🕽 Advisory Bulletin



Issued: 18/7/2019

Ö IN BRIEF

- Crops continue to look well but some, on lighter soil types, are beginning to show signs of moisture stress in the warm and dry conditions
- Yellowing plants are being found in many crops. Typically, this is limited to small patches of plants within the crop, but some fields have more widespread yellowing. Don't assume these are all associated with virus infection
- First cases of rust have been reported. Remember that the first fungicide should be applied at the initial signs of disease
- Symptoms of potential BCN infection; patches of stunted and wilted plants, can be seen in some crops and need investigation
- Bolters and weed beet control programmes should be underway

O ADVISORY

It might not be virus!

Crop yellowing may be due to a range of different factors. Discrete patches of yellowing plant within the crop may be virus infection but this may also be linked to other issues such as foliage disease and magnesium deficiency.

First virus yellows symptoms will be visible 2-4 weeks after infection, although the full extent of virus symptoms in crops may continue to develop throughout July and August.

Typically, symptoms from the primary infection by aphids will develop in small patches within the crop, with more widespread infection depending on the level of secondary spread. There are reports of more widespread virus infection being found in a few crops and these are being investigated further. Where crops are more than 2-4 weeks on from the onset of mature plant resistance it is expected that further virus transmission and symptom development will be reduced.



BBRO is monitoring many crops throughout July and August for virus symptoms, including those where yellow water pan traps were sited. BBRO will report back on this survey but it is essential to collect data on a large number of representative crops before drawing conclusions.



Earlier infection with downy mildew has also caused yellowing in crops. Check the heart of the plant for signs of this disease.



In some cases, yellowing may also be linked to magnesium deficiency, especially as the recent dry conditions have resulted in water-stress on lighter land.



Photos 4 -6 (below Depict magnesium deficiency

More general yellowing of the crop may also be due to where the soil was waterlogged earlier in the summer and/or where soil is compacted. Patches of BCN infection may also result in yellowing as leaves senesce.

Foliage disease – As with powdery mildew, we are also seeing the very first signs of rust in crops. Remember that the first fungicide should be applied at the initial signs of disease. Keep a careful watch for the first signs of any foliage disease in crops. Check different varieties as there are differences in disease susceptibility. It is important to get fungicides on early, as evidence indicates that crop performance is compromised from the very early stages of infection. Remain vigilant over the next few weeks. The forecast rain will increase the risk of rust as well as 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 present, it is important to control them. Your strategy will depend on the numbers of bolters and weed beet:

- 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.

Photographs of the key stages of pre-flowering through to maturing seed in relation to bolter and weed beet control can been found in the BBRO Reference Book (www.bbro.co.uk/publications).



25th July 18:30 – 19:30 BCN Special Bridgham near Thetford. Followed by discussion session at the Larling Angel. Book now: <u>https://bbro.co.uk/events/</u>

We will shortly be opening the bookings portal for Autumn Demo Farm events. Provisional plan for the following:

10th Sept 8:30 -11:30 Newark Growers 11th Sept 8:30 - 11:30 Bury Growers 11th Sept 13:30 - 16:30 Cantley Growers 26th Sept 8:30 - 11:30 Wissington Growers

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