



Issued: 28/06/19



IN BRIEF

- **Crops continue to develop rapidly and in general look very well, showing good yield potential.**
- **Further potential cases of virus yellows symptoms have been reported and are being checked.**
- **Some more general yellowing of crops has been observed and may be related to high rainfall and waterlogged soils.**
- **Many crops are now at or beyond the 12-leaf stage, but aphid control needs to remain a priority.**
- **Continue to check plants for aphids and the threshold of one wingless aphid per plant. If the threshold is met, there remains a risk of virus transfer by aphids and protection will be required.**
- **Check the BBRO's virus yellows map to see yellow water pan traps near you. Visit https://bbro.co.uk/on-farm_aphid survey.**
- **Increasing numbers of leaf miner eggs and leaf damage are also being reported so don't forget to look for these.**
- **Keep a close watch for foliage disease. Some cases of bacterial leaf spot have been reported following the wet weather.**
- **Bolters and weed beet are appearing in crops and a programme of control needs to be started.**



ADVISORY

Crop Yellowing - First virus yellow symptoms will be visible 2-4 weeks after infection, although it may take longer to see the full extent of virus symptoms in crops. If you are concerned about any yellowing in your crop, BBRO can confirm the presence of virus, although photographs are preferable in the first instance. If samples are to be sent please ensure you send several leaves in a sealed plastic bag, with damp tissue paper around the petioles, along with full details of the crop and treatment history. Please avoid crushing the leaves.

It is important to remember that when plants reach the 12-leaf stage they DO NOT become completely resistant to acquiring the virus, it is a gradual change as the crop matures. Continue to monitor for aphids especially in crops which are just at the 12-leaf stage or

where parts of the field are yet to reach this stage as they will still be at risk of virus acquisition.

The photo shows symptoms of beet mosaic virus (note the mosaic pattern between the veins of the leaf) which is being seen in several crops. Transmitted primarily by aphids in a non-persistent manor but can be transmitted mechanically too. Previous trials have shown maximum yield losses from this virus were up to 9% from late May/June inoculations, therefore, not as severe as virus yellows.



Photo 1: Beet mosaic infected leaf

More general yellowing of the crop may be due to the soil being waterlogged and development of anaerobic conditions. As soils dry out, root function will recover, and crops will pick up nutrients. Give crops a chance to recover for a few days, before rushing into applying foliar nutrients.

Foliar disease - we are continuing to see some samples bacterial leaf spot symptoms in the Plant Clinic. These have developed due to the warm wet conditions and although nothing can be done, most plants will grow away from symptoms. Silvering disease and downy mildew are also being seen. Start looking for first signs of foliar diseases especially powdery mildew, rust and cercospora.



Photo 2: Early cercospora

Bolters/weed beet - remember that just one bolter per square metre can reduce crop yield by 11% through shading and competition for water and nutrients. Where bolters and weed beet are appearing in crops it is important to decide on your control strategy. This will depend on the numbers of bolters and weed beet present:

- Where numbers are less than 1000/ha (1 per 10m²) aim to pull by hand before seed set.
- If numbers are between 1000 and 10,000/ha (1-10 per 10m²) you may want to consider weed wiping with glyphosate.

Check specific product details for rates and concentrations. Remember to lower the concentration in line with guidelines in hot, dry conditions. Target treatment when bolters/weed beet are more than 10cm higher than the crop. Consider wiping dense populations twice, in opposite directions. You may need to make more than one application from early July to early August.

- Where populations are in excess of 10,000/ha, you may need to consider the option of cutting.
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Photographs of the key stages of pre-flowering through to maturing seed in relation to bolter and weed beet control can be found in the BBRO Reference Book <https://bbro.co.uk/publications/reference-book/>



EVENTS

1. BeetField19 - Summer Open Days

Tuesday 2nd July Fotheringhay, Peterborough. PE8 5HZ

Thursday 4th July Thelveton Estate, Diss. IP21 4HP

Book now: <https://bbro.co.uk/events/>



CONTACTS

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

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

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

General Enquiries info@bbro.co.uk



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