



Issued: 27th April 2022



IN BRIEF

- Winged and wingless aphid numbers continue to increase, especially in non-Cruiser SB treated crops and are being reported across all beet growing areas.
- The BBRO aphid-monitoring network is now active, please check the aphid survey data and aphid distribution map on BBROPlus (<https://plus.bbro.co.uk/on-farm/member-area/>) regularly for the latest update.

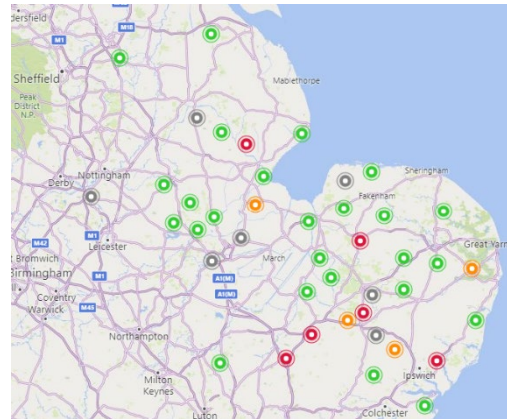


Fig 1. Map as of 27/4/2022

- Check all non-Cruiser treated crops as a priority and consider spraying **only** if the aphid threshold of **one green wingless aphid per four plants** is exceeded.
- Where plants are still emerging or are very small (cotyledon/1-2 true leaves) you might want to consider the timing of the first application to ensure there is sufficient leaf area to maximise the efficacy and uptake of the aphicide on the plant. However, this is a difficult judgement call and should be viewed on a field-by-field basis. **Don't apply too early and use up one of your permitted foliar applications.** Currently there are only two aphicides available.



Fig 3 & 4. Check each crop carefully for aphids

- As aphids move into crops, this is one of the most critical periods to remove any potential sources of virus on the farm. Check and destroy any leaf growth on spoil heaps, clamps, and groundkeepers.

- Soils are drying rapidly, and emergence is being affected in some later drilled light land crops. Those early drilled crops, sown into moisture, are showing better emergence and are continuing to grow.
- Where emergence is affected (and/or patchy) be careful with your choice of herbicides. Ensure you only apply products approved for post-emergence use as un-emerged parts of fields may be negatively impacted. This is especially important for herbicides containing lenacil. In dry conditions, try to keep the first post-emergence herbicide spray as 'gentle' as possible to reduce the risk of damage.
- As soils are becoming increasingly dry, do not delay applying remaining nitrogen on to crops. Make sure there is sufficient time for top-dressed nitrogen to be washed into the soil and available to plants to drive rapid leaf growth.
- Leaf miner eggs and the first signs of blackleg have been reported to the BBRO Plant Clinic.



Fig 5. Leaf miner eggs and damage on a young plant.



ADVISORY

Aphids – Numbers are continuing to increase. Analysis of aphids caught in yellow water pan traps are showing a range of different species present. As well as *Myzus persicae*, other aphids, such as the potato aphid (*Macrosiphum euphorbiae*), are present. This species can also transmit the yellowing viruses.

For non-Cruiser treated crops two sprays are currently approved: flonicamid or acetamiprid. These can be applied in any order. So far, there have been no reports of wingless aphids on Cruiser SB treated crops BUT REMEMBER if you need to spray such crops (if above threshold) you must start with flonicamid (Teppeki or Afinto).

Herbicides - with all post emergence herbicide applications, it is important to allow beet crops to harden off as much as possible before applications are made. Using high rates, increasing the number of partners in the mix, and adding oil will further increase the risk of crop damage. High light levels, dry soils and large changes in diurnal temperatures also increases susceptibility to herbicide damage. Check crop growth stages and compliance with the minimum crop growth stage on product labels especially where emergence has been variable and/or where there may be different varieties in the field.

Lenacil is a useful tank mix partner and can be effective on brassica species, black-bindweed and knotgrass. If applied in dry conditions that are followed by heavy rainfall, crop effects can be an issue. Lenacil products also state 'cannot be used before first leaf visible and cotyledons horizontally unfolded (BBCH 10)', so only consider using products containing lenacil where most of

the crop has reached this stage. There is some limited trial data that has shown that an interaction with pre-emergence use of lenacil in dry conditions and thiamethoxam-treated seed treatment can occur, reducing establishment.

Tank mixing herbicides and foliar insecticides In general, great caution should be taken if considering tank mixing herbicides. BBRO generally advise against tank mixing foliar insecticides and herbicides as it is quite likely the efficacy of one or both partners will be compromised by not applying at the right time or conditions. Also, do not compromise on water volumes as these may be different, and check on the compatibility of different partner products.

Nutrition— BBRO trials show a shallow yield response curve above 90-100kg N/ha on minerals soil and at current fertiliser prices, the yield response to rates above 100 kg N/ha are unlikely to be economic. Many growers are trimming back nitrogen rates by 20-30 kg N/ha this season. Remember to account for any nitrogen contributions from manure application and cover crops that include legume nitrogen-fixing species. In the current dry conditions, make sure top-dressed nitrogen is applied in good time for the nitrogen to be washed down sufficiently into the soil (although that will be challenging under current conditions and weather forecasts). Target final top dressing with nitrogen to be completed by full emergence.

More advanced crops may also be ready for their first manganese and magnesium applications, especially when growing rapidly. Manganese is especially key to supporting rapid leaf growth. Target a minimum of 1-2 applications during early canopy growth starting from BBCH 14-16 (4-6 leaf stage) repeating at 7-14 days. Target 1 kg Mn/ha in normal growing conditions and 2 kg Mn/ha where there is a higher likelihood of deficiency such as; rapidly growing crops (all soil types) and/or organic & sandy soils, high pH, after liming and fluffy seedbeds. Remember symptoms can be transient depending on the growing conditions but apply at the first signs of symptoms, don't wait for severe symptoms to develop.



EVENTS

Bookings now open for the BBRO BeetField22 events.

BeetField22: MAY

4 farms, 4 events

4 topics:

**Aphid Control
Nutrition
Foliar Disease
Varieties**

4 YOU

MAY 2022

16:00 - 19:00

12th - Park Farm, Thorney, Peterborough

13th - Eaubrink Farm, King's Lynn

17th - Bracebridge, Lincs

18th - Fersfield, Diss



Book an hour slot: www.bbro.co.uk

Refreshments provided

BASIS & NRoSO Points available



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Two NRoSO points in total (not per bulletin) have been allocated between 01/06/2021 and 31/05/2022 reference **NO469403f**. To claim these points please email NRoSOCPD@cityandguilds.com