



Issued: 9th June 2022



IN BRIEF

- Crops continue to power away in the warm and wet weather with many now at the 10-12 leaf stage and more advanced crops with 14-16 leaves. Seed which did not germinate in the earlier dry conditions is now growing but has resulted in growth stages ranging from 2 to 12 leaves across fields.
- The wet weather may result in some of the earlier developing foliar diseases such as bacterial leaf spot and downy mildew. Last season there was some confusion between bacterial leaf spot and cercospora leaf spot. Fungicides will be wasted if applied to control bacterial leaf spot. Cercospora is very rarely recorded in June as daily average temperatures are not warm enough. BBRO will be running its Cercospora early warning alert system again this season from the beginning of July.
- Recent heavy rainfall has reduced aphid numbers to below threshold for foliar insecticides on many BBRO monitoring sites. Rainfall has been localised so it is important to continue to monitor all crops especially where close to fields of oilseed rape/mustard which will be a major source of aphids.
- Remember the threshold up to the 12-leaf stage is **1 green wingless aphid per 4 plants** and **1 green wingless aphid per plant** where there are more than 12 leaves.
- From the 12th-leaf stage, sugar beet becomes an increasingly poor host for aphids with fewer new winged adults being produced. This reduces the secondary spread of virus within fields. Remember that plant maturity is a gradual process and not a 'switch.'
- It is important to continue to monitor crops that are just at or just past the 12-leaf stage as these may still need protecting where the threshold is reached. As a priority, check cruiser-treated crops that have not already had a foliar insecticide or crops where a foliar insecticide was applied more than 10-14 days ago.
- Where crops are at the 14-16 leaf stage **and** aphid number are low, a foliar insecticide may not be required. Bear in mind that two stage germination this season has resulted in variable growth stages across fields so make sure this is assessed carefully.



Aphid update

Aphid numbers continue to vary between fields and from day to day. Heavy rain will reduce aphid numbers, but populations can recover and/or new aphid can arrive in crops. The number of beneficiaries such as ladybirds are also increasing. It is important to make decisions based on regular assessment of aphid numbers to ensure foliar insecticides are used most effectively. Remember, that at the 12-leaf stage, plants begin to become more resistant to the virus, but this is a gradual process up to about 16-18 leaves. The aphid threshold for triggering foliar insecticide application depends on the number of leaves. Where this is variable, use the lower estimate of growth stage in crops:

Up to 12 leaves – 1 green wingless aphid per 4 plants

More than 12 leaves – 1 green wingless aphid per plant

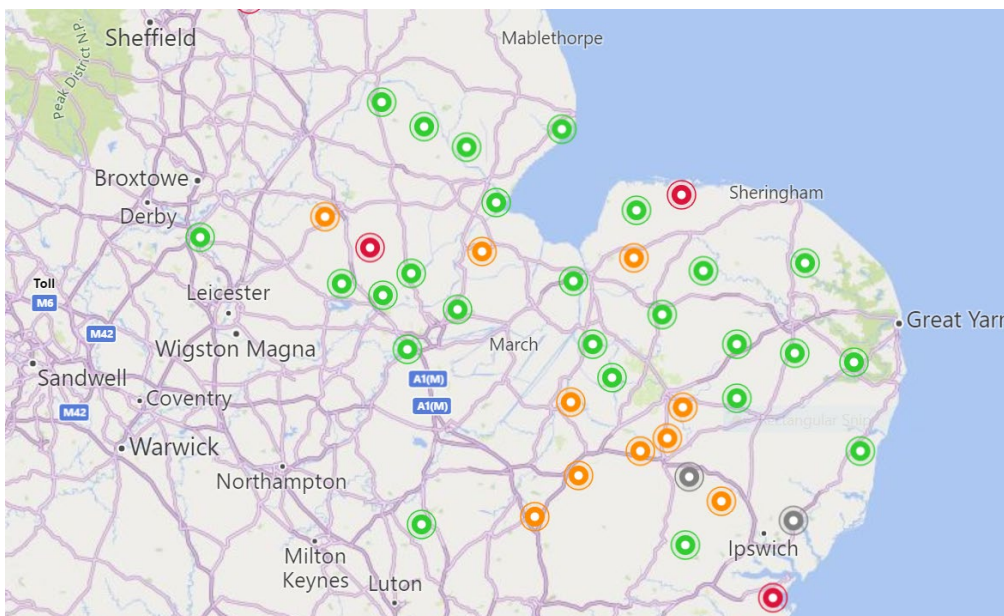


Fig 1: Aphid map as of 8/6/22

Fig 1 shows the aphids detected across the BBRO network. Many sites have turned from red and orange to green following the heavy rainfall.

Check the aphid survey data and aphid distribution map on BBROPlus regularly for the latest update (<https://plus.bbroy.co.uk/on-farm/member-area/>). Use this as a guide only and not as a substitute for checking your own individual crops. Information is updated regularly throughout the week as data is collected. If the sites are grey (no data) it may be worth checking the previous week using the green arrows above the map or checking again later as the maps are regularly updated as information is received from the field.

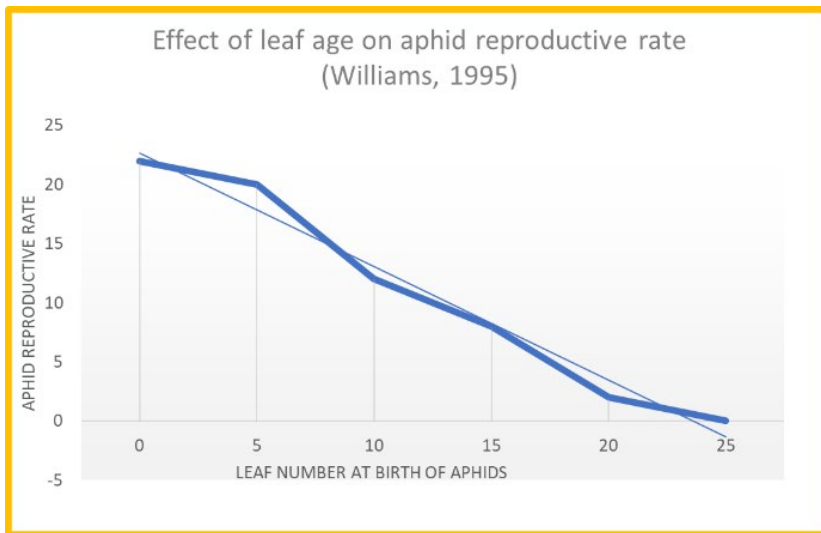


Fig.2 The effect of leaf number on aphid reproduction

Fig. 2 shows the effect of leaf number on aphid reproduction, highlighting how more mature plants become increasingly poor hosts, reducing the number of new winged adults produced and therefore the spread of virus within and between crops. At the 15-leaf stage aphid production is reduced by >60% compared to the very youngest plants.



Fig.3 Typical 10-12 leaf stage plant

Foliar disease

Bacterial leaf spot - wet weather may cause localised symptoms of bacterial leaf spot. Photographs (Fig 4) are from 2021 when there were similar wet growing conditions. There may be some potential for confusion of these symptoms with those of cercospora. Bacterial leaf spot tends to occur earlier in the season and has more angular lesions on the leaf, often on the leaf margins and associated yellowing. Early cercospora infection tends to develop much later and is typified by more regular discrete circular spots.



Fig 4: Bacterial leaf spot on left versus cercospora leaf spot on right



EVENTS

Next events:

16th June: Morley Open Day <https://tmaf.co.uk/morley-innovation-day-2022/>

7th July: Bracebridge, Bloxholm Lane. **Herbicide special** with UPL, plus BBRO staff on hand to answer your questions. Booking opening shortly: www.bbro.co.uk/events.

26th July: BeetField22 Revisit – Fersfield. Details to be released shortly.

28th July: BeetField 22 Revisit – Thorney. Details to be released shortly.



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BASIS POINTS

New reference for points will be available shortly

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-req.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 NRoSOCPCD@cityandguilds.com