



30<sup>th</sup> May 2024



## IN BRIEF

- **Cut-off date for drilling Cruiser SB treated seed is the 1<sup>st</sup> June 2024.**
- **EA Approval for Insyst as a third spray for non-Cruiser SB treated sugar beet.**
- In general, Cruiser seed treatment appears to be holding aphid populations. Expect Cruiser treatment to be effective for 8-10 weeks from drilling.
- Many non-Cruiser SB crops have reached aphid threshold (5 green wingless, per 20 plants). However, recent cooler weather and wind have knocked back the population rates, but don't be complacent as with warm weather forecast, numbers could still increase.
- We are now seeing a number of beneficials in the crop, particularly ladybirds and soldier beetles.
- Crop development is variable across the beet area. More advanced crops are at 8-12 leaves and beyond, but many are at the 4-leaf stage (relatively small). Colder soil types and poorer soil conditions, along with a lack of warmth and sun is holding back leaf production and expansion in some crops. Foliar nutrition will help slower crops develop.
- Pest (bird, mammal & invertebrate) grazing and damage continue to affect crops.
- Some herbicide damage identified following the use of Lenacil.
- [Aphid Survey – now live](#)



## ADVISORY

### Aphid update

As of midday on the 29<sup>th</sup> May, 1412 *Myzus persicae* and *Macrosiphum euphorbiae* have been caught in the yellow water pans. Of those, 1168 have been tested for the beet poleroviruses (BMV and BChV). No further positives have been found since the last bulletin was sent (total of 3 positives so far this season).

Currently, winged aphid numbers migrating into crops are being heavily influenced (and in many cases suppressed) by the current showery, blustery conditions. Consequently, over the last seven days, numbers of green wingless aphids have not generally triggered the need for spraying at most of the BBRO monitoring sites (please see BBRO aphid monitoring maps). However, vigilance is still required given the wide range in plant growth stages across the growing area and the potential for aphid numbers to increase if conditions become more

settled and warmer. Beet crops near oilseed rape will need to be particularly closely monitored as any overwintering populations of *Myzus persicae* migrate away from these crops as they mature.

The first reports of green wingless aphids on Cruiser treated crops have been received. Please start checking these crops too if the seed has been in the ground for eight weeks or more.

Beneficial insects continue to be found in increasing numbers especially ladybirds and soldier beetles.

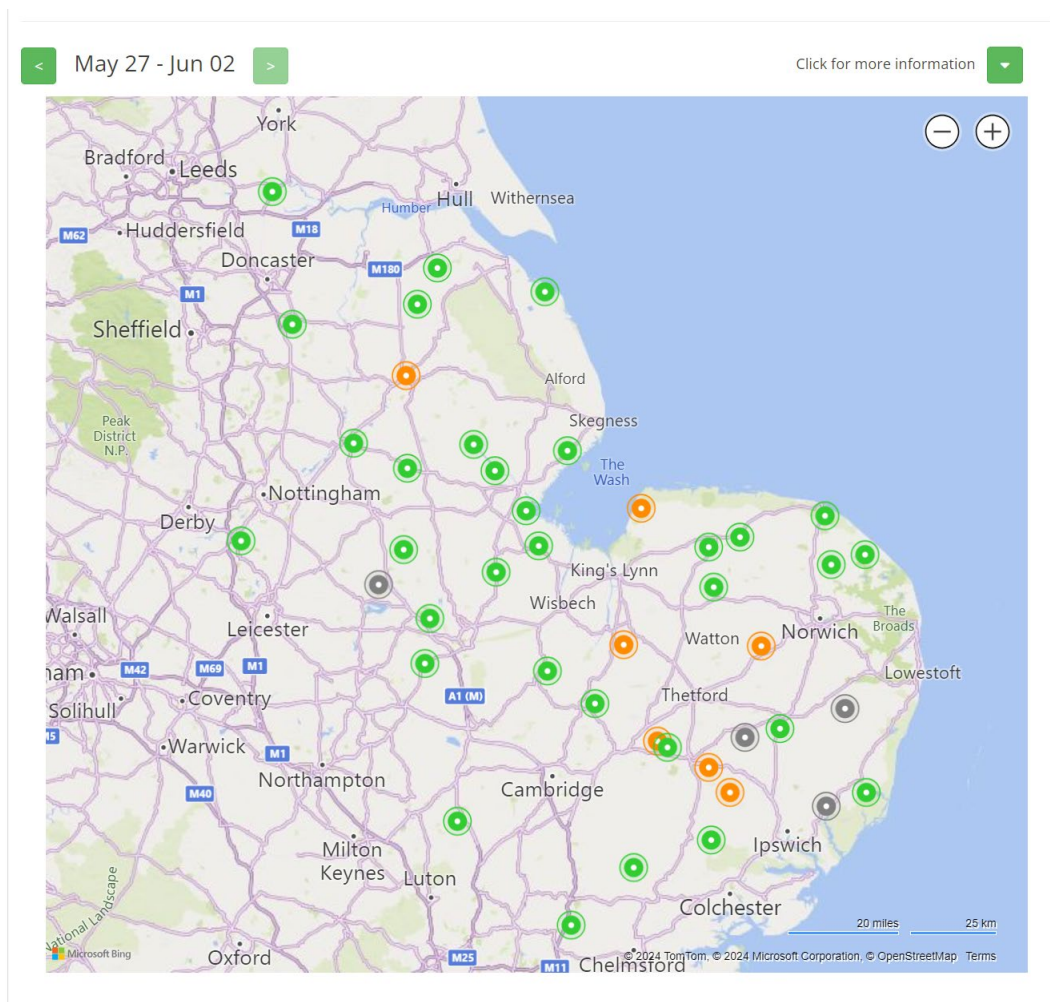


Figure 1: Aphid survey map from the 30<sup>th</sup> May 2024.

**Emergency Authorisation approved. ([See here for full details](#))**

This Emergency Authorisation allows a second foliar spray of 'InSyst' on non-Cruiser SB treated sugar beet crops to aid control of the peach-potato aphid (*Myzus persicae*) and prevent virus yellows infection. Key points:

1. Application must only be in sequence - following a first foliar spray of 'InSyst' and a second foliar spray of flonicamid (e.g. Teppeki);
2. This EA is for non-Cruiser SB treated crops only. You MUST not spray Cruiser SB treated crops, in accordance with the stewardship agreement ([Cruiser stewardship](#));
3. As part of the stewardship agreement around this EA, the following information must be recorded by the user and submitted to British Sugar by 30 August 2024;
  - The date(s) and location(s) of any second application of 'InSyst' and the number of hectares treated in accordance with this emergency authorisation
  - Aphid counts and crop growth stages at the time of decision
  - The basis of the decision making on whether to apply foliar spray(s) during the susceptible growth stage period, including any 3rd foliar application (i.e. a second application of 'InSyst').

### **Nematodes**

The first signs of white female cysts of BCN are being recorded on beet samples sent to the BBRO clinic. If present, BCN will become increasingly apparent (given current warm, wet soil conditions) so please check crops if you suspect this issue. Similarly, the same conditions have favoured free living damage too and again we have seen samples where plant growth has either been restricted or root structure has been affected with many laterals formed.

### **Crop development and nutrition**

Whilst some of the earlier drilled crops that went into good soil and seedbed conditions are now rapidly developing canopies, some of the later sown crops, drilled into wetter conditions and where there has been significant rainfall are slow to develop leaf canopy. A range of pests are grazing on crops contributing to some slow and backward growth too. It is therefore important to optimise the supply of nutrients to crops to assist with leaf growth:

1. If you have had a large amount of rainfall, some of the applied nitrogen may have been lost from the rooting zone of young plants. Plants may appear stunted with small pale leaves (with little progressive growth after period of warmth) and may show reddening of the petioles.
2. Applying a small additional amount of nitrogen 10-20 kg N/ha will ensure availability in the topsoil profile. Be mindful to keep within the limits of N-Max (120kgN/ha). Undertaking a SMN test may help identify an issue. Sample the top 0-15cm and 15- 30 cm profile as a check. Laboratories can usually report results within a week.
3. Apply manganese and magnesium as foliar sprays as soon as there is sufficient canopy (4-6 leaf stage). Don't delay and do not wait until symptoms appear.
4. Where crops appear persistently backwards, check the potential cause by investigating roots but consider applying some foliar nitrogen and phosphorus with the manganese and magnesium as a foliar treatment. This will provide the essential nutrients to 'kick start' growth. Your manganese and magnesium products are also

likely to provide some sulphur. If not, consider applying some. Boron and zinc may also be low in crops on sandy, thin, and higher pH soils but unlikely to be essential to many crops at this stage.

5. If applying foliar nutrients, target a programme of application of 1-3 kg/ha of each nutrient at each application. Remember, foliar feeding is best undertaken as a 'little but often' approach. Avoid applying foliar nutrients to plants in hot sunny conditions.

### **Weed control info supplied by: Pam Chambers (British Sugar)**

#### **Lenacil – crop damage in 2024**

This season has seen some exceptionally heavy rainfall within short periods of time and this has resulted in some beet crops being adversely impacted by programmes containing lenacil especially on lighter soils. At a BBRO herbicide trial on light land one of the objectives was to look at alternatives to phenmedipham within a weed control programme, phenmedipham was replaced with lenacil in one treatment. The crop was drilled on 25.04.24 and post emergence sprays were applied on 10.05.24 and 18.05.24. It can be seen how the crop was impacted in photos. 1 and 2. Rates of met amitron and ethofumesate were kept constant but lenacil was applied as Venzar 500 SC at 0.2 then 0.4 l/ha.



Figure 2 (left): Lenacil + met amitron + ethofumesate (Photo supplied by P Chambers)



Figure 3 (right): phenmedipham + met amitron + ethofumesate (Photo supplied by P Chambers)

## **Lenacil - background information**

Historically lenacil labels within Europe used to have a warning advising against the post emergence use on sands, stony or gravelly soils and soils with more than 10% organic matter. Current labels for lenacil products within Great Britain (G.B.) do not give any guidance with respect to soil type.

Lenacil is broken down very slowly in the plant and its action is that of a photosynthetic inhibitor. Lenacil is relatively insoluble and consequently it is released slowly and only moves gradually within the soil. In dry seasons initial activity is low until a wet period occurs and then it 'kicks' in. If used on its own the activity from lenacil is often quite poor but when used in tank mixes there is often a synergistic effect with the partner active.

Lenacil is currently marketed in G.B. as Venzar 500 SC and can only be used post-emergence with a maximum individual rate of 0.4 l/ha and a maximum total dose of 1.0 l/ha/yr. There are no restrictions on the number of applications that can be made to a crop. BBRO Bulletin No.5 gave information on crop vigour for a range of herbicide actives including lenacil.

Lenacil is a useful addition to the herbicide programme for control of brassicas and polygonums; it is seen as an 'activator'. It is weak on field pansy, red dead nettle and speedwells.

## **Summary**

- **We caution against using lenacil on sands, stony or gravelly soils and soils with more than 10% organic matter, especially as the majority of the beet growing area is experiencing higher than average rainfall this season**
- **Where using lenacil on other soil types take care with tank mixes and make sure they are fully supported by manufacturers. In particular, make sure mixes that contain clopyralid and triflusaluron-methyl are supported before using**
- **Check that adjuvants rates are used according to weather conditions**
- **Crops that are at 2 to 4 leaves and growing fast can be just as sensitive to herbicide damage as younger plants so take care with sprays when spraying in warm conditions and cloudless skies**
- **In the majority of cases injured plants will recover. In a few cases, generally in spray overlaps plants may not survive, check to see if growing points are still present and viable before taking the decision to re-drill**

## **Key notes to consider for weed control in sugar beet:-**

1. Physical tank mixes are supported for annual broad-leaved herbicides and insecticides but ideally, they should not be applied together. Insecticides require a minimum of 200 l/ha of water whereas ABLW herbicides are likely to perform better at 80-100 l/ha with a fine spray. 2. A tank mix of graminicide and insecticide is a better option as both require 200 l/ha water volume and coarser sprays.
3. If temperatures increase to the predicted 20° C plus, then avoid spraying herbicides in the middle of the day especially if cloud cover is absent. Aim to spray in the evening or early morning. Beet and weeds are likely to be sensitive to herbicides when conditions are warm, moist, and humid.
4. When controlling black-grass clethodim should be first choice, remember to add in a water conditioner even in non-hard water regions.
5. As soon as the beet crop reaches 1st true leaves 1cm there is support for 'Broadacre' mixes these can be useful where weeds are getting large, manufacturers provide examples of supported mixes.
6. Remember to always add in an adjuvant oil when using triflusaluron-methyl (Debut) as performance can be reduced by 50% if it is omitted, depending on the weed species being targeted.
7. Aim to use the actives that are strongest on the key weeds present e.g., for fat-hen phenmedipham + ethofumesate + adjuvant will work well on emerged weeds. See the BBRO Reference book for strengths and weaknesses of actives on other key weeds.
8. Tank mixing graminicides and annual broad-leaved herbicides is not ideal, the efficacy on grass weeds and in particular black-grass can be compromised. Physical compatibility support does exist but where possible apply separately especially if you have a serious black-grass problem.
9. Make sure that the interval between sprays is short where large weeds are being targeted. Adhere to product labels and take a note of crop health but 5–7-day intervals may be optimum for controlling large weeds.
10. A mix that has worked well in BBRO trials over a number of years is 3 applications of the following:-
  - phenmedipham (320 g a.i./ha) + metamiltron (700 g a.i./ha) + ethofumesate (150 g a.i./ha)

Note, where problem weeds are present then other actives may need to be added to the mix and rates should be adjusted according to size of crop and weeds.

## **Stewardship of Cruiser SB crops - reminder**

There are several key conditions summarised below that must be adhered to:

- A maximum seed rate of 1.15units/ha of treated seed. If there are concerns about poor establishment and a higher rate of seed is required, untreated seed can be

used but the rate of Cruiser SB treated seed must not exceed 1.15 units in each hectare drilled. It is essential to make accurate records of where all Cruiser SB treated seed is drilled within fields.

- Careful and targeted use of herbicides is required to minimise the number of flowering weeds in treated sugar beet crops and reduce the risk of indirect exposure of pollinators to neonicotinoids. The use of BASIS recommended herbicide programmes must be adopted by growers and their agronomists. Ensure all drill operators are aware of the [guidelines associated with the use of Cruiser SB treated seed](#), particularly ensuring all drilled seed is covered.
- No thiamethoxam seed treatment i.e. Cruiser SB may be used on the same field area for 46 months from the date of sowing treated sugar beet seed in 2024.
- **No Cruiser SB treated seed can be used after 1 June 2024**, this includes placing the product on the market, use, storage and disposal of unused stocks. This is regardless of any unfavourable weather conditions, e.g. extreme wet, that may result in a delay to drilling and also includes any re-drilling of treated sugar beet from crop loss (due to wind blow or capping) on the same field area for 46 months from the date of sowing treated sugar beet seed in 2024. This is to minimise the risk of residues being acquired by succeeding flowering crops or weeds and hence exposing bees and/or other pollinators to neonicotinoid seed treatments.



## EVENTS

We will be attending Cereals on the 11<sup>th</sup> June, please join us for the NFU Sugar Hour.

We will also be supporting the following event. Please click below to register.

**Mastering disease control in sugar beet**  
Friday 14<sup>th</sup> June, 8:00am

BASF invites you to join a collaborative webinar with British Sugar, BBRO, and Independent Agronomist Craig Green, to look at how to master disease control in sugar beet this season.

This will be an interactive webinar, so we invite you to bring your questions for our experts.

BASIS points available for attendees.

[Click here to register](#)

You will also be able to find us at the Morley Innovation Day – 20<sup>th</sup> June. Please see below to book.



**Morley Innovation Day**  
including the  
**AHDB Strategic Cereal Farm East Open Day**

Thursday 20<sup>th</sup> June 2024  
Opens at 10am  
Last four starts at 2pm

Morley Farms, Deopham Road,  
Morley, Wymondham, NR18 9DF  
Free lunch and refreshments.

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The event and parking are  
1/2 mile from the main farm.  
Follow the signs on the day.



The **Morley Innovation Day** showcases the latest arable advice and research from UK agribusinesses and research organisations. This free-to-attend event features a mix of field-based demonstrations and static exhibits, enabling attendees to interact with leading industry experts. This event is made possible by the unique relationship between The Morley Agricultural Foundation and NIAB delivering farmer-facing long-term agronomy research.

**NIAB Field Demonstration Tours**

Access NIAB's latest agronomy and soils research and demonstrations at Morley Farms, alongside impartial variety and agronomy advice from our regional agronomy team and crop specialists. Tour groups start in the demonstration fields at regular intervals from 10am through to 2pm, and include:

- Winter wheat varieties - Claire Lesman
- Barley varieties - Patrick Stephenson
- Cereal disease management - Aoife O'Driscoll

**EVENT TIMETABLE**

9.45am ..... Registration open  
10.00am ..... NIAB field demonstration tours start  
12.00 - 1.30pm ..... Lunch  
2.00pm ..... Final field tour starts  
4.00pm ..... Event closes

Please register on the NIAB

website:

[bit.ly/MorleyInnovationDay2024](http://bit.ly/MorleyInnovationDay2024)



**NIAB Soils and Farming Systems Team**

NIAB Soils and Farming Systems team will be on hand to discuss the latest research on assessing new diverse wheat lines under regenerative agricultural practices. In addition to the Morley Soil and Agronomic Monitoring Study (SAMS) and other long term experiments at Morley.

**AHDB Strategic Farm East**

AHDB will present the research underway at the new AHDB Strategic Cereal Farm East, hosted by David Jones at The Morley Agricultural Foundation. Topics will include cultural control of grassweeds, decision support for managing BYDV risk and improving nutrient use efficiency.

**Agrovista**

A long term supporter of the Morley Innovation day, Agrovista technical staff will be on hand to discuss Project Lamport which is a series of long term trials. They investigate cultural controls to reduce the reliance on pesticides particularly to manage blackgrass and improving soil health with a aim to create profitable crop production.

**Adams & Howling**

Adams & Howling will be discussing Malting barley both winter and spring and current market requirements.

**Openfield**

Openfield will be in attendance to discuss grain marketing information. We are also very grateful to Openfield for sponsoring lunch.

**The Morley Agricultural Foundation**

Some of the current cohort of TMAF funded PhD students will be demonstrating their work to date. The subjects include: wheat genetic improvement to rooting, nitrogen efficiency, and septoria resistance.

**BBRO (British Beet Research Organisation)**

BBRO will be on hand to discuss topical issues of the season, including Virus Yellows.

**Maize Growers Association**

The Maize Growers Association (MGA) proudly presents a diverse range of trials at Morley Farms, showcasing innovative approaches to maize growing. These trials address key challenges growers face, aiming to optimise yield, enhance crop quality, and promote sustainable practices. Come and speak with us as we delve into distinct areas of investigation: Pre-Emergence & Post-Emergence Weed Control, Foliar Applied Nitrogen, Soil Nitrogen Mineralisation, Under sowing Maize, Reduced Herbicide Usage, Deep Drilling and Alternative Seed Dressings.

**John Innes Centre**

The John Innes Centre is a plant and microbial research centre based in Norwich. Visit us on the John Innes Centre stand to find out about our latest research highlights such as tackling Virus Yellows disease in sugar beet, identifying resistance to cabbage stem flea beetle in oilseed rape, using genome editing to improve future crops, development of Plenty Sense nitrogen sensors for understanding nitrogen availability and timing of fertiliser applications and Free Inq solutions to disease in potato.

Morley Business Centre, Deopham Road, Morley, Wymondham, NR18 9DF  
Tel: 01953 859630 [www.tmaf.co.uk](http://www.tmaf.co.uk) Registered charity No.1097177



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**BASIS POINTS**

Two BASIS points in total (not per bulletin) have been allocated for the period between 01/06/23 and 31/05/24 reference CP/126447/2324/g. To claim these points please email [cpd@basis-reg.co.uk](mailto:cpd@basis-reg.co.uk)

Two NR0SO points in total (not per bulletin) have been allocated from 1st September 2023 to 31st August 2024 - NO500860f. To claim these points please email [nrroso@basis-reg.co.uk](mailto:nroso@basis-reg.co.uk).