown. Where the crop is grown on rented land, understanding the history and management and existing weed issues that will affect the potato crop is very important. In terms of growing potatoes where glyphosate resistance has developed, it will be a real challenge."

However, the likelihood of resistance becoming

widespread was currently very low, as only one isolated case had been reported, she stressed.

"Ensuring that the seed bed is free from weeds pre planting / post-planting pre-emergence is a very high priority for potato weed control. Glyphosate (before crop emergence) not being effective against an aggressive weed would make weed control after the crop has emerged really difficult. But it is important to note that this is very unlikely to be a widespread scenario at the moment."

As a major producer of glyphosate herbicides, Bayer is closely following the discovery, but also anticipates that glyphosate will remain a core pillar of integrated weed management on farm, as it is in other markets with cases of resistance.

"It is important to emphasise that this is one case of resistance in one weed species. Bayer regularly screens black-grass, Italian ryegrass and other weed species within its own resistance monitoring programme and has found no populations of concern for glyphosate in the UK," a company announcement stated.

"Reducing the risk of further cases of resistance should remain a priority for all growers, advisors and registration holders. Bayer is committed to promoting awareness of the established guidelines for glyphosate stewardship."

Grower actions

Resistance tends to develop within the field, so growers' actions directly affect the likelihood of resistance developing on farm.

WRAG, an independent body made up of crop protection researchers (including ADAS) and agrochemical industry experts, is re-emphasising the importance of glyphosate stewardship and encouraging all growers and agronomists to read and act on the WRAG Guidelines for minimising the risk of glyphosate in the UK, first published in 2015.

Both growers and advisors have been advised to refer closely to the 2021 WRAG publication 'Guidelines for minimising the risk of glyphosate resistance in the UK' and to material on Bayer's website about stewardship.

Technical Specialist at Bayer, Roger Bradbury, who gave a presentation at the WRAG briefing, has long advocated the need to apply glyphosate at the right time, with the right dose for the target weed and with good application technique.

"Ensure effective control from glyphosate by using the correct rate, at the right timing applied with good technique in suitable conditions. Any failures of control should be closely investigated to understand the reasons. In all likelihood, it will be due to a field or application effects but if these are ruled out, more detailed investigation into possible resistance should be considered," he advised.

Repeat applications to weeds that have survived a glyphosate application should also be avoided. Instead, growers are advised to use other chemical modes of action or non-chemical control methods such as cultivation or mechanical weeding to manage survivors.

"Appropriate stewardship steps on all farms, and effective steps to prevent the reproduction and movement of seed on farms with populations of concern will help ensure continued efficacy of glyphosate in the UK," Bayer goes on to add in its guidance statement.

Under investigation

At present, in addition to the one confirmed case, three suspect populations of Italian ryegrass are under investigation with results expected later this year. To date, Italian ryegrass is the only weed with suspect populations in the UK. Extensive testing of black-grass and a 2023 survey of 166 brome samples found no populations of concern.

ADAS points out that where instances of similar resistance were previously discovered in both Spain and Italy, in 2006 and 2012 respectively, resistance did not escalate and result in a widespread problem. Most confirmed cases of glyphosate resistance in Italian Ryegrass are in North and South America.

ADAS Weed Science Consultant, Katy Hebditch said: "This finding is a concern but not a surprise. We have known for a long time that glyphosate resistance was a matter of when, not if. The main message we want people to take away from this is to pro-actively assess risks and manage them to delay the development of resistance on your fields or farm. We must remain careful of how and when we use glyphosate, stay vigilant, and follow best practice recommendations."

She added: "If you have noticed that a particular weed is surviving repeated herbicide applications, it could very well be resistant to that active. ADAS offers independent herbicide resistance testing for all grass and broad-leaved weeds so get it checked to know for sure. Early intervention and pro-active mitigation is the best way to manage and reduce risk and ultimately cost."

Faye added: "Pre planting or post planting pre-emergence weed control is an essential part of weed management in the potato crop (after the withdrawal of other options) and that largely comes down to glyphosate."

"Other options might be used in that context, including carfentrazone, but are not as effective against grass weeds. The crop is associated with lots of mechanical weeding through the soil movement, so land where potatoes are grown a lot in the rotation are in quite a good place to avoid glyphosate resistance in the future since all the soil movement is reducing the selection pressure on glyphosate."

'Green' manure advice

When used as part of a mix and incorporated, Italian Ryegrass might be used as one part of a green manure within potato growing, but Faye said where that approach is adopted, there are better options for species to include in mixes.



"Companion cropping in potatoes is minor, perhaps focused on lighter soils where there's a risk of topsoil erosion. Most companion crops will not include Italian Ryegrass, with preference for a cereal or a legume," she said.

"We would be advising people not to start using Italian Ryegrass as part of any mix used as a companion crop. This advice also considers that the use of Italian Ryegrass in these such mixes will make weed control in general more difficult, rather than a direct threat from introduced seed and resistance." **PR**

WRAG guidelines:

- **Prevent survivors:** Avoid repeat applications to surviving plants.
- **Maximise efficacy:** Apply the right dose rate to kill all target weeds (reduced rates increase the risk of reduced efficacy), at the right timing (when weeds are actively growing, avoiding stem extension growing phase), in the right conditions (do not apply to plants under stress from waterlogging, drought, and very cold weather).
- **Use alternatives:** Use non-chemical options (such as cultivation), where practical, and use other herbicides in sequence.
- **Monitor success:** Remove survivors and report potential resistance issues to your advisor and/or the product manufacturer.

What other issues do potato growers need to be aware of?

- Knowing the history of rented land and the weed pressures you will face.
- Knowing the pre planting and post planting pre crop emergence windows for herbicide use.
- Remaining vigilant to any changes in weed populations in their crops.

‘Re-think residuals to keep ridges weed free’

With a key residual herbicide active under close regulatory scrutiny in Europe, weed control strategies could soon require a re-think in the UK. So what is the latest thinking ahead of planting 2025?

THE European Union recently announced the withdrawal of metribuzin, with a use-up date of November 24th, and whilst it's uncertain whether British regulator HSE-CRD will follow suit, there is a strong chance the active could soon be lost in Britain.

One agronomist weighing up its loss in weed control programmes is Agrii's Andrew Sprunt, who oversees more than 800ha of potatoes across the Scottish Borders, East Lothian and Fife.

Around 10% of this area is seed, with the remainder predominantly pre-pack, including whites like Maris Piper, salad varieties and a small area of processing for various end uses, including crisping.

Across his area, annual meadow grass is an ever-present threat and when considering broad-leaved weeds, targets like chickweed, mayweed, groundsel, black bindweed and knotgrass are of increasing concern.

Weather unpredictability has challenged his weed control programmes in recent seasons, with dry spells through May into June resulting in less-than-ideal conditions for residual herbicide efficacy.

He said some residual herbicides available to growers, including prosulfocarb, pendimethalin and clomazone, require soil moisture to work well. Metribuzin, because of its water solubility, helps prop up programmes in drier conditions and would be very much missed.

"I think a product like Praxim (metobromuron) would help fill that gap, should metribuzin go, as it also works well in dry conditions," said Andrew. "I've already found it handy on light, sandy soils, or where the variety is sensitive to metribuzin, but going forward I see it having much more of a role in all programmes, particularly with its strengths on weeds like chickweed and mayweed."

ALS-resistant weeds

These species have confirmed resistance to ALS-inhibitor herbicides like sulfonylureas (SUs) in the UK, and others like groundsel have suspected insensitivity to the same mode of action. In Europe, populations of fat hen also have confirmed ALS resistance.

With post-emergence options in potatoes limited and many relying on SU herbicide rimsulfuron in products like Titus, using Praxim to control these species pre-emergence will benefit the potato crop and the wider rotation, Andrew said.

"Adding in a contact partner like Gozai (pyraflufen-ethyl) to a Praxim-based pre-emergence spray just before potatoes come through will help as well. It's certainly stronger than Shark (carfentrazone-ethyl) on chickweed, mayweed and poppies," he said.

Growers have often relied on metribuzin to control volunteer oilseed rape, which is a very competitive species in potatoes, but Andrew said Praxim offers decent control at the 3L rate.

Certis Belchim's Western Technical Adviser Beth Jones-Davies says 3L/ha is where growers will see its broadest spectrum of control and when deciding on rates to use, it's important to look at the conditions at the time of application (higher rates help in the dry) and the weed spectrum present.

"Where you have some of those difficult weeds, like volunteer oilseed rape, then increasing rates from 2.5L/ha to 3L/ha could make the difference," she said, adding: "From your pre-emergence residual and contact spray, the aim is nice, clean ridges."

As Praxim has no soil type or varietal restrictions, she's found its flexibility helpful to growers in her area, who often rent multiple fields across a large geographical spread without detailed information on soil type variability.

"Where you have a mix of metribuzin-tolerant and sensitive varieties, majoring on Praxim will also help simplify things for sprayer operators and growers avoid any potential crop safety issues at emergence," she said.

Ben Burgess, who advises growers from north Shropshire to south Herefordshire on soil types ranging from blow-away sands to peats and heavier clay loams, has been using Praxim on metribuzin-sensitive varieties like Innovator with good success, partnering it with a prosulfocarb product +/- a contact product like Kabuki (pyraflufen-ethyl) and said it also lends itself to his lighter sandy fields and when a pre-emergence spray is left as late as possible.



Chickweed is an ever-present threat.



From pre-emergence residual and contact spray, the aim is nice, clean ridges, Beth Jones-Davies stressed.

"Some of my growers are direct planting on some marginal potato land, so Praxim's crop safety is also very useful where ridge structure is less than ideal. However, at the moment I tend to use Gribuzz (metribuzin) with Stallion Sync Tec (clomazone + pendimethalin) as it covers most bases," Ben said.

Like Andrew, he can see this changing in the future, with more Praxim + prosulfocarb mixes applied, or potentially Praxim with Stallion Sync Tec where the field's weed spectrum dictates.

"It's competitively priced compared to Emerger (aclonifen), so if and when metribuzin does go, it's going to be a much bigger part of potato herbicide programmes," said Ben.

Andrew said although Praxim has a broad spectrum of control, there are small species gaps that tank-mix partners must fill. Whilst metribuzin is available, it remains a key component of his programmes alongside Praxim, with both actives strong on annual meadow grass. 2.5L/ha of Praxim with 0.5-0.7kg/ha of a metribuzin product like Gribuzz would be advised, potentially adding in clomazone if there is a major concern about cleavers.

However, where metribuzin can't be used owing to soil type and/or variety, he favours partnering Praxim with prosulfocarb products like Defy or Wicket. In these non-metribuzin situations where cleavers and fumitory are present, he tends to use 3L/ha of each.

This is particularly important in seed crops, where growers cannot use post-emergence herbicides.

"You only get one shot at it, so stacking your rates up a wee bit higher will help. Even in ware crops, growers would like to avoid coming back in with Titus as it can cause some crop effect," he said. **PR**



A date with the British potato industry

The 2025 *British Potato Industry Event* and *British Potato Industry Awards* will include a new awards venue, relaunched categories, a celebrity speaker, seminars and more new features.

NOW we've entered 2025, we're gearing up for two exciting events that take place every two years within the British potato industry.

In November, Harrogate in Yorkshire will once more see the whole industry converge there for the *British Potato Industry Show* and *British Potato Industry Awards* events which have this year been adapted to make them more relevant and inclusive.

The British Potato Industry Event 2025 unites professionals from across the potato supply chain for two days of networking, innovation, and industry insights. The event offers opportunities to connect with leading experts, discover the latest trends, and explore cutting-edge technology that's shaping the future of the potato sector.

The awards, held on the first night of the show, provide an opportunity for everyone who's attended the show, to mingle socially while celebrating achievements and breakthroughs from the previous two years. A celebrity speaker (to be announced shortly) will provide entertainment and introduce the

awards after a three-course dinner, and there will be an opportunity to network and relax with others from the industry before and after the presentation.

Having grown in size since first being launched in 2019, this year's event takes place at a new venue - the Majestic, Ripon Road, Harrogate

There are 10 award categories in total – eight for businesses or research organisations to enter, and two individual ones. Like everything that evolves for the better, organisers have taken on board feedback from judges and partners of the previous three award events and used this to make the categories easier to understand and enter, while encouraging more companies to take part.

British Potato Review Editor, Stephanie Cornwall, who was on the panel of judges at the 2023 event, said: "Categories aren't restricted to specific sectors – they will now be more about rewarding innovations, involvement in collaborations, and contributions that have benefited the potato industry generally, or whose work over the past two years is set to make a lasting impression."



The awards are organised by the *British Potato Review* team and judged by an independent panel of judges drawn from different sectors of the British potato industry. They are held in partnership with the *British Potato Industry Show*, which is owned by the magazine's publisher, Warners Group Publications.

Entries are now open, while the judging panel and celebrity speaker are set to be announced in coming weeks – those who are signed up to our weekly e-letter will receive regular updates. →

Get your thinking caps on – what can you enter?

Rules of entry

- Anyone can nominate or self-nominate, providing they can prove their connection to the entry.
- The easiest way to enter is to visit our website awards page at <https://britishpotato.co.uk/british-potato-awards/enter/> and press 'enter' against the relevant category. If you prefer to enter manually, please email your entry to hayleyc@warnersgroup.co.uk or send by post to Hayley Comey, 2025 British Potato Awards, The Maltings, West St, Bourne PE10 9PH. Be sure to state which award category you are entering.
- You can enter more than one category if required.
- Each category contains three or four bullet point criteria - please respond to each bullet point separately.
- Be sure to include full contact details (and the nominee's contact details if they are not the same as yours).

Business award categories:

Storage Innovation

ANYTHING that is helping keep energy costs down, prolonging the life of stored potatoes, re-purposing or improving a storage facility, or providing a customer service beyond expectations, could be a contender for this award.

Has your company or organisation come up with something new or refined an existing product, service, app or piece of technology over the past two years that is having a positive impact on potato storage?

- Describe the type of innovation (eg. Chemical/biological treatment, technology, building, accessory, technology etc)
- What impact/effect has it had? (eg. This could include reducing energy costs, prolonging tuber life, creating labour savings, improving quality, ease of use etc)
- Please give examples of how the above effect/s have been achieved.



Hescott-Meredith Science Award

THIS award will be presented to a standout scientific contribution made to the industry over the past two years. If a company or organisation's lab work or field trials have helped aid pest control, environmental tolerance, variety stamina, soil health etc, let us know.

- Describe the research programme or trial and its purpose. State when it was initiated and whether it is ongoing.
 - What are its proposed outcomes?
 - What has been achieved or discovered over the past two years?
- This award is a memorial to British Potato Review's founding member, Bob Meredith, and his daughter Hazel Hescott after whom it is named.



Best Environmental/Sustainability Initiative

THE Environmental Award recognises outstanding companies and organisations from any sector of the potato industry who've contributed in some way to the protection of the environment or sustainability over the past two years. If this has led to improved sustainability, carbon reduction, reduced tillage, biological changes, or generally had a positive impact on the countryside and farmed land, let us know.

Any company or organisation is eligible for this award, including suppliers and agronomy businesses who have introduced a practice or product that has made a notable impact on environmental performance, or those contributing to one or more industry collaboration.

- What actions and contributions have been made by the company/organisation?
- What have been the overall goals of the above action/s and/or contribution/s and how have these been actioned over the past two years?
- Give examples of achievements.

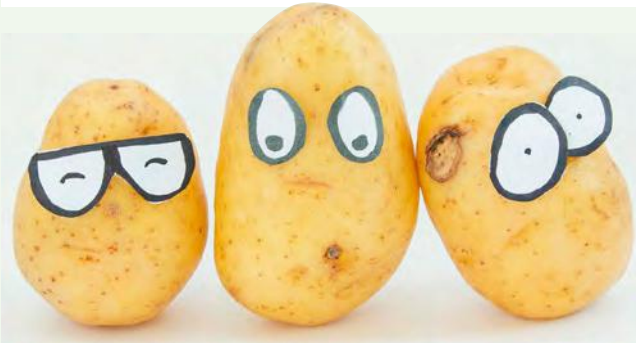


Best Marketing Campaign

GOOD marketing is frequently taken for granted, but where would we be without those timely reminders, solutions and information streams that keep the industry up to speed?

This award aims to reward the most effective marketing strategies and campaigns that have made their mark on the British potato industry over the past two years. Any company, co-operative, agency, charity or local government initiative operating within the potato industry is an eligible contender.

- What was the campaign and what messages was it looking to spread?
- How did it set about achieving this within the past two years?
- What, if any, notable results have been seen since the campaign was launched?



Agtech and App Innovation

CAN you tell us about a piece of agri-tech or an app that's helping improve yield, profits or day-to-day practices?

We're keen to hear about innovations introduced or upgraded in the past two years that could be a game-changer for the future.

Whether this is something contributing to a field application, identification of pests/disease, water monitoring, soil analysis, contribution to a handling/grading application, storage monitoring, weather monitoring or other, we're keen to hear.

- What is the overall aim of the nominated innovation?
- How does it contribute to any, or all, of the following: Time-saving, cost-minimising, labour saving, sustainability?
- Give examples of where the innovation has been introduced, and what the feedback was.



Machinery Innovation

MACHINERY that has simplified or improved any kind of application within the potato industry over the past 18 months is eligible for this award, be that within field operations, handling, grading, transportation/conveying or packing.

- Is this a new piece of machinery, existing or an upgrade?
- What is its aim and how has the introduction or update sought to achieve this in the past two years?
- Give examples of the contributions / positive outcomes it has made to growers, suppliers, packers or other.



Growing/Supplying Contribution

WE'RE keep to hear from businesses growing potatoes or grower-suppliers who have set good examples for others in the industry over the past two years.

Noteworthy actions can include collaborations, participation in projects or trials, contributions to communities and charities, assistance given to other growers.

- What collaborations and projects has this growing company/supplier been involved in over the past two years?
- How have they contributed to the above?
- What assistance have they given to other growers, charities or communities? →



Consultant/Advisor Contribution

AGRONOMY companies, companies offering advice on farming practices and storage consultants are eligible for this award. Tell us how individuals within the practice/consultancy have contributed to good practices and outcomes, or how the overall actions of the practice/consultancy have brought positive impacts within the potato industry over the past two years.

- What advice and help has been given to growers over the past two years?
- Has this contender been involved with any collaborations or other potato industry projects?
- What achievements and goals have they helped or contributed to over the past two years?



“Categories aren’t restricted to specific sectors – they will now be more about rewarding innovations, involvement in collaborations, and contributions that have benefited the potato industry generally.”



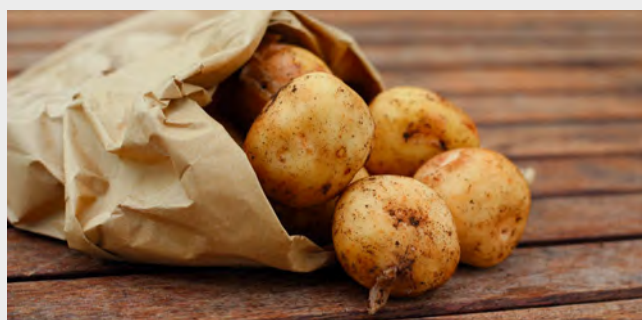
Individual award categories

British Potato Industry Award

THE British Potato Industry Award is for outstanding contribution to the potato sector. It was inaugurated in 1997 and has been awarded annually. It was originally administered by the British Potato Council and subsequently by the Potato sector of AHDB, before being incorporated within the National Potato Industry Awards run by Potato Review.

This is an award to an individual and we’re looking for nominations from throughout the British potato supply chain

- What collaborations / projects have they been involved in over the past two years?
- How have they contributed to the above?
- What achievements have they made during their career?



Best Young Achiever

THIS award seeks to recognise the best and brightest young people within the potato industry, be that within growing, engineering, scientific, research or other sectors. Apprentices, interns, students or anyone aged under 30 who is felt to be making a significant contribution or displaying positive qualities can be entered for this award.

- What contributions have they made to a company, organisation, or the potato industry overall, over the past two years?
- What makes them stand out as an individual?
- What, if any, individual achievements have they made in the past two years? **PR**



Advancing Potato Agronomy



CS1

Highest Quality
Seaweed Extracts

CS2
+NPK

*Protect
your
soil*

*Protect
your
crop*

*Protect
your
margin*

British Owned

British Made

proven stress protection

info@thecropsmith.uk

07891 582 886

www.thecropsmith.uk





Silicon products show positive blight defence

TRIALS carried out by Orion Future Technologies, working with Hutchinsons and Richard Austin Agriculture, have revealed how the application of silicon biostimulants can have a positive effect on potato yields and improve the plant's natural defence to late blight.

Orion's R&D Agronomist, Kate Williams, said: "In an independent trial, the yield of a Melody crop increased by 18%. This was achieved by adding two biostimulants, Sirius and Pluton, at a concentration of 0.5 litres per hectare to the standard tank mix across eight applications."

A separate trial sought to understand the impact of using biostimulants as a way to strengthen potato plants to better

withstand late blight. This trial used Sirius, a silicon-based biostimulant, with Trident, a micronutrient product.

"Trident is a copper and zinc formulation that stimulates plant health and helps to protect against common stresses. In the trial, a concentration of 3 litres per hectare of Trident was combined with a 0.5 litre per hectare concentration of Sirius every week for 12 weeks," she said.

The outcome of the additional micronutrient and silicon boost meant only 18% of the crop was affected by blight compared to 20% with the standard tank mix. The control sample crop succumbed entirely, with 100% of the crop affected by blight, showing the devastating



threat blight poses to potato crops.

"Silicon helps to strengthen a plant's natural defences and also helps it to take up more nutrients. This is why using a silicon biostimulant in addition to copper and zinc has helped the treated sample to stand up to blight," said Kate.

"Silicon helps to strengthen a plant's natural defences and also helps it to take up more nutrients."

Kate Williams, R&D Agronomist, Orion



Cover crop achievements rewarded

POTATO supplier Albert Bartlett has held its first Cover Crop Competition in Jersey, recognising the efforts of local growers using cover cropping techniques that enhance biodiversity and sustainable agriculture.

The winners' award ceremony took at the Jersey Farming Conference at La Mare Wine Estate.

Launched earlier this year, the competition was held across four key categories: Best Bird Cover Crop, Best Visual Cover Crop, Best Pollinator Cover Crop and Best Soil Health Cover Crop.

Judges included representatives from Jersey Birds of the Edge, Normans Seed Suppliers, and the States' Enhancement Land Resource Management Section:

The 2024 winners are:

- **Best Bird Cover Crop:** Fosse Au Bois Growers, Paul, Peter & Matt Carre
- **Best Visual Cover Crop:** Meleches Farms, Nick Mourant
- **Best Pollinator Cover Crop:** J&S Growers, Steve Baudains
- **Best Soil Health Cover Crop:** Somerleigh Farms, Matt Lamy
- **Overall Cover Crop Winner:** Fosse Au Bois Growers, Paul, Peter & Matt Carre

The Cover Crop Competition was complemented by a research study led by Jess Sandle-Brownlie, which measured the environmental impacts of cover crops on



pollinator populations, soil health, and bird diversity across Jersey. Key findings from the study reveal substantial ecological benefits:

Pollinator activity: Cover crops significantly boosted pollinator populations compared to traditional grass fields, with the pollinator-specific mix delivering up to six times more insect activity (a 30% increase) than control fields. Phacelia attracted particularly high numbers of bumblebees, demonstrating the value of diverse floral resources for supporting pollinator populations.

Soil health: Fields planted with soil health-specific cover crops, such as mustard, showed a 15% improvement in organic matter and resilience, enhancing the soil's capacity to support healthy crop yields in subsequent growing seasons.

Bird diversity and habitat: Bird-friendly cover crops achieved a 25% increase in bird visitations, demonstrating that tailored cover crop strategies can enhance local biodiversity and foster habitats for species that contributes to a balanced farm ecosystem.

Group Environmental Manager at Albert Bartlett, Fiona Ross, said: "We were absolutely delighted to organise this inaugural competition to support the fantastic biodiversity work that has been carried out by the Jersey farming community. Celebrating and promoting the island's growers who strive to implement best practices for the environment is a key aim of the competition and Albert Bartlett want to extend their congratulations and thanks to all the participants, supporters, funders and of course the winners.

"Research carried out on the cover crops planted during this competition identified floral diversity as a vital part of promoting a healthy pollinator population with different pollinator groups preferring different flowers, colours and units to each other. With this in mind, Albert Bartlett's support of the competition will continue to evolve, with plans to expand its reach and further support Jersey farmers in their efforts to improve agricultural resilience and biodiversity for years to come." **PR**



Boosted tuber numbers for Scottish seed grower

Trial highlights potential for improving seed potato production through strategic tweaks to production systems, including some biostimulant applications.

WITH continued research and wider adoption, Scottish potato growers may soon have an effective new approach to boosting tuber numbers in the coming years, recent work has shown.

A potato trial has shown promising results in increasing tuber numbers for seed potato crops, particularly for the popular Innovator variety.

Conducted by SAC Consulting (part of Scotland's Rural College), the trial demonstrated a significant boost in seed potato tuber numbers using biological products and agronomic interventions, a crucial development for seed growers aiming to maximise tuber yields.

The trial was spearheaded by Steven Jack of Organic Potato Growers, with financial backing from potato processor Lamb Weston. The trial was also encouraged by members of the SAC Association of Potato Producers (SACAPP), a knowledge exchange network.

Senior Potato Consultant at SAC, Kyran Maloney, has been leading the trials.

He said: "Steven Jack outlined a brief that resonated with many regional seed growers. He wanted to test products and techniques to increase tuber numbers on seed crops and with the additional guidance of Agrovista Agronomist and North Scotland Area Manager, Andy Steven, we trialled various treatments related to planting systems and some product applications."

Kyran said the seed potatoes were cultivated in de-stoned beds using a split-plot trial design with quad planting in traditional ridges, allowing more space for root expansion. Existing research indicates that this method enhances tuber numbers. The trial also incorporated three-row beds, a common growing practice.

Six different approaches were tested on two varieties, Innovator and Ivory Russet, as follows:

- Standard agronomy
- Increased seed rate
- Physical interventions – including tipping potatoes from one box to another and using black plastic coverings post-planting
- Calfite Extra applications – a foliar nutrient complex



Host farmer Steven Jack and local SACAPP groups at the trial site.

- Luxor applications – a biostimulant applied in-furrow and as a foliar nutrient
- Phosta applications – a soil-applied agent designed to unlock phosphate.

Key findings

The results showed that increasing the seed rate had little impact. However, other biological and agronomic interventions proved more effective. Luxor increased tuber numbers by over 30%, Phosta led to a 20%+ increase while tipping and covering techniques boosted tuber numbers by more than 24%.

"These statistically-significant results are highly relevant for regional growers," said Kyran. "Increasing tuber numbers is vital throughout the supply chain, and growers are also exploring ways to enhance sustainability, reduce 'field generation,' and lower aphid-vectored virus exposure - key factors in maintaining high health status for seed potatoes."

Calfite Extra applications also showed an increase of about 13. However, the trials showed no statistically-significant impact on Ivory Russet.

"It's not easy to explain why interventions worked in one variety and not the other," said Kyran. "We're keen to run similar trials in future seasons to see if we can replicate the result."

Multiplication challenge

With commercial potato varieties increasingly bred for processing, their suitability for seed production has become a challenge, as they naturally produce fewer tubers. This is counterproductive for seed growers who prioritise high tuber counts.



Particularly promising results were seen for the popular Innovator variety.

Andrew Cromie of Unium Bioscience said maximising tuber numbers is essential for seed crops.

"Recognising this issue, the trial was designed to assess the impact of two key products - Calfite Extra and Luxor - on seed potato production. These products enhance phosphate availability and provide biostimulants to support tuber formation and overall plant health," he said.

"It's crucial to identify which varieties respond to biostimulants. In other trials we have seen significant increases in tuber numbers with Calfite Extra. The interaction of variety and treatments is interesting, and we are keen to explore this further to see if this is consistent year to year.

"We've also developed LuxiCal, a blend of Luxor and Calfite Extra, and are eager to explore potential synergies for boosting tuber numbers. Being part of these trials allows Unium Bioscience to provide well-informed guidance on maximising product benefits."

The Scottish trial demonstrated evidence for an increase in tuber numbers with the application of Luxor, Phosta and tipping and covering techniques in at least one variety.

"These results are beneficial not only for Scottish growers but also for UK-wide salad crop producers who aim to increase tuber numbers for punnet potatoes," said Andy Steven, adding that ongoing trials will be essential to validate these initial results. **PR**

Transformative trials results

Small and mighty microbes making the big difference in TRIP project.

TWO seasons into the three-year Innovate UK-funded Transformative Reduced Input Potatoes (TRIP) Project, the on-farm trials continue to demonstrate the importance and positive effects of adding supplementary soil microbial mixes during planting.

Seed germination rates and early crop establishment have been seen along with longer-term benefits to crop vitality and yield.

The project involves a consortium of key industry, academic and farming partners, including Dyson Farming, Bangor University, The James Hutton Institute, Light Science Technologies and Emerald Research Ltd. The farm-scale and replicated trials are taking place through the farming partners SDF Agriculture, F G Pryor and Son Ltd, Colwith Farm Potatoes Ltd and CP Richards & Son Ltd.

Emerald Research Ltd (ERL) CEO Simon Fox explains “Over the winter months, the soil’s natural microbial colonies are challenged by flooding and persistent waterlogging as well as freezing temperatures. This follows them having survived in the face of overused input factors such as fertilisers, nematicides and insecticides.”

He said research has long correlated the synergistic relationship between plant roots and soil microbes in beneficial processes such as nutrient exchange, growth stimulation and increasing disease resistance and, even with the recent renewed emphasis on soil health and the inclusion of organic matter, naturally-occurring soil microbial colonies are still under pressure to survive and be useful.

Over the past two seasons of trials, the TRIP project has evaluated the use of a microbial mix



The Lincolnshire trial site at Dyson Farming in August 2024.

that has been developed using combinations of native UK microbial species, because they are adapted to the varied soil and environmental conditions of the UK. These formulations contained mixtures of many synergistic and beneficial species because each will flourish in different conditions and support the positive effects of others.

The microbial mix also included a food source for the microbes and a number of complementary biostimulants, which also have a direct beneficial effect on early growth and nutrient mobilisation in the root zone. These were combined to fortify and feed the microbes, while the tubers started to produce roots, ensuring that the newly-introduced microbial colonies could survive and thrive until the tuber produced roots and the microbes had a plentiful natural food source.

The 2024 trials re-affirmed the project’s findings from the previous year. Typically, the four trials in 2024 (three in Cornwall and

one in Lincolnshire) tested four different treatment regimes (see table).

Throughout all four trials, a significant yield uplift of between 25% and 32% was seen where Consortium Plus had been used instead of a standard seed dressing.

These results not only support the need to increase the naturally-occurring colonies at planting with UK derived microbes, but also the importance of keeping them fed during the first few days while the tuber begins to root and to continue supporting them in the intervening two or three weeks while roots develop. After that, the crop will be producing enough root exudate to maintain the colonies without additional support.

Lastly, the inclusion of these with foliar nutrients has allowed those carrying out the trials to reduce soil-applied fertilisers by 50% while maintaining yields, providing another positive benefit for the soil’s future microbial colonies.

The 2025 trials are currently being developed in conjunction with the project’s farming and academic partners and will continue to evaluate the benefits of using a microbial mix at planting along with the longer-term effects on crop yield. **PR**

“Over the winter months, the soil’s natural microbial colonies are challenged by flooding and persistent waterlogging as well as freezing temperatures. This follows them having survived in the face of overused input factors.”

| | TREATMENT 1 | TREATMENT 2 | TREATMENT 3 | TREATMENT 4 | CONTROL |
|--------------|------------------|-----------------|-------------------|-----------------|-------------------|
| AT PLANTING | 50% NPK | 50%NPK | 50%NPK | 50%NPK | 100%NPK |
| AT PLANTING | STD SEE DRESSING | CONSORTIUM PLUS | STD SEED DRESSING | CONSORTIUM PLUS | STD SEED DRESSING |
| FROM T.I. | FOLIAR NPK | FOLIAR NPK | FOLIAR NPK | FOLIAR NPK | |
| FROM ROESTTE | BLIGHT PGRM | BLIGHT PGRM | DIAMOND ONLY | DIAMOND ONLY | STD.BLIGHT |

Research into microbial inoculants is revealing how targeted microbial communities can enhance soil fertility and crop resilience. Photo: turek

Embracing ages-old biology

Samantha brown, Technical Director of the Crop Smith Ltd, discusses the evolution of potato growing and how biology is adapting.

FOR over a century, agriculture has been dominated by a chemical revolution. Synthetic fertilisers and pesticides have become the cornerstone of crop production, promising quick fixes and high yields.

But as we push further into the 21st century, it is becoming increasingly clear that biology evolved over millions of years offers solutions far more advanced, resilient, and sustainable than chemistry alone can achieve.

Biology is complex. Microbes, fungi, and plants form a living network in the soil, one that predates human agriculture by millions of years. These systems evolved not in isolation but in collaboration, creating a finely-tuned balance that drives nutrient cycles, enhances plant health, and supports biodiversity.

Biological systems are not merely passive. They are dynamic and adaptive. Soil microbes, for instance, have developed the ability to fix atmospheric nitrogen, making it available to plants—a process no synthetic fertiliser can replicate. Mycorrhizal fungi form vast underground networks, extending plant root systems and increasing access to water and nutrients. These interactions are actively evolving, and will shape the future of agriculture.

This sophistication surpasses the linear processes of synthetic chemistry. Where chemical inputs often create dependencies and degrade long-term soil health, biological systems regenerate and sustain themselves. They are not just advanced; they are the result of billions of years of evolutionary refinement.

A history of overshadowed innovation

Despite their undeniable potential, biological solutions have often been overlooked. The rise of the agrochemical industry in the 20th century reshaped agricultural practices and, perhaps more critically, the mindset of farmers and agronomists. Chemical inputs offered predictability and immediate results—qualities that are easy to market and measure. In contrast, biological solutions were dismissed as too slow, complex, or difficult to quantify.

This narrative, perpetuated over generations, has conditioned many to believe that nature's solutions are inadequate for modern farming's demands. However, this view ignores a critical truth: Synthetic inputs, while effective in the short term, can lead to soil degradation, increased chemical dependence, and environmental harm.

Biology as the frontier of innovation

Modern science is beginning to validate what nature has known all along. For example, research into microbial inoculants is revealing how targeted microbial communities can enhance soil fertility and crop resilience. Advances in soil biology are uncovering ways to rebuild degraded soils and increase yields sustainably.

Why biology outperforms chemistry

The superiority of biology lies in its adaptability and interconnectedness. Where chemistry offers static solutions (formulae that remain fixed regardless of context), biology provides dynamic systems that respond to environmental changes. For example, microbes can adjust their behavior to support plant health during droughts, a feat no chemical input can achieve.

Moreover, biological systems work in harmony with the environment, reducing runoff, pollution, and greenhouse gas emissions associated with agrochemicals. By leveraging biology, farmers can create systems that are both productive and regenerative, benefiting both the land and the broader ecosystem.

**BOOK YOUR
DEMO NOW**



CERES 450

GET READY FOR SPRING WITH ONE PASS PLANTING

YOUR AVR CONTACT

07955 232433 | nealkinsey@avr.be
07435 524570 | shanejohnson@avr.be

YOUR AVR DEALER

07967 575004 | martyn@trmachinery.co.uk
07818 030552 | stewartb@peck.co.uk



WELVENT

CROP STORAGE SPECIALISTS

Bespoke systems designed and built to suit your crop storage needs:

- Box Potato Stores
- Glycol Refrigeration
- Ambient Systems
- Louvres or Flaps
- Ventilation Ducts
- Servicing



- Bulk Potato Stores
- Fans
- Tunnels
- Inverter Panels
- Fan Houses
- Automatic Controllers



WELVENT LTD

Whisby Way, Whisby Road,
Lincoln LN6 3LQ

T 01522 693008

F 01522 500429

E enquiries@welvent.com

www.welvent.com



Haith

HANDLING SOLUTIONS YOU CAN TRUST

From single machines to complete turnkey solutions the potato industry trust Haith to handle it.



IN-TAKE



BOX TIPPLERS



WASHERS & DESTONERS



POLISHERS



GRADERS



OPTICAL SORTERS



IN-FIELD



TURNKEY SOLUTIONS

INNOVATION COMBINED

+44 (0) 1302 831911

sales@haith.co.uk

www.haith.co.uk



GRIMME
Strategic Partner

Impact of the EU Fertilising Products Regulation

A significant regulatory shift in the European Union is set to further elevate the role of biological solutions in potato growing. The new EU Fertilising Products Regulation (Regulation (EU) 2019/1009), which came into full effect in 2022, introduces a harmonised framework for fertilising products, including biostimulants. This marks a major milestone for the industry, providing clarity and legitimacy to these biological inputs.

Under the new regulation, biostimulants are officially recognised as a distinct category of

fertilising products, separate from traditional fertilisers and pesticides. This allows for clearer labelling, standardised quality criteria, and more transparent marketing. As a result, farmers and agronomists can confidently integrate biostimulants into their practices, knowing they are backed by scientifically-validated claims.

The regulation also promotes innovation and market expansion. By setting safety and efficacy requirements, it opens up opportunities for research-driven advancements in biostimulant technology. This will likely drive greater investment in microbial inoculants, plant-

derived extracts, and other biostimulant solutions that enhance plant resilience, nutrient efficiency, and soil health.

Furthermore, the EU's emphasis on sustainability and reduced chemical dependency aligns perfectly with the benefits of biostimulants. With increasing restrictions on synthetic fertilisers and pesticides due to their environmental impact, biostimulants present a viable alternative that can maintain productivity while minimising ecological harm.

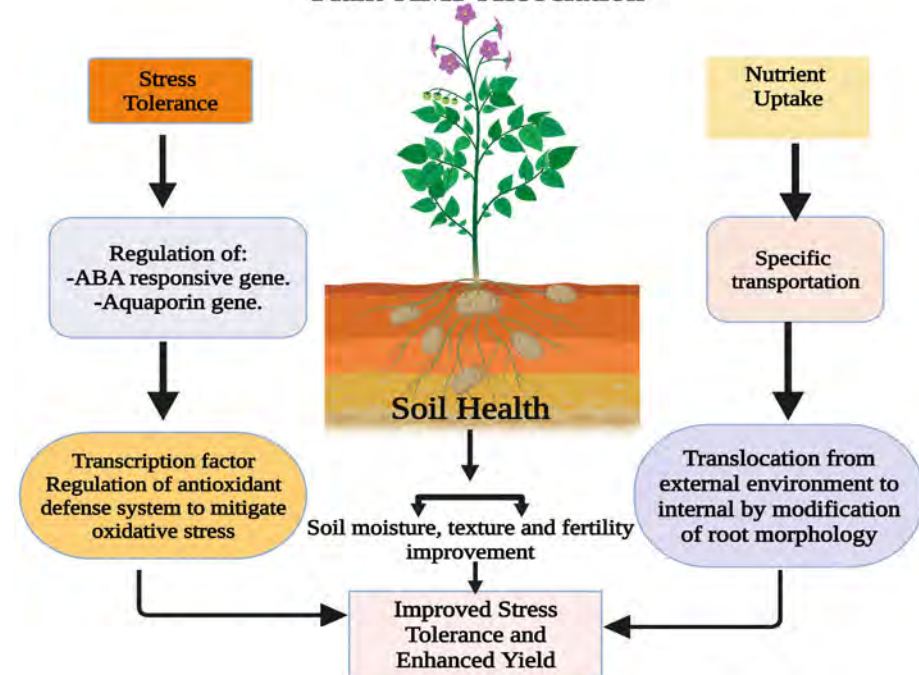
The Path Forward

The future of farming depends on a shift in perspective. Farmers and agronomists must embrace the full potential of biology, recognising it as a sophisticated and advanced system capable of meeting the challenges of modern agriculture. This does not mean abandoning synthetic inputs entirely but rather integrating them with biological solutions to create a balanced, sustainable approach.

Biology is not a relic of the past - it is the key to the future. It represents an evolutionarily advanced, inherently sustainable system that has been quietly driving life on Earth for billions of years. The challenge now is to harness its power with the respect and ingenuity it deserves.

The time has come to move beyond the chemical-first mindset and to invest in the remarkable systems that nature has spent millennia perfecting. In doing so, we will not only improve yields and resilience but also secure the long-term health of our soils, crops, and planet.

Plant-AMF Association



New look for crop nutrition range

OMEX Agriculture, a supplier of crop nutrition solutions, has revitalised its crop nutrition and foliar fertiliser offering for potatoes, which it has renamed the Fortiflo range.

The Fortiflo range offers a range of biostimulants, core crop nutrition and fertiliser additives to improve efficiency and reduce emissions.

OMEX's National Agronomy Manager Scott Baker said: "We are continually evaluating our product range to ensure it meets customer expectations, running trials with our in-house research and development department and collaborating with universities and research facilities."

New biological R&D centre

SPECIALITY minerals company ICL has unveiled a new biological research and development centre whose work will seek to enhance crop resilience, increase yields, and the environmental impact of potato growing and other farming practices.

The centre is located in Israel and features advanced laboratories, controlled growth chambers, and micro-organism cultivation capabilities.

The facility is part of ICL's global network of 13 R&D centres.

Dr Elinor Erez, Vice President of research and development at ICL Growing Solutions, said: "This marks a bold step forward in transforming global agriculture. By blending science, technology, and unmatched agronomic expertise, we're delivering solutions that strengthen global food security while driving sustainability to the forefront of growing."



Implications of potato crop offtakes examined

DEFRA figures reveal that the national balance for phosphate in England has been declining over the last few decades and is now only about 5% of the 230 kt surplus from 1990.

Whilst a net balance between nutrient inputs and outputs may be seen as ideal, this now marginal surplus is an average for the country and does not give the true picture at an individual level, according to the Potash Development Association, which says farm level balances are a better indication for each business and whilst some are likely to find themselves still in a positive balance, there are plenty of other businesses which are now in a deficit position.

Whilst the published trend is for phosphate (all inputs and outputs), it is likely to be similar for potash. Any negative balance will deplete soil reserves and if not corrected will result in potential yield and financial penalties down the line.

Crop offtakes are often overlooked but the implications should not be ignored.

Despite UK soils usually containing large total quantities of phosphorus and potash, most of this will be unavailable in the short to medium term. Complete restocking is extremely rare, although certain clay soils can release useful quantities of potassium from pools not measured by soil analysis.

Data from the British Survey of Fertiliser Practice show significant reductions in major nutrient use in Great Britain over the past 40 years. The overall rate of fertiliser phosphate has decreased by around 67% and that of fertiliser potash by around 55%. Rates of phosphate and potash application have remained greater in Scotland than in England and Wales.

The latest data provided by NRM shows that around a quarter of all arable soils are below the target level for P, K and Mg.

Optimal yields are only likely to be achievable where soils contain sufficient phosphorus

and potassium in a readily available form so that they are able to release enough of these nutrients into the soil solution on a daily basis to satisfy crop uptake requirements. Nitrogen is also likely to be used less efficiently where potash levels are suboptimal, reducing the returns from this valuable input and increasing the potential for negative environmental effects, according to the PDA.

Potash reserves in the soil are more effective at supplying the plant than fresh fertiliser applications. Impoverished soils often do not produce the same yields as fertile soils even if higher fertiliser rates are applied so an adequate reserve of phosphate and potash to feed a potato crop should be maintained in the soil by using fertilisers to replace what is removed, the PDA stresses. For soils with low reserves, extra fertiliser should be used to restore fertility to target levels. For soils with high reserves, fertiliser usage should be reduced or omitted, it adds.

Nutrient imbalance in 66% of Irish soil

TWO thirds of Irish soils have significant nutrient imbalances, according to newly-released data.

IAS Laboratories, which specialises in agricultural and environmental testing, has published an annual soil summary report for 2023-2024, compiling data from thousands of soil samples across Ireland. The business' inaugural soil summary is compiled from 45,000 soil samples collected across Ireland between June 2023 and May 2024 with the aim of helping growers and advisors understand current nutrient status across Ireland, compare results across farms, implement insightful management strategies, and enhance soil health for optimal crop production.

"The soil data that we analysed last season shows that there are some serious nutrient deficiencies in most Irish soils," said Dr Sajjad Awan, Agronomy Manager at NRM, IAS Laboratories' sister company. "Over 30 years, we've seen similar deficiencies in the UK at NRM, prompting us to launch a soil summary for IAS to see how soils are faring in Ireland and to help farmers decide what to do with that information.

"The findings are a wake-up call. It's concerning that imbalances seem to be the norm, and whilst weather conditions do have an impact on nutrient availability and crop yields, it's important to learn from the data to work towards overall improvement."

Key findings from the summary include:

- **Soil pH:** although the average soil pH was 6.4, which is close to the ideal range for crop growth, 37% of samples fell below pH 6.0.

Low soil pH reduces the availability of key nutrients, which has an impact on the efficient use of applied fertilisers. It also increases the availability of aluminium and manganese, which can reach toxic levels and harm plant roots, reducing their ability to absorb water and nutrients.

- **Soil phosphorus:** 63% of soils were deficient in phosphorus, which can limit crop yields, and 15% had too much phosphorus, which poses potential environmental risks through leaching. To help optimise soil nutrient levels, Sajjad recommends testing more regularly. This will give growers and advisors the data they need to start making informed, insightful changes into their management programmes and improve crop production, he said.

"Testing is the only way to get the information required to start

taking steps towards evening out these issues and imbalances," he said. "However, many farmers either don't test frequently enough or failing to act on their results. Regular soil testing is so beneficial, as it provides crucial insights into the nutrient status

of the soil. This helps farmers and land managers make informed decisions about fertilisation and soil amendments for optimal farm productivity. Consistent testing also allows farmers to track progress year after year, leading to measurable improvements in both productivity and profitability over time. We recommend testing all fields once every four years, or rotating through a quarter of fields annually."

"The soil data that we analysed last season shows that there are some serious nutrient deficiencies in most Irish soils"

Grower-supplier trials low-carbon fertilisation initiative

FERTILISER producer Yara has announced a new partnership with potato supplier and grower Branston, which will be trialled at the Branston farm in Lincolnshire.

As part of the initiative, Yara will provide Branston with lower carbon fertilisers as well as crop nutrition support to reduce carbon footprint and improve yield. As part of the joint initiative, Yara will supply Branston, the potato grower for Tesco Finest white potatoes, with a Lower Carbon Crop Nutrition Program to reduce the carbon footprint of the end product.

Already a buyer of Yara's liquid and solid fertiliser products, Branston's aim to achieve long-term sustainability led to discussions with the fertiliser producer about how it could help the company lower its carbon footprint using lower-carbon fertilisers.

YaraMila, YaraBela and YaraLiva have been lower carbon since 2006 when Yara introduced abatement technology to reduce nitrous oxide emissions. However, this is only part of the picture. Alongside supplying fertiliser products, Yara will provide Branston with potato crop nutrition support focusing on whole plant health to improve yield.

This will involve carrying out soil and leaf testing at its Lancrop Laboratories to assess NUE and identify nutrient deficiencies and providing micronutrient products from the YaraVita range to ensure crops have everything they need.

The project will gather relevant data to demonstrate how much of a carbon reduction is possible. Included in this data will be verification statements which will show the carbon footprint reduction of the products supplied.

Key Account Manager for Yara UK, Gareth Flockhart, said: "Introducing this holistic crop nutrition program approach will positively impact the potato crop at Branston by lowering carbon footprints whilst maintaining or increasing yields. Yara fertilisers have been independently verified since 2006 and now include the new Climate Choice Low Carbon grades. These lower carbon fertilisers included as part of the Crop Nutrition Plan will inevitably help both Branston and Tesco reduce their carbon footprint even further.

"Our hope is that through this initiative, we can demonstrate that by making the switch to lower carbon fertilisers is the way to a more sustainable food system for the future."

It is hoped the project will then be rolled out to the company's external growers in the near future.

Branston's Agronomy Director, Mark Willcox, said: "Yara have done some great work in developing a number of genuinely low-carbon fertiliser products that should offer potato growers the same storability, handleability and nutrient uptake that they are used to from conventional products. We hope that over time, innovative products such as these will be incorporated into our recipe for low carbon (or even Net Zero) potato production."

Insight into soils' health in updated map

NRM, an independent provider of agronomic and environmental waste analysis for land-based industries, has updated its interactive soil map alongside its annual soil summary report for last year to help UK growers benchmark results against other farms in the same region with the same soil types and climatic conditions.

Soil and Crop Nutrition Agronomist Sajjad Awan said the summary has again confirmed the trend seen over the past 30 years that soils are deficient in the three key nutrients, phosphorus, potassium and magnesium.

The map and summary include consolidated, anonymised data from thousands of soil samples collected between June 2023 to May 2024 from farms across the UK. By selecting their region and county, growers and advisors can localise nutrient summaries, gaining information and insights tailored to their specific needs. Data for phosphorus, potassium, magnesium and pH is split out by arable and grassland and summarised according to the 9th edition of the RB209.

Sajjad said: "It's also interesting to look at trends and variations across the different regions in the UK to see how we're doing on a more local level. An interesting insight is that we have seen large regional variation in soil phosphorus levels, influenced by a variety of geological factors, land management, crop and nutrient management practices.

"For example, available phosphorus levels are low in Yorkshire, potentially due to the region's higher soil pH as a result of chalky boulder soils locking up the nutrient with calcium. In the South East, in contrast, we have seen higher phosphorus levels. This likely reflects more frequent fertiliser use, including inorganic and organic forms such as biosolids, probably driven by the need to support high-value cropping systems. Furthermore, NRM's GrainCheck data shows that the actual grain phosphorus removal is lower compared to the offtake values described in RB209. This could be potentially contributing towards higher soil phosphorus levels."

Project seeks to curtail potato companion crop myths

An initiative hoping to boost UK production of a potato companion crop, determining definitive best practice, has been launched.

Beans, like all legumes, are good companion crops for potatoes. They help to add nitrogen to the soil - their ability to fix their own nitrogen while also leaving it in the soil for the potato crop is well documented. They can also help trap aphids and deter weeds with their dense growth above and below the ground.

However, uptake of growing beans has long been curtailed by the perception that they're unreliable, despite the multiple benefits they provide.

PGRO's Chief Executive Roger Vickers said: "While there are scientific publications that clearly demonstrate across north-west Europe that beans are no more unreliable than other spring sown crops, the perception is real and impactful. The current recommendations in RB209 have not changed in decades and it is not at all clear from where the recommendations originated. Seeing this as a possible weakness in the agronomic approach to bean cropping, we are embarking on a study that aims to establish new best practices and recommendations."

A new project called ANSWERS, or 'Alleviating Nutritional Stress for Wider Environmental Rewards in Sustainable UK protein crop production', will bring together PGRO, NPZ (LSPB), Yara, and the University of Lincoln, alongside real field-scale trials, to develop practical nutrient plans to enhance nodule activity and nitrogen fixation, productivity, yield stability, protein content and climate resilience.

"The goal is to optimise the on-farm yield and quality of faba bean as an alternative UK-produced protein source, to directly influence significant improvement in productivity, sustainability, the environmental impact of farming, progression towards net zero emissions and help create resilient food supply chains," said Roger.

The project will build upon recent studies undertaken by PGRO, Yara and the Bean YEN network which revealed that poorly-understood nutrient requirements are a key barrier to increasing production. After collecting data from 318 farms, Yara found that substantial proportions of faba beans are deficient in potassium, magnesium, manganese, molybdenum and boron. These nutrient deficiencies impair nodule activity, nitrogen fixation and plant resilience to environments.



"Despite their indisputable benefits, only 3.8% of UK arable land is currently used for field bean production," says Mr Vickers. "The low area of pulses reflects variable yields (mean 5.1t/ha, range 1-8t/ha) and low gross margins in some years, but potential yield has been shown to be much higher - as much as 13.7t/ha in field beans. In 2024 we saw some UK farms achieving over 9t/ha.

"There is significant potential to increase area, which would help to replace imported soya in animal feeds and reduce the carbon footprint of animal production systems."

ANSWERS is funded under the Defra Farming Innovation Programme Small R&D Partnership Projects competition and will run for three years.

'Incorrect interpretations defy the purpose of soil sampling'



Soil sampling could be a wasted exercise unless results are correctly interpreted, potato growers have been warned.

Sampling is an essential tool in revealing the nutrient availability of soils and Simon Francis, Technical and Services Manager for agronomy firm ProCam says it is not

only required for farm assurance compliance purposes and to meet the statutory requirements of an increasing number of SFI schemes, but it is also time well invested in ensuring potato crops can perform to their full potential.

However, unless soils are sampled and tested in a timely and accurate manner, and the results interpreted appropriately by an experienced agronomist, it is unlikely the investment in soil sampling will generate a viable return, he added.

"Sampling prior to sowing any crop is key, as it provides an essential opportunity for growers to assess the nutrient status of soils and to make plans to redress any identified imbalances or deficiencies," Simon said.

Simon recommends each field should be tested at least every four to five years. "In extreme cases, for example where continuous high rainfall or an extended period of waterlogging has caused nutrient stores to be depleted due to leaching, increasing the frequency of testing could prove useful. Another

example could be where a lack of organic matter prevents nutrients from being retained, thus causing leaching losses to be exacerbated."

In addition, water logging also compromises root development, affecting a crop's ability to access nutrients, so understanding what is available to the crop during the early stages of development is vital to maximise potential, Simon said.

"Irrespective of the soil type, the very least growers should be doing is to test each field to build a basic picture of the farm's P, K and Mg indices as well as pH and organic matter. Testing organic matter content can provide a good indicator of general soil health, from which it is possible to begin to understand the soils capacity to retain both moisture and nutrients," he said.

"Beyond this, the next step is to build a more comprehensive understanding of the macro- and micronutrients available to plants, so that a tailored nutrient programme can be drawn up proactively rather than reactively during the season."

A mixed approach to PCN management

Tom Harrison at HDF Farming Ltd shares his experiences of managing potato cyst nematode (PCN) as part of an IPM system.

In 2021, fourth generation young grower Tom Harrison took on the reins of his family's business, which has been growing potatoes since 1963.

Managing more than 1,200ha with 460ha of potatoes grown on rented land spanning the North Norfolk coast, the home farm of HDF Farming Ltd is in Trimingham, near Cromer.

The family grows seed potatoes under contracts with different seed companies. They also grow potatoes for processing, supplying Lamb Weston and Albert Bartlett. In addition, they supply pre-pack potatoes to supermarkets and sell some potatoes directly to local markets under their own brand.

With a wide range of potatoes being grown across rented land, Tom and the farm face regular PCN challenges.

IPM management experience

Through working with experts, including independent agronomist Simon Alexander, Alistair Neill from Prime Ag and Alastair Ross from Frontier Agriculture, Tom is actively looking at non-chemical approaches to PCN management.

As such, he uses a combination of IPM strategies to help spread risk and bolster the chances of potatoes being protected from *Globodera rostochiensis* and *Globodera pallida*.

The first step in his battle plan is having a thorough understanding of the PCN pressures in every single field.

"Although you can't be 100% accurate with the reading across an area of over 10,000 square metres and only 200g of soil, sampling every single field remains the first step for us to work out PCN burden and forge an IPM plan that won't decrease yield," said Tom.

"If a field is deemed to be clean, we put in a variety with low resistance, therefore the chance of multiplication is very low owing to no findings in the samples. If we find higher counts, around one to five eggs per 200g soil sample, we would be likely to use a variety with good resistance and partial tolerance. In this instance Amanda works well.

Sometimes a half rate Nemethorin is still required as a yield protection depending on the field history, he said.

"This strategy assures when the land comes back into potatoes in eight years' time that



Tom Harrison took on the reins of his family's business in North Norfolk, which has been growing potatoes since 1963, four years ago.

we shouldn't run into any issues. If higher egg counts show above this reading, five eggs and over per 200g of soil, this is when a variety such as Elland is used to achieve reduction in PCN counts as it has good resistance as well as high tolerance. However, a full rate of Nemethorin is still required in this instance to guarantee that yield and ensure a positive return."

Tom explained how bio fumigation is used to reduce PCN development.

The first step in Tom's battle plan is having a thorough understanding of the PCN pressures in every single field.

With a wide range of potatoes being grown across rented land, Tom and the farm face regular PCN challenges.



Tom said the farm considers nematicides as an insurance policy for the crop and the investment.



"We use hot mustards with a 50/50 blend of Caliente and Caliente Rojo, which are mulched when around 50% of the crop is flowering. This process releases Isothiocyanates as well as other products of hydrolysis into the soil which suppresses the PCN.

"Good establishment is key, and the aim is to produce as much biomass as possible before the mustard starts flowering. For best results, the soil needs to be moist and the temperature needs to be above eight degrees when mulching and sealed."

"Ensuring all steps of growing the fumigation crop are done correctly is key to reducing PCN numbers. We have seen mixed results and the majority of these is down to how well established the crop is."

Explaining why this process is part of his IPM strategy, Tom said: "I like to try to use bio-fumigation as a non-chemical approach to managing the pest, but as the effect can be hard to monitor, it's always used as part of a mix of practices."

Using *Solanum sisymbriifolium* – a member of the potato family – as a trap crop is another strategy he has trialled.

"The roots' release exudates that encourage the PCN to hatch but they cannot multiply on the roots. This, therefore, leads to a reduction in the population," said Tom. "We've seen a 30-40% reduction in PCN using this method, however, there are some key timing considerations.

"We were lucky enough to be following a carrot rotation, which was key, as *Solanum sisymbriifolium* is most effective if planted in early summer - ideally June - which doesn't work with all rotations. However, with autumns becoming more open, there may be an opportunity to extend the drilling window which may lead to more opportunities to fit this in the standard rotation.

"As with bio-fumigation, trap crops also reduce pest levels, but their use can be costly - we are looking at £750/ha before the soil sees a potato," he added.

Tom said the farm considers nematicides as an insurance policy for the crop and the investment.

"We do use nematicides where required in fields with higher PCN burdens, which

is representative of between 20-30% of our total crop," he said.

Reflecting on his experiences, Tom highlights what he believes is essential for a successful IPM strategy to manage PCN.

"A combined approach, using the right IPM methods tailored to each field and level of PCN burden is crucial," said Tom. "Equally important is selecting the right varieties and thoroughly sampling all your land to understand the plant and financial risk due to PCN.

"It's worthwhile making sure you can access as wide a range of varieties as possible so you can pick what you need when it comes to

yield, margin or cleaning up land for your next rotation in eight years' time."

"Though PCN management is challenging at times, I take comfort in the fact that the industry has learned a lot and moved on significantly in the past few years with new technologies developed and more varieties becoming available."

"We are conscious of the best practice requirements on the use of granular nematicides as stated under stewardship and doing our best to help protect them and to minimise their impact on the natural environment," said Tom. **PR**

Farm facts

- 1,200ha with 460a of potatoes grown on rented land, spanning the North Norfolk coastline and at the home farm in Trimmingham
- The farm also produces winter wheat, winter barley, spring barley, oil seed rape, sugar beet, peas as well as grass seed
- Seed potatoes are stored, managed and distributed from local site in Foulsham – which forms part of 22,000 tonnes of storage used by the business
- All potatoes are both Red Tractor and LEAF Marque assured
- The family also contract plant and harvest 40-50ha of potatoes for local growers

Reminder: Responsible nematicide use

THE Nematicide Stewardship Programme (NSP) promotes the responsible use of granular nematicides as part of an IPM approach, to tackle the persistent challenge of PCN.

The NSP best practice steps, which are part of the Red Tractor standards for potato growers, give guidance on how to achieve safe and responsible application.



GRANULAR NEMATICIDE BEST PRACTICE STEPS



1. QUALIFY

- PA4G or PA4 certificate
- Artis e-learning certificate
- NRoSO membership



2. CALIBRATE

Machinery must be professionally calibrated every two years



3. SINGLE PASS

Apply and fully incorporate nematicides within a single pass



4. SHUT OFF

Applicators must have the facility to shut off granule flow before the row end



5. SPILLAGES

Bury small spillages immediately



6. CHECK

Check treated fields 12-24 hours after application for adverse effects to wildlife

FOR MORE INFORMATION VISIT: WWW.NSPSTEWARDSHIP.CO.UK

CROP VISION⁺

The Optical Sorter for unwashed potatoes and onions



- Powered by AI
- Easy integration in all line
- Sorting in 3 ways

073 98 29 27 75
contact@downs-fr.com

www.downs-vision.com



Reminder to soil test as part of IPM strategy before growing season

ONGOING research from the PCN Action Scotland project has reinforced the importance of soil testing as the basis of integrated pest management (IPM) strategies for managing Potato Cyst Nematode (PCN) this spring.

The research, led by Dr James Price, a molecular biologist and nematologist at the James Hutton Institute in Scotland and project lead for PCN Action Scotland, indicates that targeted management of the pest not only by population, but by species is key.

“Part of our project work is to help highlight the value of accurate and early PCN detection through soil testing to effectively combat this pest to growers.

“Our advice is to understand your soil, determine what’s in there—both good and bad—and establish the PCN population at species level, whether it’s *Globodera pallida* or *Globodera rostochiensis*.”

James also highlights the precision needed for soil sampling.

“Given that cysts are about half a millimetre in size, it’s crucial to soil test thoroughly and sample appropriately to understand the population. Identifying the species is vital; only then can you decide what to do next.

“Knowing your specific issue and disease pressure is a vital part of knowing what next steps to take.”

If soil sampling indicates the need for nematicides such as fosthiazate as part of an IPM strategy, the Nematicide Stewardship Programme (NSP) Group advises growers to follow its ‘Best Practice



Protocol for Safe Application’, as NSP chairman Patrick Mitton explains.

“With the planting season nearly upon us, we strongly recommend growers and operators revisit our best practice guidelines when it comes to using nematicides, to protect the environment and ensure operator safety.

“The principles recommend operators hold PA4 or PA4G certification, complete the Nematicide Stewardship e-learning, and be NRoSO members.

“Along with soil sampling to assess pest pressures, seek advice from a BASIS-qualified agronomist before using granular nematicides.

“Proper calibration is also critical; ensure equipment is inspected by NSTS and regularly monitored during application to meet Red Tractor requirements,” he adds.

Growers are encouraged to visit the NSP website to update their knowledge on best practices for fosthiazate granule nematicide application before planting.

The NSP website also offers a detailed guide: Code of Good Practice for the application of nematicides (nspstewardship.co.uk).

PCN guides to be launched

PCN grower, sampling and biofumigation guides are being updated by GB PCN Forum are set to be launched this spring.

The GB PCN Forum, established in partnership with CUPGRA and made up of experts, researchers, and industry stakeholders, wants to ensure critical information reaches growers.

Dr. Matthew Back of Harper Adams University is leading the effort to revise and modernise resources to incorporate the latest research and practical insights. The updated guides will initially be available to members of GB Potatoes and CUPGRA.

Biostimulant expansion

FRENCH company EléphantVert(EV), a provider of biological nutrition and stimulation products that can be used on potato crops, has taken over another French biostimulant company, BIO3G, enabling it to expand its global service offering.

The two companies began collaborating in 2018. EV, which has a presence in more than 44 countries, was founded in 2012 and BIO3G, which is based in Merdrignac (Brittany), has been operating since 1997. Its products are available commercially in the UK.

EV has a solid foothold in Africa through its subsidiaries and has been looking to expand its European offering for the past two years. BIO3G is dedicated to the development of natural solutions with a 100% direct sales and advice approach in France, Switzerland, Belgium and Germany.

LUXOR

CALFITE EXTRA

LUXICAL

Phosphate Power

Unium

Maximise Efficiency and Sustainability in Your Phosphorus Fertiliser Programme

www.uniumbioscience.com/phosphate-calculator

Garlic-focussed distribution agreement to target nematodes

CROP science company Bayer has signed a new exclusive distribution agreement with UK-based Ecospray, a UK-based biopesticide company specialising in creating garlic extract-based solutions, to market a biological liquid nematicide sourced from garlic.

The product presents a biological alternative to traditional synthetic chemical nematicides in potato crops, and will be marketed in the European Union under the new name Velsinum™.

Jens Hartmann, Regional Head for Europe, Middle East, and Africa (EMEA) at Bayer's Crop Science Division, said: "Velsinum will be a welcome addition into Bayer's trusted portfolio of biological solutions and technologies supported by innovations like Velum, BioAct, Nematool and Terra MG."

Nematodes cause more than 75 billion euros

worth of damage to crops globally each year with all crops facing at least one nematode pest threat. Velsinum will offer growers a new tool against nematode root damage, with complementary benefits for both plant and soil health. Plants which can avoid root damage are better able to absorb available nutrients and also can withstand disease and pest pressure overall, all while safekeeping beneficial earthworm populations to maintain soil quality.

Ecospray's knowledge of naturally-occurring bioactive compounds contained within garlic has allowed the company to develop effective plant protection products which take advantage of the natural nematicidal properties of garlic extract to create safe, effective and zero-residue solutions.

Ecospray CEO Peter McDonald said: "We are



excited to collaborate with Bayer on Velsinum, which is fully compatible with Bayer's existing biological portfolio. This partnership is a strong endorsement of Ecospray and its R&D capabilities developed over many years. We also greatly appreciate the ongoing support from our existing distributors in Europe Certis Belchim BV and CBC (Europe) SRL, who remain vital to our market development with our legacy product Nemguard."

Rewards for demonstrating best nematicide practice

POTATO growers using Syngenta's Nemathorin to control potato cyst nematodes, reduce tuber damage caused by wireworm and reduce spraing transmitted by free-living nematodes this season can now get bonus Partnership Plan reward points for demonstrating they are following best application practice at planting.

Syngenta Partnership Plan Lead, Ed Flint, said he hoped it would raise awareness amongst growers about how they can adapt their own practices to get the most from nematicides.

He said: "We are committed to the Nematicide Stewardship Programme and promoting the industry to follow best practice for the application of nematicides prior to planting. A full mechanical inspection and calibration of applicators is paramount in achieving the accurate and consistent

incorporation of Nemathorin into the soil. Annual NSTS certification is a necessary part of potato production protocols.

"Not only will growers benefit from the best results from Nemathorin in preventing yield and crop quality losses from PCN and wireworm, as well as FLN that result in the spread of spraing virus, but they now also get the financial reward of additional Partnership Plan reward points too."

Syngenta recommends its granular nematicide Nemathorin should be applied evenly across the soil surface and thoroughly incorporated to a depth of 15cm to target all the key soil pests on the label. Used as part of an Integrated Pest Management strategy, alongside soil sampling, extended rotations and varietal selection, treatments can help



protect this season's yield and tuber quality, along with long-term sustainable viability of land for potato production.

Syngenta Partnership Plan is open for every grower who uses the company's products. The online platform is quick to register and easy to use. This makes it straightforward to collect points and enjoy useful rewards such as gift cards for Amazon, John Lewis, Screwfix, and other popular retailers.



standen.co.uk

BRITISH ENGINEERED SINCE 1846 
STANDEN

Standen T2XS Harvester
Gentle harvesting, simple to maintain,
cost effective to run.

Set up options include:

Double OMEGA, Salad OMEGA, Dahlmans with OMEGA, 3rd web with pintle belt and many more.

Data-driving decisions



Scott Walker of GB Potatoes discusses how we can get better data on the area of potatoes planted.

THE potato industry has made it clear that it needs better information on how much land is being used to grow potatoes but collecting this data presents a significant challenge.

We all agree that having reliable figures on potato acreage, varieties, and national yield would be helpful, but how do we actually gather it? What hurdles will we face along the way? Most importantly, can we count on industry support to make this work?

Accurate data on potato planting also plays a crucial role in discussions with government bodies. Without precise figures, it becomes difficult to argue for fair policies, support schemes, and to champion investment in the sector. Governments rely on strong data to justify their intervention, whether it be research funding, trade regulations, or food policy. If we can present a well-structured, reliable dataset, we improve our chances of securing beneficial policies for the industry.

But do you think it really matters if we know the area of potatoes planted each year or is the current guesswork sufficient?

How could we collect the data?

So, how do we go about gathering data on the area of potatoes planted and is the area enough or should we also be looking at gathering other data such as varieties?

There are a few ways we can do:

- **Satellite data:** Believe it or not, we can use satellite imagery to estimate total land coverage of potatoes within GB. With advanced technology and machine learning, we can get a reasonably accurate picture of what's planted. However, this method is expensive and would only provide information very late in the season – by which time the benefit of knowing the area planted may not justify the cost. While useful for historical data and trend analysis, it's not an ideal solution for real-time industry planning.
- **Direct from farmers:** One of the most direct ways to gather data is by going straight to the source, farmers. If they're willing to share information about their crops, we can build

a clear and accurate picture of what's being grown. But will farmers be prepared to share this information? Some may worry about confidentiality or how the data will be used. To encourage participation, we can ensure that data is anonymised, highlight the collective benefits, and possibly offer incentives. However, the question remains – would this be enough to encourage widespread participation?

- **Processors and packers:** Processors and packers already have extensive knowledge of the area they have under contract and what their grower network is planning. By combining this information, we could provide a broad industry overview without sharing commercially sensitive details. In many ways, processors and packers have a vested interest in better data, as it helps them manage supply chains more effectively. However, the key question is whether all of them would be willing to participate. Would this approach be more effective than asking individual farmers to report their own data?

The challenges we'll face

Of course, collecting this data isn't all smooth sailing. Here are some hurdles we'll need to overcome:

- **Getting growers on board:** Some growers might be hesitant to share their data, either because of privacy concerns or because they don't see the immediate benefit. We'll need to ensure anonymity and demonstrate how data-sharing can actually help them in the long run, whether through better market transparency, more informed decision-making, or stronger policy support.
- **Technology and budget constraints:** High-tech solutions like satellite tracking sound great, but they require funding and expertise. Making sure these systems are accessible and sustainable will be key. We may need to look at government funding or industry collaboration to make this a feasible option.
- **Ensuring data reliability and consistency:** Gathering and publishing data is only useful if people trust its accuracy. This means we need large-scale participation from farmers, packers, and processors if we go down this route in order to ensure the data reflects the true situation. Will we be able to get enough industry support? Additionally, we must commit to collecting and reporting data consistently over time, so everyone knows they can rely on it year after year.

Why data matters

If we can overcome these challenges and obtain accurate potato industry data, the benefits will be significant.

Everyone will have access to the same information, making the market more transparent and reducing unfair advantages. A level playing field benefits all industry players.

With solid data on what area is planted and what varieties are being grown, growers can plan their crops and investments with greater confidence. This reduces the risk of oversupply or shortages, helping to stabilise prices and profits.

One of the biggest advantages of having reliable data is the ability to present a clear case to the government for better policies and support schemes. With accurate figures, we can advocate for research funding, crop insurance programs, and industry protections that directly benefit farmers and the wider supply chain.

Then there's the encouragement it can give to investors and innovators. When investors and researchers can see clear trends in the industry, they'll be more willing to put money into new technologies and growing techniques. Data-backed insights drive innovation and efficiency improvements across the sector.

The right mix

At the end of the day, better data means a stronger, fairer, and more profitable potato industry for everyone. It won't be easy, but with the right mix of technology, collaboration, and transparency, we can build a data collection system that works for everyone.

Most importantly, having accurate and up-to-date data strengthens our voice in discussions with the government. With the right figures in hand, we can secure better funding, smarter regulations, and policies that genuinely support the industry.

By working together - growers, processors, researchers, and policymakers - we can make this happen. The future of the potato industry depends on it.

We're interested to hear what thoughts *British Potato Review* readers have on data collection for the potato industry? If you're interested in sharing your insights, please get in touch at info@gb-potatoes.co.uk **PR**



L EVANS & SON (HEREFORD) LTD



T: 01432 830722
E: sales@len-evans.com
W: www.len-evans.com



Crown House,
Canon Pyon,
Hereford, HR4 8PE

STOCK AVAILABLE

2018 GRIMME GF200 BED TILLER

- Single bed tiller
- Speed blades
- Rear linkage

£12,000

2008 GRIMME GT170S HARVESTER

- Wheel drive
- Double m/sep
- Windrower
- L/H & R/H levelling

POA

2009 GRIMME GT170M HARVESTER

- Non wheel drive
- Double m/sep

£12,000

2004 GRIMME GL32B CUP PLANTER

- Steering
- Hydraulic hood
- V.G.C

POA

2009 GRIMME GT170S HARVESTER

- Wheel drive
- Double m/sep
- Windrower
- L/H & R/H levelling

POA

2002 GRIMME CS1500 DESTONER

- Chain drive
- V.G.C

POA

E&OE



Scan to view our potato sacks in stock



UK's largest Paper Sack Manufacturer



All-Inclusive Paper Sack Supplier

Design | Manufacture | Deliver



Follow us



East Riding Sacks Ltd.

Full Sutton Industrial Estate,
Stamford Bridge, York YO41 1HS
www.eastridingsacks.com

+44 (0) 1759 371366
sales@eastridingsacks.co.uk



MERCER
MACHINERY LTD



BAUER DEALER
Large Stockist of:
Miedema & Structural Parts
Pipes and Fittings
Potato Handling Spares

Contact us on
T: 01568 797 601

BRADLEY
REFRIGERATION

A Sub Zero Holdings Company

Over 60 years serving the agricultural industry with energy efficient crop cooling solutions. Including supply, installation, maintenance and repair of all types of refrigeration.



T: 0114 553 7785
E: agriculture@bradleyref.com
www.bradley-refrigeration.com

Seed warning following wet season

Suppliers advised to protect high-value potato seed from diseases developing in store.

SEED potato suppliers are being urged to protect their product from storage diseases at first grading following the wet 2024 harvest and reports of symptoms developing in some stores.

Tuber pathogens that develop in seed from harvest to delivery include dry rot, gangrene, silver scurf and skin spot. Once established, they are difficult to eradicate, significantly affect seed quality and cause problems in following crops.

Frontier's Seed Treatment Specialist Darren Wonnacott said last year's wet harvest in some seed producing areas will have increased the risk of these diseases, particularly skin spot and silver scurf. Frontier supplies seed, crop protection products and fertiliser, as well as providing specialist agronomy advice.

Darren has also seen mummified seed tubers in some stocks, where they were infected with disease and dried out in cold storage. These are now a source of inoculum.

To prevent disease development on seed in the first place, application of a tuber fungicide treatment such as Gavel (imazalil) is being advised.

There are three phases where the treatment can be applied. Phase one is at harvest or as tubers are loaded into store, phase two is during storage – usually at first grading – and then finally, phase three is when they leave store for delivery.

"There is the potential for any inoculum to spread if you get any fresh damage during first grading, so my advice would be to apply Gavel where it hasn't already been applied in that phase two window," said Darren.

"Seed supplies are tight this year and values are very high, so it makes any investment in a treatment relatively cheap, particularly as a small problem now can turn into a big problem before delivery. It's a no brainer for me."

Susceptible varieties

Skin spot is of particular concern this winter in high-risk susceptible varieties like King Edward and Rooster because of conditions during lifting, he adds.

In these high-risk cases, he suggests a combination of Gavel and Storite Excel (thiabendazole) to bolster protection against skin spot, a pathogen which causes poor and uneven emergence in the following crop.

To apply storage fungicides like Gavel evenly over seed tubers Darren advises using a roller table applicator with a rotating hollow cone nozzle and air assisted hooded canopy.

"Always make sure your equipment is set up right and has been serviced and calibrated before use, as it'll ensure you get the most out of the treatments and keep seed in the best condition for planting."

Beating the weather and keeping dry

BASF's Business Development Manager Paul Goddard, said while the aim is always to lift seed crops in ideal conditions, weather



Darren Wonnacott, Seed Treatment Specialist, Frontier.



Paul Goddard, Business Development Manager, BASF

conditions like those experienced last year frequently conspire against us.

"The key to storing any tubers, seed or otherwise, is always to have them dry as quickly as possible to help prevent the development of bacterial rots. Then it is about monitoring. A lot of crops will spend more time in the store than in the field, especially for seed.

"Handling is also a consideration. It's well documented to be a factor in the spread of dry rot and gangrene, and there needs to be a balance while drying potatoes.

"When it comes to the application of tuber treatments for the planting season, the same considerations should be taken for them all."

He said it's important to think about what disease is on the tubers as this will dictate the need to treat and the product to use. BASF's Honesty product, for example, offers a broad spectrum disease control. It's a protectant SDHI fungicide that contains Xemium and has rhizoctonia control, silver scurf and black dot reductions on the label as well as anecdotal activity against dry rot and gangrene.

"Another consideration for tuber treatments is whether the potatoes will be grown in GB because this will restrict the use of some products," he said.

"Whether the tubers have started to chit and how big the chits are is another point - you do not want to damage the chits in the treatment process."

It's also important to know when the tubers will be planted, he added. While it is not a requirement for Honesty, it is a label requirement for some treated tubers to be planted within three months of application.

"Finally, it's important to remember that if a stock is affected by dry rot or gangrene, the value-added products can help, but no tuber treatment should be used to try and salvage a distressed stock."



Skin spot on a potato tuber.

102 residue data results submitted and more sought this year

THE CIPC Residues Monitoring Group (CRMG), a cross-industry body set up by the UK potato industry to satisfy the data submission requirements of the Health & Safety Executive's Chemical Regulation Division (CRD), submitted 102 residue data results from potato samples held in stores during 2023/24.

The stores had been previously treated with CIPC (chlorpropham) at some time in their history.

These data were voluntarily submitted to the CRMG, on an anonymous basis, in answer to a request to the potato industry for information from the Health & Safety Executive to allow the suitability of the new temporary maximum residue level for CIPC to be assessed. A graphical summary of the data is shown in Figure 1.

The graph shows a high number of residues (78) which are at or below the limit of detection (LoD, 0.01 mg/kg, denoted by the green symbols). There was one exceedance of the tMRL (red symbol).

The remaining 23 samples (blue symbols) were at a level which exceeded the LoD but not the temporary MRL (tMRL, 0.35 mg/kg). CRMG says these are the important samples to note as they represent data from stores where there is still sufficient CIPC present to exceed the LoD but the levels are comfortably within the tMRL. If the tMRL had not been put in place, the samples from the 22.5% of stores shown in blue would have resulted in exceedances.

It is important for industry to continue to supply monitoring data to retain the temporary MRL, CRMG has stressed. HSE will then continue to oversee this to ensure the tMRL is set at an appropriate level.

Store holders are being urged to get in touch with CRMG if their stores were previously treated at any time with CIPC, stressing that only one test was needed from each store.

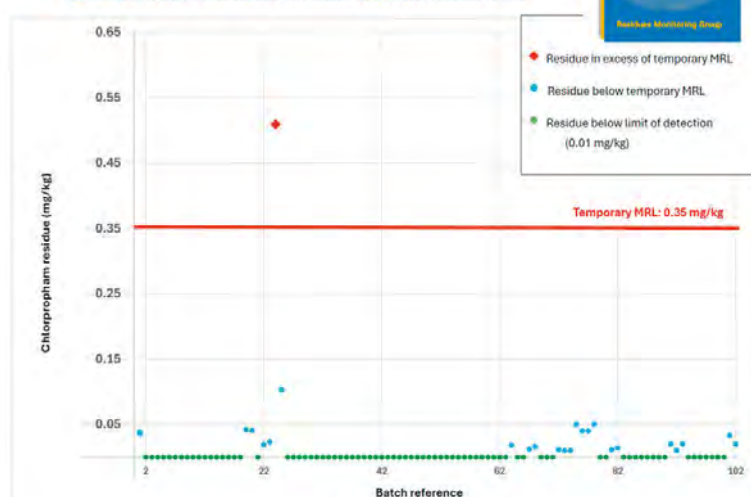
"If you have such stores, where crops are held for at least two months in the 2024/25 season, please provide data from your regular multi-residue testing to allow this to be used as part of the CRMG submission to be submitted in August 2025. We require 125

samples for the next data call, so new contributors are always welcome," a group announcement stated.

If you can help, please contact **adrian@potatostorageinsight.com** and you will be sent a simple data form to return with a copy of your lab result sheet. More information can also be found in the Residual levy funds section of the GB Potatoes website.

"It's as simple as that - but a vital role potato store managers can play to assist our industry," the statement adds. **PR**

Figure 1: All chlorpropham residue data from season 2023/24: submitted and verified



AGRIMECH®

COMPLETE END OF LINE SOLUTIONS



Biox-M – keeping control in a difficult storage season

Following a harvest affected by wildly varying ground conditions, with a very wet September for some, and what tended to be a late finish to harvest for many, storage has not been straightforward into 2025.

What seems to be clear is that attention to detail for good sprout control is more important than ever.

Many stores were filled over a much longer time window than anticipated and with crop in a wide range of conditions. With wet soil and variable proclivity to break dormancy, the start to the storage season required storekeepers to be alert to challenges. For many, Biox-M has been the product of choice, when seeking to secure some early sprout control and to leave stores better positioned for the longer term.

There have also reports of some products fogged into stores dropping out of suspension, where temperatures were cooler than anticipated (a function of a few recent spells of colder weather than we have been used to). This is almost certainly the result of internal fans not being run sufficiently for temperatures to be even through the store.

Temperature gradients in store can be expected to cause unanticipated outcomes. Fog distribution is likely to be less even (and we have seen some examples this season, where a few boxes have seen regrowth in an otherwise well controlled store, almost certainly the result of uneven fog distribution). For products with a comparatively high dew point, fog may condense out of suspension rather than turn to vapour.



In addition, treatment in stores, which would be expected to work well when the store is full, should be considered carefully, if a treatment is required after partial crop movement.

Fog distribution might be varied by the removal of some boxes.

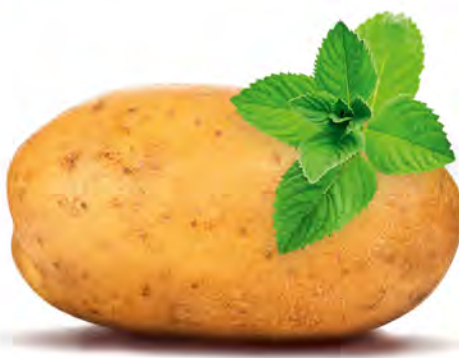
Why biox-m®?

The only completely natural product.

No persistent residues.

Approved for use on organic crops and by organic growers.

Mint... For your tea and your 'tatties!



Biox-M:

- Is a naturally occurring and truly sustainable product, in widespread use in the food industry,
- Is approved for use on organic potato crops,
- Has no harvest interval or MRL beyond the one-day mandatory withholding period after treatment, and is thus ideal for use on crops for which the date of movement is uncertain,
- Has flexibility of timing of application,
- Results in minimal weight loss in store,
- Does not leave persistent residues in the fabric of stores and boxes used for storage,
- And is therefore suitable for use in stores, which may subsequently be used for the storage of other crops or seed potatoes,
- Is effective at higher storage temperatures, reducing the risk of acrylamide development when crop is processed,
- Sequesters carbon during growth, removing 1t of CO₂ for every 1,000t of potatoes treated,
- And should be a component of the sustainability plan for every farm and every customer; effectively carbon neutral.

Biox-M is the only 100% natural and sustainable sprout control for potatoes.

Peter Hall
peter@junopp.com
07973 172 722

Nick Tapp
nick@junopp.com
07775 785 748

MAPP 16021
www.junopp.com

Netherlands setting for international potato show

POTATOEUROPE, the international event dedicated to the entire value chain of potatoes, is this year taking place at the new location of Wageningen University & Research (WUR), Field crops in Lelystad, The Netherlands.

The event, which takes place each year in one of the event's four partner countries - the Netherlands, Germany, Belgium and France - will be held on September 3rd and 4th and is free to attend. It will feature an outdoor exhibition on potato cultivation and other machinery. It is organised by DLG Benelux BV.

The 2025 venue is situated in the heart of one of the main potato-growing regions of the Netherlands and close to World Potato City Emmeloord.

The theme of an international conference which will take place at PotatoEurope 2025 is "Integrated Crop Management (ICM) – The Future of Potato Farming."

WUR has organised the conference, which will focus entirely on innovative strategies to make potato farming more sustainable, resilient, and profitable for the future.

During the conference, leading experts and researchers will share their knowledge on the latest developments and insights. WUR researcher Dr Peter Kromann said: "ICM is not just about advanced integrated farming tailored to future environmental demands — it's smarter farming and more profitable farming."

Key topics to be addressed during the conference include the role of crop diversity in reducing pests, diseases, and weeds, as well as the impact of variety selection and cultivation strategies on potato crop health, tuber quality, and yield. The conference will also highlight innovative approaches to soil, water, and nutrient management, enabling farmers to grow robust crops with fewer inputs. Additionally, targeted pest control methods, such as using low-risk solutions instead of conventional pesticides, will be extensively discussed. Finally, attention will be given to monitoring and evaluation, offering practical insights into tracking results and continuously improving strategies.

Gearing up for next field-based event

POTATOES in Practice (PiP), Scotland's largest field-based potato event, will take place on Thursday, August 7th at The James Hutton Institute's Balruddery Farm in Invergowrie, near Dundee.

Potatoes in Practice is hosted by The James Hutton Institute through the National Potato Innovation Centre (NPIC) in partnership

with Scotland's Rural College (SRUC), and Agrii. The annual event aims to foster learning and agricultural innovation, offering a comprehensive showcase of the latest developments in the potato industry.

Organisers have stated that bookings for outdoor exhibition and static machinery spaces must be submitted by May 1st.



Sustainability focus at conference

THE South East Future of Farming Conference returns on April 10th.

For the third year it will be held at Plumpton College's £10m AgriFood Centre

in Sussex, run by the college, CLA and Virgin Money, with an emphasis on sharing sustainable farming practices to enhance productivity and profitability.

TONG

THE COMPLETE HANDLING SOLUTION FROM FIELD TO PACK



- > Loading & Cleaning
- > Grading & Sorting
- > Washing & Processing
- > Tipping & Filling > Optical Sorting



www.tongengineering.com

e: sales@tongengineering.com

t: +44 (0)1790 752771

TONG SWIFTLIFT

EXTENDING HANDLING INNOVATION



High quality elevators and conveyors for all applications

Manufactured by
Terry Johnson Ltd
Now part of the Tong
Engineering Group Ltd

e: sales@tongswiflift.com
t: +44 (0)1406 422286

Leading through change

With the legislation outlook looking to shift substantially in coming years, Alexander Preston looks ahead to what he believes could be The Great Potato Revolution.



Hailing from a farming background, Alexander Preston is the founder of Preston Waldon, a Hampshire-based consultancy dedicated to agricultural public affairs and reputation management that partners with organisations from the fresh produce, growing, surveying, building/development, technology and estate management sectors. Having worked with FTSE 100 companies, trade organisations, MPs, and industry leaders, he advises on policies to boost revenue and reduce costs

IN January, I joined thousands at LAMMA – the first great agricultural gathering of 2025 where, after the doom and gloom of 2024, I expected a subdued and pessimistic atmosphere.

How wrong I was.

Two words echoed in every conversation: Resilience and fight-back. These words capture the tone of 2025 – a year that demands adaptability, collaboration, and bold leadership.

At the Oxford Farming Conference earlier this year, the DEFRA Secretary Steve Reed summarised the challenge perfectly: “Farming must be recognised as a serious business that needs to turn a decent profit,” he said, adding: “Climate change and external shocks will keep challenging the sector.”

As these words suggest, the industry faces a defining period. But how can the potato sector thrive amidst rising costs, increasing taxes, and regulatory changes?

The storm on our doorstep

Forthcoming tax reforms, like the new National Insurance hike and the ‘Double Cab Tax’, are going to squeeze margins and mean

familiar practices no longer make sense, but I’ve worked with leaders across the potato supply chain and know that challenges can be turned into opportunities.

One example is James Morrison, a potato farmer from Herefordshire, whose operation evolved in three key ways: Automated processes reduced labour costs by 40%, partnerships with neighbouring farms to share equipment, reduced overheads and the soil health initiatives he launched qualified for new tax reliefs.

“We’re not just growing potatoes anymore – we’re growing the future of farming,” said James

The Great Divide

By 2026, the inheritance tax landscape will shift dramatically, creating ‘The Great Divide.’ On one side will stand the innovators, those embracing collaboration and sustainability. On the other will be those struggling to keep pace.

Sarah Jenkins, a Norfolk grower, took decisive action with our support. Her farm became part of a five-farm collective, sharing resources like cold storage and marketing costs. The result was lower tax burdens, higher profitability, and greater bargaining power in an increasingly competitive market.

Then comes 2027, bringing the Carbon Border Adjustment Mechanism. For forward-

thinking businesses, this isn’t just another regulation, it’s a competitive advantage. Growers can prepare by investing in precision agriculture systems to reduce carbon footprints, implementing soil health programs to boost yields and capture carbon and establishing tracking systems to verify and market sustainable practices.

Revolution takes root

By 2030, the revolution will be in full swing. Regenerative agriculture will no longer be a buzzword-it will be a business advantage. Imagine potato fields where no-till farming slashes costs and protects soil health, cover crops enrich the soil between rotations and precision tools optimise every square metre for maximum yield.

The innovators won’t just survive, they’ll lead.

By 2035, the most successful operations will be carbon-neutral powerhouses, where sustainability drives profitability. Forward-focussed growers will have achieved carbon-neutral certification, robust biodiversity across their farms, climate-resilient systems built for the future and premium market positions based on verified sustainable practices.

The road ahead is challenging but full of opportunity. **PR**

Tax Changes and Government Updates

Double Cab Pick-Up Tax Change

When: April 1st, 2025 (Corporation Tax) / April 6th, 2025 (Income Tax)

What’s changing: Double cab pick-up trucks (1 tonne or more) will be taxed like cars. If bought before April 2025, old rules apply.

Inheritance tax relief for environmental land

When: April 6th, 2025

What’s changing: Easier to pass on land for environmental projects with less inheritance tax.

Inheritance tax relief for farms and family businesses

When: April 6th, 2025

What’s changing: 100% tax relief on the first £1 million. After that, relief drops to 50%.

Employer national insurance increase

When: April 6th, 2025

What’s changing: Employers pay 15% National Insurance (up from 13.8%) on the first £5,000 per employee.

£5 Billion for sustainable agriculture and climate projects

When: 2025–2026

What’s changing: What’s changing: £5 billion to support eco-friendly farming practices and environmental protection.

Carbon border adjustment mechanism

When: January 1st, 2027

What’s changing: Tax on imports like cement and steel made with high carbon emissions to encourage greener production.



Knowledge grows

YaraAmplix™

Enhancing your
crops' natural
potential in
harmony with
nature



Responsive

Adaptable to your crop needs
throughout the crop cycle

Robust

Protect crop quality and improve crop yield

Resilient

Enhancing plants tolerance to abiotic stress

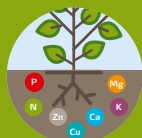
Abiotic Stress Tolerance

- Water stress
- Temperature stress
- Light stress
- Salinity
- Chemical stress



Nutrient use efficiency

- N fixation
- Nutrient solubilization (e.g. P, K)
- Nutrient availability
- Nutrient uptake
- Nutrient assimilation



Crop quality (Yield & Quality traits)

- Soil health
- Plant health
- Fruit quality
- Root growth
- Photosynthetic activity
- Seed germination





Expanding elevators service

A YEAR after launching its SwiftLift division, handling machinery manufacturer Tong has launched a new website which will make it easier for potato growers and suppliers to access information about the mobile elevators, or order one.

The SwiftLift elevators are available in standard lengths ranging from 3m to 12m long, with two belt widths of 600mm and 900mm for conveying lines.

General Manager at Tong SwiftLift, Richard Knighton, said the first year of trading for its new SwiftLift division had exceeded expectations and there were plans to develop the elevating and conveying range, which have been manufactured in conjunction with Terry Johnson Ltd of Holbeach, this year.

"We're very pleased with our first year's progress, building on the solid foundations of Terry Johnson Ltd," he said. "Demand, especially from export markets, has been strong, expanding the product's reach through our existing distribution channels. The launch of our new website aligns with growing demand."

Dealerships offer electric solution to desiccation and weed control

POTATO growers in East Anglia were recently introduced to a new distribution agreement for an electric solution for potato desiccation and weed control and the same solution is now being extended to growers in Denmark and Sweden, following a further new dealership announcement.

crop.zone, a German company, provides electric crop management solutions to potato growers in the UK and Europe. Its solutions include herbicide-free desiccation, treatment of cover crops and weed control. The company claims its electric desiccation method allows potatoes to grow for longer before the foliage is eliminated in just seven days which the company says will ensure maximum yield and quality.

In December, it announced its partnership with Tuckwells, a family-run agricultural dealer. Founded in 1954, Tuckwells started out as a contract spraying company and developed into a UK-wide machinery dealership. It has 11 outlets across Suffolk, Essex, Hertfordshire, Bedfordshire, Greater London, Kent, Surrey and East Sussex.

Now Danish and Swedish growers also have access to the same solutions following a new distribution partnership with Yding Smedie & Maskiner A/S, a Danish agricultural machinery supplier established in 1996.

Green Growth: Could hydrogen power the future of growing?

HYDROGEN-powered agriculture is a timely topic in the UK, with the Government announcing farming vehicles are set to undergo a hydrogen revolution.

This switch to cleaner technology could enable potato growers and storage houses to decarbonise faster in line with net zero principles, according to fueling company, Dover Fueling Solutions, a provider of fuel dispensing systems.

One manufacturer embracing the change is JCB which has been given a special order to produce hydrogen-powered equipment for farms around the country.

Hydrogen can play a crucial role in multiple aspects of potato growing, particularly for equipment and production systems that demand high levels of power, according to Dover.

Much like hydrogen fuel cell trucks, which can travel up to 500 miles without refueling, hydrogen-powered tractors and harvesters could provide long-lasting energy while reducing emissions.

Equipment such as irrigation systems and grain dryers can also be powered by hydrogen, ensuring that farm operations remain efficient and sustainable, the company states. In post-harvest processes, hydrogen generators can provide a reliable source of heat, reducing both operational costs and the farm's carbon footprint.

The use of hydrogen for transportation and refrigeration could ensure that farming systems become increasingly sustainable, with fewer greenhouse gas emissions, the company adds.

In addition to newly-designed hydrogen-powered tractors and equipment, older machinery could also be retrofitted with hydrogen technology, allowing potato growers to transition more smoothly.

"By replacing traditional fuels like diesel with hydrogen, potato growers can dramatically reduce their carbon emissions and contribute to the UK's broader net-zero goals. This shift not only aligns with global sustainability efforts but could also enhance the reputation of UK growers as pioneers in green innovation," it states in a recent blog.

However, one of the most significant barriers is the current lack of infrastructure to produce and store low-carbon hydrogen. Building the necessary infrastructure, including hydrogen refueling stations and production facilities, will require significant investment and time. Without this infrastructure in place, growers may find it difficult to transition to hydrogen-powered equipment.

Another challenge is the storage of hydrogen itself. Gaseous hydrogen is much less dense than diesel, making it heavier to store and transport. This could complicate the logistics of implementing hydrogen-powered systems on farms, particularly for operations that rely on mobile equipment.

Growers will need to consider the additional space and weight requirements for hydrogen storage tanks, which may increase upfront costs. The initial investment in hydrogen-powered equipment can be prohibitive for many farmers.

Hydrogen technology, while advancing, is still relatively new, and the costs associated with hydrogen-powered machinery can be significantly higher than conventional options.

However, as hydrogen production scales up and technology becomes more affordable, these costs are expected to decrease, making hydrogen a more viable option for growers.



AgVantage UK Ltd

Poplar Farm

Coates, Peterborough, PE7 2DU

☎ 01733 215921

🌐 www.agvantage.co.uk

✉ info@agvantage.co.uk

Proud importer of Dewulf potato and vegetable equipment



Enduro Generation 2



ML 1980 Premium



Soil Cultivation



Planting



Harvesting



Grading



Storage

dewulf
enjoy growing

BUILT TO FIT

PARTS FOR YOUR MACHINERY

Extensive range of parts available
for Stone Separators.

WEBS
ROLLERS
SPROCKETS
STARS
WEARING PARTS



 **BROEKEMA**
Conveyor Belts

Contact our specialists

sales@pananglia.com

+44 (0)1787 242740

pananglia.com

 **PAN ANGLIA**
ROOT CROP SPECIALIST



British POTATO INDUSTRY AWARDS



NEW VENUE!

MAJESTIC HOTEL & SPA
Ripon Road, Harrogate, North Yorkshire HG1 2HU

The British Potato Industry Awards will be held 19th November 2025



ALWAYS ON THE FIRST EVENING OF THE BRITISH POTATO INDUSTRY EVENT

ENTER



To enter or book a table, please contact Victoria Liddington
victoria.liddington@warnersgroup.co.uk 01778 395029

BOOK



Sponsored by **GRIMME**

New platform gives growers greater data control

A NEW data management platform was recently revealed at the Association of Independent Crop Consultants (AICC) technical conference, which creators say offers a more independent and future-proof platform for managing farm data that is more relevant to potato growers than some of the services they may already be using.

The platform has been developed by TEAM Ag UK in collaboration with AICC, which points out that growers in the UK face asymmetrical markets, therefore don't have the same access to data and information as larger corporations, leading to potential imbalance and exploitation in areas like agronomic decision making, input purchasing, crop marketing, and value capture from non-food-producing activities like environmental schemes or carbon selling, which generate additional revenue streams.

TEAM Ag UK co-founder and CEO Kiryon Skippen said most digital tools used by growers, such as Farm Management Information Software (FMIS), often require sensitive data to be shared with the application owner.

TEAM Ag launched a legal review of terms and conditions of current platforms that

generate and hold farm data and this revealed that many clauses are unfavourable to farmers.

"It's a two-way relationship and growers should be issuing their own terms and conditions on how and where their information or data is used," said Kiryon.

TEAM Ag's FIX platform will also offer a range of digital tools to support best practice on farm.

Kiryon said there are three core principles that TEAM Ag UK will apply to its data management and FMIS software. First, farmers will decide who has access to their data and receive a fair share of the value created by sharing it. Second, FIX will promote unbiased, scientifically-verified best practice, from an industry-neutral perspective.

Finally, the platform will facilitate collaboration between the science, agronomy and growing communities and create opportunities for growers to accelerate innovation in their own interests by working together.

Design of the platform has been influenced by AICC focus group agronomists and investor farmers, to ensure it is meeting the needs of future users.

The first iteration of FIX will be launched in the second half of 2025 to allow for extensive consultation with users on the initial features.

AICC CEO Sarah Cowrick said: "The focus is on being an independent resource that's not linked to product sales and the safety of farmers' data is paramount."

Essex-based agronomist and AICC Chairman Andrew Blazey has 30 years' experience as an agronomist and like other members, has plenty of experience of evaluating and using FMIS with his clients.

"I believe our sector of the industry is in need of a robust and future-proof independent system and I'm confident FIX can deliver on that and I look forward to working closely with them on further development this year," he said.



Weather app provider to expand solutions following merger

DIGITAL agricultural solutions provider Groupe ISAGRI has acquired Sencrop, the French company specialising in agricultural weather and irrigation solutions.

Both companies are European leaders in agro-meteorology and field management and Michaël Bruniaux, co-founder of Sencrop, said the partnership will enable co-operatives and traders to benefit from an expanded network of stations and a richer offering.

"For existing users, very little will change – our weather stations and app will continue to function as normal. But in the longer term, farmers will benefit from the synergies of our two businesses," he said.

ISAGRI owns a smaller weather service - Météus – which will be absorbed by Sencrop. In addition, it owns Landmark Systems, which specialises in farm and estate management software in the UK.

Sencrop's other Co-Founder Martin Ducroquet said: "We are delighted to be able to build on our agro-meteorological platform and improve our service for all farmers.

"This move comes at a time of consolidation in the ag-tech sector, and ISAGRI is the ideal partner to accelerate the development of our unique collaborative platform. We have strong synergies which will bring about the emergence of tomorrow's leader in precision agriculture, where data and AI will play a key role."



Precision Fertiliser Application with the Team Front Mounted Application System

NOW AVAILABLE WITH THE ARAG BRAVO 180S CONTROLLER AS A STANDARD OPTION

For further information, please get in touch.
team-sprayers.com • 01353 661211

Impressive harvest prompted by space experience



ULANQAB city, located in one of China's leading potato-producing regions, Inner Mongolia, saw an impressive potato harvest in 2024 and the seed used is particularly special, having come from China's Shenzhou spacecraft, where they experienced genetic variation.

In 2022, 66,500 potato seeds were taken into space aboard the Shenzhou XVI crewed spaceship and stayed there for around five months. Researchers at Xisen Potato Industry Co headed up the project in a bid to breed potato varieties with salt-alkali tolerance and higher yields.

The breeding technique, known as space-induced mutation breeding or space mutagenesis, involved exposing seeds to strong cosmic rays, as well as other conditions such as vacuums, microgravity and low levels of geomagnetic interference, according to a report in China Daily.

On their return to earth in October that year, the seeds were delivered to the Shangdu Potato Technology Innovation Centre at Xisen Potato Industry Co, where scientists began the selection and cultivation process.

The cultivation process involved test stages in the laboratory, greenhouse and field.

China has been conducting space breeding experiments since 1987, sending the seeds of various plant species into space on retrievable satellites and Shenzhou spaceships. Space crops including rice, wheat and tomatoes, had already been successfully cultivated across the country.

The space experience has produced potato strains that can produce higher yields, mature earlier, and have enhanced disease resistance, according to Zhang Linhai, Director of the Technology Innovation Centre at Xisen Potato Industry Co.

He said the seed had undergone genetic variations while in space, leading to new strains whose characteristics include higher yields, early maturation, and enhanced disease resistance.

Ulanqab's overall potato production capacity is expected to reach around 3.1 million tons this year, with smart storage facilities capable of keeping potatoes fresh for distribution until May. Early reports suggest that yields per mu (about 1/15 of a hectare) will exceed 6,000 kilograms.

Annual event welcomes potato queens and highlights growing challenges



THE 19th International Berlin Potato Evening was recently held by the German Potato Trade Association (DKHV).

Leading representatives from the European potato industry gathered in the ballroom of the Hilton Berlin at Gendarmenmarkt for the event on the eve of Fruit Logistica.

DKHV welcomed more than 480 guests from 17 countries, from associations, politics, science, and business, as well as representatives from more than 180 companies in the industry. A highlight of the evening was the presence of the Potato Queens Daniela I from Bavaria and Paula I from the Heide.

DKHV President Thomas Herkenrath opened the evening with a welcome speech highlighting the importance of international and cross-border engagement in association work for the potato industry. He emphasised the necessity of European and global cooperation in research and science, such as in breeding suitable potato varieties for different regional conditions or in combating pathogens like late blight and the reed glass-winged cicada.

"The increasing spread of the reed glass-winged cicada, which has rapidly spread in numerous cultivation areas in recent years, poses a significant threat to potato cultivation," he said. "This species of insect can transmit the stolbur pathogen and a proteobacterium, causing massive yield, quality, and storage losses up to total crop failures. In addition, the increasingly stringent political requirements in plant protection dramatically complicate the effective control of such pests."

He urgently called for innovative solutions to ensure long-term food security in Germany and Europe and also addressed current changes in global trade, saying it is increasingly difficult for many German companies to remain competitive in world trade while they face high production costs, driven by "excessive bureaucracy, overregulation, documentation obligations, senseless certification mania, and sometimes excessive demands of some NGOs".

Olaf Feuerborn, Chairman of the Union of German Potato Trade e.V. (UNIKA), also stressed the urgency of addressing the growing challenges, especially from pests like the reed glass-winged cicada.

The 20th International Berlin Potato Evening will take place on February 3rd next year.

New dealership partnership

POTATO breeder HZPC has partnered with three dealers to launch a new seed dealership in North America and Canada. These three initial dealers include Ebe Farms in Ferndale, Washington, USA, Kroeker Farms in Winkler, MB, Canada, and Edmonton Potato Growers in Edmonton, AB, Canada. All have a long history of successful collaboration with HZPC.

They will continue to support commercial users of HZPC genetics as well as support regional multipliers of HZPC varieties to ensure all have access to a clean, stable seed supply, according to the breeder.

The strategic shift will allow HZPC to transition away from a direct seed sales model toward a complete variety licensing approach model, where partners throughout the supply chain will be able to deliver knowledge and support both in the field and in the market, the company has stated.

"It will also allow growers of HZPC varieties and marketers to work directly with the customers that they have been shipping to for years, without the added layer of complexity or cost the previous sales approach required," a company press statement revealed.

The statement went on to add: "HZPC is excited to enter this new era of collaboration and is looking forward to solidifying these partnerships. HZPC will continue to work closely with all its seed growers across North America to provide the technical support and market insights that have made it the market leader in potato genetics".

Founded in 1898 and rooted in The Netherlands, HZPC has grown to become a global leader in potato breeding, seed potato trading and concept development, working with food producers, processors and retailers.



The outdoor exhibition for potato cultivation and machinery!

FREE
ENTRANCE*
PARKING
CATALOGUE

*Registration required



Organisation:

DLG Benelux B.V.
info@dlg-benelux.com
T: +31 85 401 73 97

Event Location:

Edelhertweg 1
8219 PH Lelystad
The Netherlands



- More than 28 hectares of exhibition grounds
- Field trials, harvest, and processing demonstrations
- Free entrance*, parking, and PotatoEurope 2025 catalogue
- Extensive conference and seminar program
- Innovation award
- Organized on the grounds of Wageningen University & Research, Field Crops, Lelystad, in the heart of one of the main potato-growing regions of the Netherlands



MORE INFORMATION

*Registration required

Innovate, Network, Grow: See You at PotatoEurope 2025!

Main Media Partner:



Tractor Sponsor:



Energy Sponsor:



Supporting Partners:



 **potato-europe**

 **potatoeurope**

www.potatoeurope.nl



INTERNATIONAL
Exhibition • Conference • Field trials • Machinery demonstrations



Benelux

New Head of Ops

TREVOR King has joined Haith, which manufactures machinery for harvesting, packing and washing potatoes, as the company's Head of Operations.

In the newly-created position, Trevor will oversee production, electrical, design, fabrication, scheduling and planning of the company's workflow. He will also be involved in mentoring and developing the knowledge and skills of Haith's production team.

Haith's Managing Director Duane Hill said: "Trevor has a wealth of experience across various manufacturing operations. He is time-served in technology, engineering and agricultural manufacturing businesses and has a track record of implementing world-class manufacturing processes. In his last role, he introduced systems and processes that increased production by 40%. As well as being an expert in production improvements, he is also proven in leading, coaching and mentoring people. We are very



pleased to welcome Trevor to Team Haith and are confident he will be a valuable addition to our senior management team."

Before joining Haith, Trevor was head of operations at HK Timbers. He said: "I am excited to combine my manufacturing, commercial and people development experience."

Coinciding with the new appointment, John Nicholls has assumed the role of After Sales Service & Installation Manager, taking on responsibility for all after-sales functions.

New role for Antonia

ANTONIA Walker has taken on a new role at FMC as Commercial Technical Manager for the North and Scotland and Technical Lead for potatoes and field veg.

She will be the main point of contact on the FMC portfolio for growers and agronomists in that area.

Antonia, who formerly worked at UPL, is well-known to many in the potato industry.

Hailing from an arable background, with all members of the family working in various agricultural sectors, she grew up on the family farm in South Yorkshire. She has a strong agronomic background with a wealth of experience gained as a BASIS-trained agronomist working with distributors and as an independent advisor.

She has previously worked at Fera Science, where she spent more than two years with the Plant Clinic, and AHDB. She also helped to get the Fight Against Blight (FAB) project off the ground - a UK project looking into potato blight protection, where various members of the industry collaborate.

In her new role, she will provide comprehensive technical and commercial support, collaborate with trial organizations, industry bodies, and processors to ensure effective product implementation as well as offering advice to agronomists, growers, and commercial distributor staff.

"I have worked in many parts of the industry including science and research



which gives me an edge when it comes to understanding different challenges, how to address the need for change including how markets work and of course new opportunities," said Antonia.

"FMC have a great portfolio and a new product in Isoflex" active so it's a very exciting time to be joining."

Antonia said she is also looking forward to the upcoming opportunities for potatoes and field vegetables in both conventional and biological products.

Gareth Jones, Technical Leader Northern Europe, said: "It's great to be able to welcome Antonia into FMC as the Commercial Technical Manager for Scotland and Northern England. As well as benefitting from her specialist crop knowledge, it strengthens and completes the team's ability to provide technical support across the whole of the UK, especially important given the exciting new product launches we expect to have this year."

Mick not George

IN the January issue of British Potato Review, we ran a story about Mick Haith retiring after 47 years working for the handling machinery manufacturer founded by his father, George.

In the print issue of the magazine, the headline said that George had retired. This was an error and should have said Mick.

Corrina becomes permanent leader for BASIS

CORRINA Urquhart, who has been serving as interim CEO of BASIS since November 2024, is now stepping into the permanent role of CEO, assuming responsibility for the training, certification and auditing body.



Before her appointment as CEO, Corrina was Director of External Relations at Lantra and has had an 18-year career in education, research, and policy. In 2024, Corrina was recognised for her inspirational leadership skills as a finalist of the national Woman Who Achieves Awards.

She said: "I am honoured to lead BASIS and its dedicated team into its next phase. Our focus will be on improving the organisation's ability to positively impact on people and businesses in the land management, environmental, and amenity sectors."

She continued: "Under my leadership, BASIS will adopt a proactive approach to engagement. In January alone, I look forward to meeting with members and stakeholders at key industry events including the Oxford Farming Conference (OFC), and the UK Lawncare Association Annual Conference, plus a site visit through the National Pest Technicians Association (NPTA)."

BASIS Chairman William Burgess said in a short span of time, she has provided stability and "clear direction".

"Both I and the Board of Trustees are confident that she will develop a refreshed vision for BASIS and brings with her great energy to achieve this. We are all looking forward to working with her further to drive the business forward," he said.

CLASSIFIEDS

BOX ROTATORS FORWARD TIPPLERS

Largest range on the UK market. Controlled and gentle handling for low box and produce damage. Machines are interchangeable between forklifts and telehandlers. For all year round operation. Whatever your requirement, a machine to meet your needs
Broadwater Machinery Phone 01728 723221 or 07747 030738
broadwatermach@yahoo.co.uk www.broadwaterltd.com

SPRAY FOAM INSULATION

Specialists in agricultural buildings. Over 50 years combined experience in the spray foam industry. For a competitive quotation and free site survey.
CONTACT R&S INSULATION LTD 07538255518 07818073625
www.sprayinsulationcompany.co.uk

POTATOES WANTED

W & J Brooks Ltd, potato packers of Leicester, are looking for best, bold washing quality potatoes that are box stored. Excellent prices, promptly paid. Collection ex-farm by our own transport.
Call Bill Brooks on 0116 244838

ABERGAVERNNEY BOXES

(Previously
Abergavenny Sawmill)

We have been manufacturing wooden potato boxes and bins for over 30 years.

- Custom sizes available
- Extended payment terms offered
- Stock carried all year round
- Traditional family business



✉ sales@spudbox.com

🌐 www.spudbox.com

☎ 01873 859188

Next family generation, same great service!

Say potato, say Agrico.

Specialist breeder and supplier of high grade potatoes

For more information on any of our varieties
 Call: 01307 840551
 Email: potatoes@agrico.co.uk
 www.agrico.co.uk

Follow us:

Techneat TANKS.co.uk

THE TECHNEAT TANK RANGE

Tanks ranging from 1000l to 20000l and a wide range of harvesters and filters to suit your needs/roof sizes.



Techneat TANKS.co.uk

CON-TENTED Products
Partners in outdoor pig products

www.techneattanks.co.uk

t: 01353 862 044 | e: info@techneat.co.uk

BAKER SEEDS

Quality Seed Potatoes

*Independent Producers & Suppliers of UK, Imported
New & Established Varieties*

Including: Agria, Babylon, Camel, Charlotte, Edison, Electra, Estima, King Edward, Lanorma, Manitou, Marfona, Markies, Maris Peer, Maris Piper, Melody, Miranda, Nectar, Orchestra, Panther, Ramos, Sagitta, Saxon & Wilja.

T: 01366 388598 M: 07836 650105

E: baker.seeds@btconnect.com

Broadwater Machinery Ltd



K54 – Europe's best selling agri box rotator for any handler



K80 forward tippler gentle & quick box tipping. Very adaptable & easy to operate

BOX ROTATORS & FORWARD TIPPLERS

01728 723221 or 07747 030738

E: broadwatermach@yahoo.co.uk

W: www.broadwaterltd.com

**ROTATING AHEAD
IN THE FIELD**

Praxim. For the ideal pre-em, just add the tank-mixers.



Praxim makes perfect

Praxim lets you create the most effective weed control solution for your farm, your field, your situation.

It gives proven, consistent results against annual grasses and broad-leaved weeds. Most important, you can tank-mix it readily with your other residual and contact herbicides.

The dose rate is flexible, making Praxim ideal for short and long-season potato crops. And you can use it on any variety, on any soil, in all conditions right up to ridge cracking.

**Get the Praxim start. Talk to your advisor, call 0845 373 0305
or go to certisbelchim.co.uk/praxim**



Certis Belchim
GROWING TOGETHER