



IN BRIEF

- BBRO aphid monitoring network is now in operation with the first set of results due this week and then available on the BBRO website.
- Green wingless aphids have been reported at threshold (one green wingless aphid per four plants). These are likely to be *Macrosiphum euphorbiae* (potato aphids) at present given current observations from a number of sugar beet crops.
- No *Myzus persicae* have been caught in the two Rothamsted suction traps at Broom's Barn or Kirton traps to date; two were recently trapped at the Writtle (Essex) site.
- Early samples (28th April) from the BBRO CropWatch network indicate migration of *Myzus persicae* & *Macrosiphum euphorbiae*.
- Remember three aphicide sprays are available for use this year, but only one application of each active ingredient.
- Beneficial insects are starting to be observed too including ladybird eggs being laid on beet plants.
- Correct identification of aphids is critical; in several instances globular springtails have been confused with aphids. Please check and seek advice if unsure – [BBRO aphid and beneficials ID guide](#)
- Variable beet and weed emergence requires some thought with respect to herbicide timings including Conviso One, there is also the need to consider tank mixing with insecticides. Early drilled crops are now receiving their third post emergence sprays and some crops will require stronger conventional programmes to get on top of weeds.
- [BeetCast April: Unpicking seedling diseases.](#)
- [Weather watcher? View the data collected by our new weather stations.](#)



ADVISORY

Aphid control

The Rothamsted Research forecast originally predicted the first peach-potato aphids (*Myzus persicae*) into beet crops from the second week of May, with a national VY forecast at 17% infection (in the absence of any control measures). However, the recent warm, dry weather is potentially bringing forward this aphid migration and both *Macrosiphum euphorbiae* (potato aphids) and *Aphis fabae* (black bean aphids) have already been found

in crops. BBRO's AphidWatch network will go live on the 1st May with twice weekly updates available via the [BBRO AphidWatch website](#)

Macrosiphum euphorbiae can transmit virus yellows, but potentially to a lesser extent. However, all green wingless aphids should all be included in field counts to determine the spray threshold. Checking several locations across the field may also be helpful to determine the extent of the aphid pressure. As crops are generally still very small, resulting in a small target area for sprays, it may be beneficial to wait for the crop to expand further before spraying.

Reminder: Thresholds for control are 1 green wingless aphid per four plants up to 12 true leaves and then 1 aphid per plant between 12-16 true leaves.

Aphid foliar Spray options for 2025:

Active Ingredient	Product Name	Application Timing (No. True leaves)	Aphid Knock-down	Beneficial insect safety ¹	Relative Cost	Mode of action
Acetamiprid	Insyst	<16	Fast	Generally Harmful	££	Contact & Systemic (Translaminar)
Flonicamid	Teppeki/ Afinto	2-16	Slow	Mostly Harmless	££	Ingestion Non-mobile
Flupyradifurone	Sivanto Prime	2-9	Fast	Harmless – slightly harmful	£££	Contact & Systemic (Translaminar)

1. According to IOBC toxicology class. Further details available from [AHDB](#)

There is no set sequence in which to apply these insecticides. When determining which order to use them, consider the number of beneficial insects already in the crop to protect them as much as possible. Crops without active beneficial insects in may be best positioning Insyst first to save the less harmful chemistries for later in the season.

We do not recommend tank mixing insecticides with herbicides. BBRO do not have sufficient data on their compatibility or impact on efficacy. Insecticides should be targeted to maximise aphid control when reaching the spray threshold.

Do not be tempted to use pyrethroids (e.g. Hallmark). 95%+ of aphids we are controlling are resistant to these and it will severely impact build-up of beneficial insects such as lacewings and ladybirds.

Leaf Miner eggs

A few reports have been received regarding early sightings of Leaf miner eggs on young beet plants. It is unusual to see much damage from the first generation, but we are watching the situation carefully. Please keep us informed if you spot damage on more than a handful of plants.



Photo 1 (above): Leaf miner eggs on underside of sugar beet leaf.

Photo 2 (left): Early leaf miner damage seen in 2024.

Watch out for the beneficials

Globular Springtails are often mistaken for wingless aphids but are in fact one of the good guys and pose no threat to your crops. If in doubt, use a magnifier to check!

Photo 3 (right): Globular Springtail



Weed Control – info supplied by Pam Chambers, British Sugar

Conviso One

Timing of sprays



The optimal time to apply Conviso One is when the target weeds, particularly fat hen, reach the 2-4 true leaf stage. Application can be made at 1.0 L/ha post-emergence from first leaf visible (pinhead-size), cotyledons horizontally unfolded up to and including the eight-leaf stage of the crop. However, this season there are a significant number of crops where there is variable emergence of both crop and weeds, see Photo .4 where some of the beet crop is at the expanded cotyledon stage but the 'trigger weed' fat hen has 4 true leaves plus.

Consider applying a 'holding spray' using conventional chemistry and delaying the Conviso One.

Photo. 4: Fat hen & Sugar beet

Tank mixing or sequencing with conventional herbicides

The preference is to apply Conviso One alone or in sequence rather than tank mixing, although Bayer has now issued support for tank mixing which is as follows:-

- Conviso One 1.0 L/ha is supported with **any one** of the three options below
 - 300g (= 0.6 L/ha product rate)* for 500g/L approved SC ethofumesate
 - 700g (= 1.0 L/ha product rate) for 700g/L approved SC metamitron
 - 100g (= 0.25/ha product rate) for 400g/L approved SC clopyralid

*from 2TL of the beet crop

Where volunteer potatoes are being targeted then a sequenced approach should be followed. Apply Conviso One first followed by clopyralid. It is unlikely that Conviso One will replace the use of clopyralid within a spray programme for volunteer potato control.

Tank mixing with an insecticide

There is support from Bayer to tank mix Conviso One with Insyst (acetamiprid), Teppeki (flonacimid) or Sivanto Prime (flupyradifurone).

Conventional herbicides

Some crops have now received or are about to receive their 3rd post-emergence spray and crop canopies are mostly still open. Decisions on when to stop spraying are now being considered for forward crops:-

- Have any new weeds emerged since the last spray – if not then delay until a new flush appears, probably after rain

- Where new weeds have emerged or where the latest herbicide has not given adequate control then continue with the herbicide programme. Leaving partially controlled weeds will allow them to 'harden' up and be more difficult to control
- Continue with weed control programmes until canopy closure

Fire brigade programmes

This season black bindweed is becoming one of the problem weeds, generally this is easy to control but where it becomes 'hardened' off it can pose issues. Generally, it is because herbicide rates being used are too low and spray intervals are too long. A few days is a long time in the life of a weed!

- Make sure spray intervals are short if struggling with weed control – 5 to 7 days. Check individual product labels with respect to intervals permitted.
- Always include an adjuvant oil, vegetable oils are kinder to the crop and the weed, so switch to a mineral oil where possible, i.e., where the crop is not under any stress from pest, disease or nutrients and you don't have beet still emerging!
- Key actives for controlling bindweed are phenmedipham, ethofumesate and oil. The inclusion of clopyralid will help but take care with this where the crop is small and only use supported rates. From 2 true leaves expanded of the crop the following is supported: -
 - phenmedipham 480 g a.i. (3.0 L/ha of a 160g product) +
 - ethofumesate 200g a.i. (0.4 L/ha of a 500g product) +
 - metamitron 700 g a.i. (1.0 L/ha of a 700g product) +
 - adjuvant oil according to temperature

The above mix will also give good control of fat hen. The inclusion of lenacil (Venzar 500 SC) can be useful for knot-grass, brassica and black bindweed control. If rain is forecast then be careful with the rates of lenacil being used and do not use if 'heavy rain' is forecast.

Spraying in hot conditions



- Expect to see ethofumesate 'sticking', see Photo 5. This occurs most years and the crop will grow away from it.
- Be careful with adjuvants, do not use if temperatures go above 21°C. However, the preference is to keep the adjuvant in the tank mix but spray in the evening or very early morning. A vegetable oil is kinder than a mineral oil to both crop and weeds!
- Check tank mixes, especially if crop emergence is variable, hot actives will be triflursulfuron-methyl, and clopyralid in particular.

Photo 5: Ethofumesate sticking

Clethodim or annual broad-leaved weed (ABLW) control – which comes first?

Ideally if black-grass has emerged, has three true leaves or more and is actively growing then clethodim should be applied. Remember to include a water conditioner, not adjuvants. The preference is to apply clethodim prior to any ABLW sprays containing ethofumesate or triflurosulfuron-methyl as both these actives will have some impact on black-grass and could potentially reduce the uptake of the clethodim. There is support for using clethodim with flonacimid, acetamiprid and flupyradifurone. Check individual product labels and manufacturer information for individual products.



EVENTS

Book now for our spring in-field events (click below).

BeetField25: Detail Delivers

	In season update: including aphid and insecticide programmes	14th May 8:30 & 10:00 - Morley, Norfolk	
	Seedling diseases Identifying the problem	14th May 14:00 & 15:15 - Linton, Cambridge	
	Weed control: challenges this season	15th May 9:00 & 10:30 - Navenby, Lincs	

**Book: www.bbro.co.uk/events**
Dress for the weather conditions



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BASIS POINTS

Two BASIS points in total (not per bulletin) have been allocated for the period between
01/06/2024 – 31/05/2025 - CP/138145/2425/g. To claim these points please
email cpd@basis-reg.co.uk

Two NR0SO points in total (not per bulletin) have been allocated from 01/9/2024 –
31/05/2025 NO503154f. To claim these points please email nroso@basis-reg.co.uk.