

Issued: 27th May 2021

IN BRIEF

Aphid Update

- The cool, wet, blustery conditions of recent days have suppressed aphid flight and build up on the crop. As temperatures warm-up, we expect this to change. Warmer temperatures will encourage aphids to fly, locate host crops, feed and to produce young wingless juveniles.
- Between May 21st - 27th, only 3 of the 51 BBRO monitoring sites (Swaffham and Bridgham in Norfolk and Woodbridge in Suffolk) have been found with any green wingless aphids; none were at threshold for spraying.
- The Rothamsted suction trap data shows that five *Myzus persicae* have been recorded across the 16-trap network, with two at Brooms Barn and none recorded at Kirton.
- However, there are increasing reports of aphids in crops by growers and agronomists (initially potato aphids but increasingly peach-potato aphids and black bean aphids) and some early reports of wingless aphid numbers being above threshold. The situation is changing daily, make sure you check the very latest update on [BBROplus website](#).
- The BBROplus map is a guide to where aphids are being identified but it is important to monitor your own crops and treat, if necessary, when at threshold. At this stage of the season the threshold trigger for spraying is 1 green wingless aphid per 4 plants (3 green wingless aphids per 12 plants) up to the 12-leaf stage.
- As we are now entering a critical period, it is vital that crops are inspected closely and regularly and treated when the threshold is reached. Do not go too early. Remember that we currently have a two-spray programme (Teppeki followed by InSyst) so we need to use sprays effectively.
- This is your last chance to remove any remaining potential sources of virus before aphids arrive in larger numbers and potentially transfer virus into this season's crops. It is still possible to find spoil heaps and beet clamps with leaf growth on them. Leaf growth like this must be destroyed immediately as it is likely to contain virus. Remember also to check for and remove any groundkeepers in fields which had beet last season.



Fig 1: Leaf growth on an old beet clamp in mid-Norfolk recently.



Remember that aphids can be winged or wingless. *Myzus persicae* (the peach potato aphid) is on the left of the photo and *Macrosiphum euphorbiae* (the potato aphid) on the right. *Myzus persicae* tends to be smaller than *Macrosiphum euphorbiae*, with the adults having a darker body, whereas *Macrosiphum euphorbiae* tends to be greener.



Fig 3: *Myzus persicae* (left) and *Macrosiphum euphorbiae* comparison.

The peach potato aphid is by far the most important vector of virus yellows, winged adults arrive in the crop after overwintering or migrating from other areas. They are typically 1.5-2.5mm in length and have quite long antennae which may be up 0.75-1 x the body length. They also have a distinctive dark abdominal patch and two tubes at the rear of the abdomen (siphunculi). Wingless juveniles vary in size according to their age and can reach a similar size to adults. They may range in colour from pale pink to green and become quite dark as they and the crop age. They are often clustered in the more sheltered parts of plant such as the underside of lower leaves or typically in the furled heart leaves.



Fig 2: Wingless and winged peach potato aphids *Myzus persicae*



EVENTS

[Book now to secure your place at one of the BBRO summer events.](#)

BeetField21 Self-guided Demo Farm Tours



- Compare early performance of 2022 RL
- Virus incidence and project updates
- Drought resistance and impact of irrigation
- Future proofing sugar beet crop
- Mobile plant clinic
- Spotlight on cercospora



Also visit the support and advice hub to discuss current issues with the BBRO team

15th June: Thorney | 17th June: Bracebridge | 22nd June: Bexwell | 24th June: Diss

Limited spaces - 90 minutes per visit
Booking essential: www.bbro.co.uk/events
NRoSO and BASIS points available



CONTACTS

British Beet Research Organisation, Innovation Centre, Norwich Research Park, Colney Lane, Norwich, NR4 7GJ

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 01/06/20 and 31/05/21 reference **CP/100686/2021/g**. To claim these points please email michele@basis-reg.co.uk

Two NRoSO points in total (not per bulletin) have been allocated between 01/06/2020 and 31/05/2021 reference **NO468433f**. To claim these points please email NRoSOPD@cityandguilds.com