Advisory Bulletin

Issued: 15th June 2022

Ö IN BRIEF

British Beet

- Crops continue to develop rapidly in the warm weather conditions, with many now beyond the 14-16 leaf stage. Later germinating crops continue to play 'catch-up' with some variable growth stages present.
- First signs of virus symptoms have been recorded in non-Cruiser treated crops. Bear in mind that yellowing symptoms could also be due to other factors such as capsid feeding, nutrient deficiency, root damage (nematodes etc.) and herbicides. The <u>BBRO Plant Clinic</u> can help to diagnose any problems.
- Aphid numbers are reducing in the BBRO monitoring network, with many sites showing green (no aphids detected) this week. Numbers caught in the Rothamsted suction trap network are also lower, indicating that we may be past the peak of aphid migration.
- Aphids are now being found more frequently in Cruiser-treated crops, indicating that the efficacy of the product is diminishing; 8-10 weeks after drilling as expected. Aphid numbers in some Cruiser-treated crops have exceeded the threshold and a foliar insecticide has been applied in many cases.
- Check the growth stage of crops carefully when deciding whether to use a foliar insecticide or not. In variable crops, where a sizeable proportion of the crop has less than 12-leaves **and** the aphid threshold of **1 green wingless aphid per 4 plants** is exceeded, there will still be a risk of infection and therefore requirement for a foliar insecticide. Crops with more than 14-16 leaves will be at lower risk of virus infection and spread. The threshold for crops where there are more than 12 leaves is **1 wingless aphid per plant.**

ADVISORY

Aphid update

Aphid numbers continue to vary between fields and from day to day. Heavy rainstorms can reduce aphid numbers, but populations can recover and/or new aphids can arrive in crops. The number of beneficiaries such as ladybirds are also increasing. At this stage of the season, it remains important to continue to assess aphid numbers to make decisions on the need for a foliar insecticide.

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Fig 1. shows the aphid numbers detected across the BBRO network. Many sites have turned from red and orange to green.

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

Mature plant resistance begins to develop from the 12th leaf stage. Crops beyond 16-leaf stage are at a reduced risk of virus infection and secondary spread. A foliar insecticide may not be needed at this stage, but this decision may also depend on the proximity to other sources of aphids coming into the crop and the spray interval between any previous foliar insecticides.

It is important to check on the growth stage carefully. When counting leaves, and as plants begin to merge down and across rows, it is easier to bend plants over slightly and count the number of green stems/petioles rather than the actual leaves. There is only one leaf per stem/petiole. Where this is variable, use the lower estimate of growth stage in crops.



Fig. 2 Plant at the 10-leaf stage (10 leaf stems/petioles)

Foliar disease

No significant reports so far of early foliar disease infection such as downy mildew, bacterial leaf spot and cercospora. From July onwards, BBRO will be providing regular information on the risks of cercospora development in crops. This is based on a temperature and humidity model which is used to trigger a high-risk alert. Warm temperatures (>25°C) and high humidity (>90%) provide ideal conditions for rapid development and spread of this disease. A network of Met stations are monitoring conditions across the sugar beet growing region. There have been no alerts triggered so far for cercospora, but as average daily temperatures increase this week, we will be monitoring conditions carefully.



Fig 3. Bacterial leaf spot on left versus cercospora leaf spot on right

Bacterial leaf spot - wet and warm weather may result in localised symptoms. 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 with some associated yellowing. Early cercospora infection tends to be later developing and is typified by more regular discrete circular spots.

Weed control, bolters and weed beet

There are a few signs of herbicide damage showing in crops, especially in later developing plants. Symptoms such as sticky leaves may be linked to the use of ethofumesate and mottling/yellowing to the use of triflusulfuron-methyl and lenacil. Most plants should grow away from these.

Where applying clopyralid, be mindful that the maximum total and individual doses vary for different strength products and remember that all applications of clopyralid should be completed by the end of June.

Bolters and weed beet are beginning to show in some crops. Remember, just one weed beet or bolter per square metre, could reduce crop yields by 11% and on average 1,500 seeds are produced per weed beet or bolter. At this stage, most weed beet and bolters will be at the pre-flowering stage and can be pulled or have the stem broken close to the root and left on top of the crop to die.



Fig 4. First bolters observed on one of the BBRO demonstration sites.



Next events:

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



7th - Bracebridge 26th - Fersfield 28th - Thorney Book 1 hour slot: www.bbro.co.uk BASIS & NRoSO points available

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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 <u>cpd@basis-reg.co.uk</u> 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 <u>NRoSOCPD@cityandguilds.com</u>