



Issued: 18th May 2022



IN BRIEF

- Winged and wingless aphid numbers continue to build, especially on non-Cruiser treated crops. The threshold of **one green wingless aphid per four plants** (5 or more wingless aphids per 20 plants) has been exceeded in many of these crops and foliar insecticides have been applied. Continue to **check all non-Cruiser treated crops as a priority**.
- In some crops, particularly with small plants present, the persistence of foliar insecticides has been relatively shorter than anticipated and second applications have been made where thresholds have been exceeded. Check crops again within a week of any application.
- Recognising the potential need for a third foliar insecticide, we are still awaiting news on the EA approval. This is now critical and as soon as we receive any news, we will let you know.
- Examination of most Cruiser-treated crops show that the seed treatment continues to work well. HOWEVER, in the last 48 hours, indications are that the first green wingless aphids are being found on Cruiser-treated crops; these wingless aphids are small and may still die after further feeding. This is a very dynamic situation and highlights the need to monitor these crops. **Therefore, Monitor ALL crops that are 7-8 weeks post drilling (not emergence) for aphids.**
- Aphid numbers vary from field to field, often influenced by local factors such proximity to oilseed rape and how sheltered a field is. It is important to make decisions on a field x field basis to ensure foliar insecticide is most effective. Don't apply too early and use up one of your permitted foliar applications.
- Although uneven across the beet growing region, recent rain has moved crops forward with many now at the 6-leaf stage (BBCH 16). Delayed germination has resulted in a range of growth stages with areas of patchy emergence remaining in some crops. Base decisions on the average growth stage across the field. Carry out plants count to establish the field plant population where emergence has been poor. There are signs of late germination following the rain.
- As crops grow rapidly this week, don't miss the opportunity to apply foliar nutrients to support leaf growth and progress to the 12-leaf stage. This is the stage when plants begin to be more resistant to virus yellows. Apply manganese and magnesium as a priority from the 6-leaf stage. Where growth is rapid, don't wait until symptoms of deficiency appear.

- A range of symptoms of damage due to leaf feeding insects (flea beetle, pygmy beetle, leaf miner and thrips) have been found. This is occurring more commonly in non-Cruiser treated crops. Numbers of beneficials are increasing, so any treatment with pyrethroid-based insecticide should be avoided where at all possible to minimise resistance issues and the effects on beneficials.
- Many crops have had their T1 & T2 herbicides. Where crop growth stages are variable be careful with your choice of herbicides; rate of use and use of adjuvants. Be mindful of the conditions that may increase susceptibility to herbicide damage. This is especially important for herbicides containing lenacil.



ADVISORY

Aphids - Check the aphid survey data and aphid distribution map on BBROPlus regularly for the latest update (<https://plus.bbro.co.uk/on-farm/member-area/>). Use this as a guide only and not a substitute for checking your own individual crops.

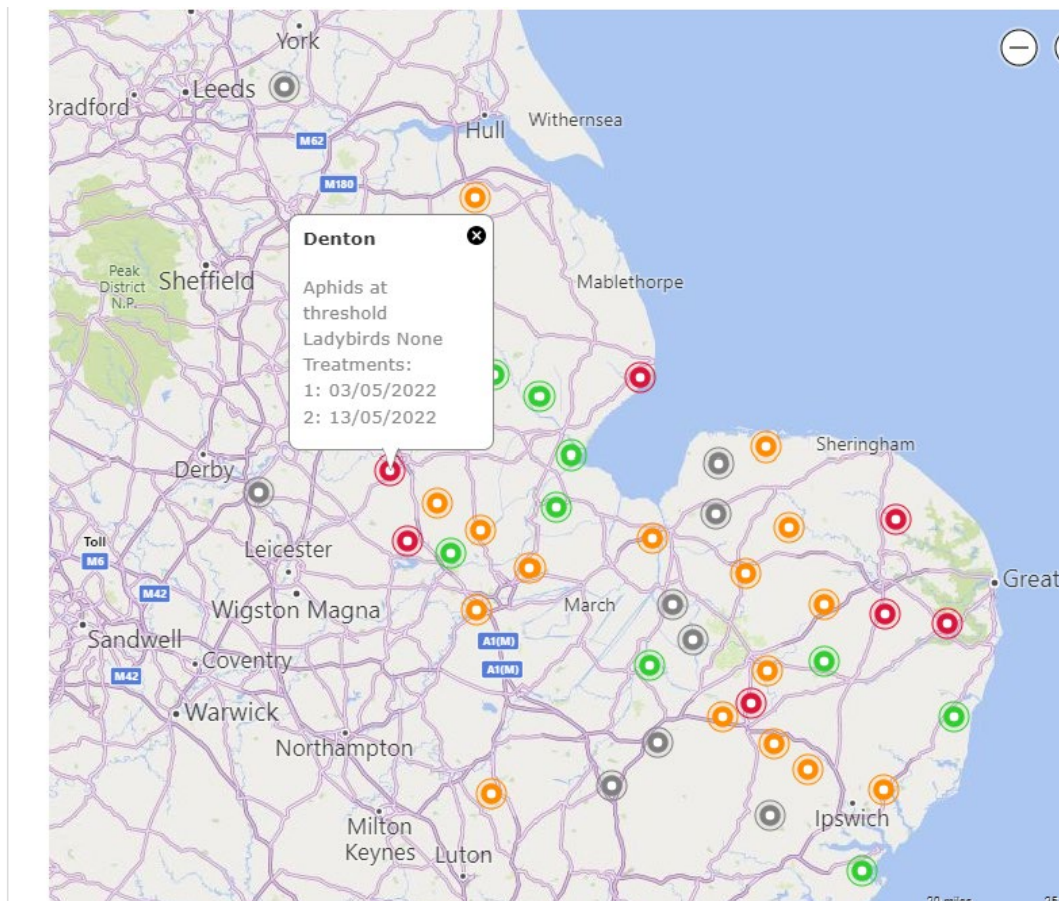


Fig 1: Aphid map as of 18/5/2022

Increasing numbers of winged aphids are being caught in the BBRO yellow water pan traps (and the regional suction trap network) and a high proportion of these are now being identified as *Myzus persicae*. This is the principal vector of virus yellows.

For non-Cruiser treated crops two sprays are currently approved: flonicamid or acetamiprid. These can be applied in any order.

BUT REMEMBER if you need to spray (if above threshold) on Cruiser treated crop you must start with flonicamid (Teppeki or Afinto). Only one spray of Teppeki or Afinto is permissible, not of one of each.

Do not reduce rates and ensure water volumes of both Insyst (Afinto) and Tepekki are in the label recommended range of 200-500l/ha.

Efficacy of foliar insecticides is being reported as less than anticipated, particularly on smaller crops. This may be in part due to the challenge of treating small plants and the recent dry conditions, as well as the large number of aphids currently moving into crops on a daily basis. Check crops again within a week of any application.

Herbicides – rain has activated many residual herbicides and they should now provide good weed control. Some larger broad-leaved weeds and grass weeds have established and may need treatment. Target post-emergence black-grass control at small plants (1-3 leaf stage). Control is reduced once black-grass plants have begun to tiller. Clethodim can provide useful control of black-grass.

Where crop growth stage is variable and/or where crops are showing signs of stress or pest damage, continue to be cautious with your choice of actives, rates, and adjuvants in order to avoid herbicide damage.

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. Do not compromise on water volumes as these may be different and check on the compatibility of different partner products.

Bayer provide a tank mixing guide on the use of Betanal Tandem with insecticides (Insyst and Teppeki) but it is important to check this on a product by product basis.

Nutrition - Rapidly growing crops, especially where most plants are at the 6-leaf stage will be ready for their first manganese and magnesium applications. Where plants are only growing slowly, and leaves are still small, these are probably best left longer to develop greater leaf area for foliar uptake.

Manganese is 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.

Crops on dry, light or thin soils, or in low organic matter, may also benefit from foliar sulphur if not applied in the base dressing. Foliar boron may also be an option on light, low organic matter/calcareous soils, especially where the soil remains dry.

Hygiene matters – don't give virus yellows a helping hand!



Fig 2: Beet regrowth found in Lincolnshire

Please remember that crop hygiene is more critical than ever. BBRO found these in Lincolnshire this week. Please ensure you cannot find any like these on your farm!



EVENTS

Next event: BBRO will be attending the Morley Open Day 16th June <https://tmaf.co.uk/morley-innovation-day-2022/>



CONTACTS

British Beet Research Organisation, Centrum, Norwich Research Park, Colney Lane,
Norwich, NR4 7G

Prof Mark Stevens mark.stevens@bbro.co.uk 07712 822194

Dr Simon Bowen simon.bowen@bbro.co.uk 07718 422717

Stephen Aldis stephen.aldis@bbro.co.uk 07867 141705

General Enquiries info@bbro.co.uk



BASIS POINTS

Two BASIS points in total (not per bulletin) have been allocated for the period between 01/06/21 and 31/05/22 reference **CP/111958/2122/g**. To claim these points please email cpd@basis-reg.co.uk

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 NRoSOC PD@cityandguilds.com