



Issued: 25<sup>th</sup> June 2020

## BeetField20 – Virtually Live! 6<sup>th</sup> – 10<sup>th</sup> July

Watch-out for our programme of short presentations being released as of the 6<sup>th</sup> July, culminating with a live webinar with Prof Mark Stevens, Dr Simon Bowen and the wider BBRO team on Friday 10<sup>th</sup> July – all streamed directly to a screen near you!

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### IN BRIEF

- **Most crops continue to grow away from the earlier dry conditions and poor seedbeds but there remains considerable variation between plants within fields**
- **Some crops have reached the target of full crop canopy cover by the summer equinox (21st June) and many are not far behind**
- **Aphid monitoring is showing numbers are much lower, especially in East Anglia. As crops mature, the risk of virus transmission is reduced as mature plant resistance begins to take effect from the 12-leaf stage. However, continue to monitor crops for thresholds at least up to the 16-18 -leaf stage, particularly in fields with a range of growth stages**
- **Virus symptoms are now showing in crops**
- **Bolters and weed beet are also showing in crops and will need managing. Remember that crops using the Conviso-Smart technology (Smart Janninka KWS) are a priority for removal of bolters**
- **Keep an early eye open for any foliar disease, such as powdery mildew, rust or cercospora leaf spot**
- **Make sure any uncontrolled beet growth on old beet clamps and spoil heaps is dealt with. These can act as a source of cercospora and rust infection into crops**



### ADVISORY

#### Aphids and virus-transmission

The first symptoms of virus yellows continue to be reported. BYV can take between 1 - 2 weeks to show symptoms after infection whereas BMVY typically takes 3 - 6

weeks. There are also reports of Beet mosaic virus symptoms in many crops this season. This is mainly aphid transmitted but tends to have less effect on yield.

Continue to assess your crops, particularly those that are late sown or at mixed growth stages, for aphids and adhere to spraying advice taking action as soon as threshold is reached: 1 green wingless aphid per 4 plants up until 12 leaf stage or one green wingless aphid per plant above the 12 leaf stage.

Black bean aphid numbers are increasing in crops and can transmit BYV in younger plants but treatment is unlikely to be necessary and the increasing number of beneficial insects will control their numbers. Monitor numbers where present.



**Pic 1: Beet Mosaic Virus**  
(mottled green/light green in mosaic pattern)  
(veinal yellowing)



**Pic 2: Beet Mild Yellowing Virus**  
(orange colour from leaf tip/inter-veinal yellowing)



*Pic 3: Beet Yellow Virus infected plant*



*Pic 4: Early BYV infected leaf*

*(lemon/yellowing of leaf between veins)*

Aphid data remain available to all growers and agronomists on the BBROplus website and a more detailed aphid/aphicide Q&A is available in [previous bulletin](#). Yellow water trap network will remain in place until 4<sup>th</sup> July 2020.

Beneficial insects are active in many crops and will these help control aphid numbers



*Pic 5: Lacewing larva*



*Pic 6: Ladybird larva*

### **Leaf Miner activity**



Several new reports of leaf miner activity have been received this week, potentially second generation, especially in Suffolk/Essex coastal areas. Earlier damage remains visible on the oldest leaves, but it is more than likely we are between the first and second generation of this pest at present.



*Pic 7: Leaf miner at work*



*Pic 8: Leaf miner damage*

### **Silver Y moth**

Numbers have been low over the last week, but an update can be accessed on this link to [Warwick University](https://www.warwick.ac.uk/newsandevents/pestupdate). Keep monitoring crops for any sudden population increases. There is an established threshold of 5 caterpillars per plant but try to avoid using approved pyrethroids in sugar beet to maintain beneficial numbers for aphid control. A good shower of rain tends to reduce numbers.



*Pic 9: Silver Y moth*



*Pic 10: Silver Y caterpillar*

### **Beet Cyst Nematode**

Infected plants and patches may be showing, especially after periods of hot dry weather. Plant will be stunted possibly with yellow and senescing leaves. Pull suspected plants and

look for small (pinhead sized) white cysts on the roots. If you find BCN, other fields, particularly those near-by are also likely to be infected and if destined for sugar beet next season, may warrant considering a BCN tolerant variety. Soil testing will confirm BCN and the size of populations.



*Pic 11: BCN infested field*



*Pic 12: BCN infested root*

### **Foliage diseases**



*Pic 13: Rust*



*Pic 14: Cercospora*



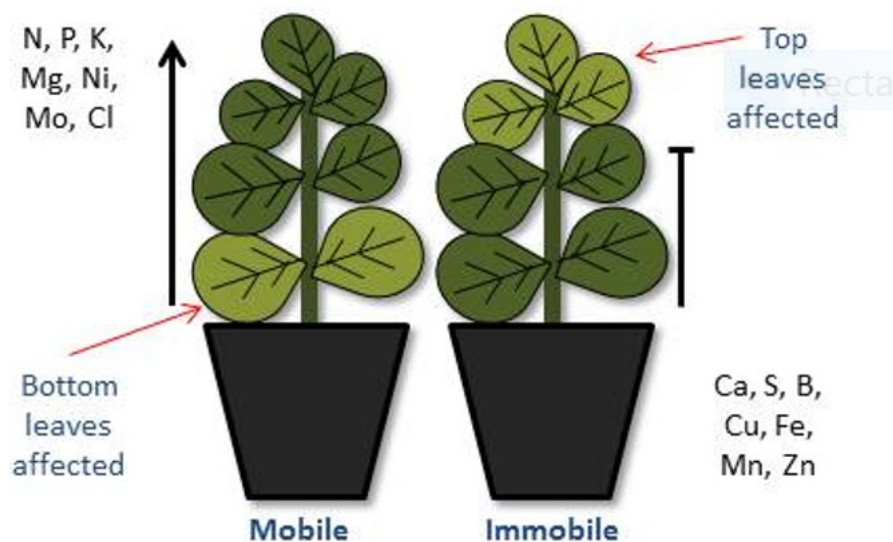
*Pic 15: Powdery mildew*

Whilst it is still quite early for foliage diseases, it is worth keeping a close look-out for first signs of foliage disease. In particular, check varieties with lower leaf infection scores on the RL list as this is where initial infections could establish.



## Nutritional deficiencies

Rapidly growing crops may show nutrition deficiencies, especially those nutrients that are less mobile with plants (see chart below). Some symptoms may be transient but where they persist, consider a foliar application. Watch for symptoms of manganese and boron.



*Pic 16: Manganese deficiency*



*Pic 17: Boron deficiency*



## EVENTS

### BeetField20 – Virtually Live! 6<sup>th</sup> – 10<sup>th</sup> July

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**Monday 6<sup>th</sup> July: RL 2021 varieties and Conviso technology**

Presented by Mike May (RL Board Chairman) and Sarah Cook (ADAS)

**Tuesday 7<sup>th</sup> July: Varietal traits: Pest & disease resistance and drought tolerance**

Presented by Dr Alistair Wright (BBRO) and Georgina Barratt (PhD student with University of Nottingham)

**Wednesday 8<sup>th</sup> July: Soil Management; variable drilling, drill testing results and nutrition**

Presented by Dr Simon Bowen (BBRO) and Stephen Aldis (BBRO)

**Thursday 9<sup>th</sup> July: Putting the ABC (Aphids-Beneficials-Control) into IPM**

Presented by: Prof Mark Stevens (BBRO)

**Friday 10<sup>th</sup> July: Beeting Change with BBRO [LIVE DISCUSSION SESSION](#)**

Join us via our website link to speak to the team and hear growers' questions.

**[Click here to REGISTER](#)**



## CONTACTS

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## 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](mailto:michele@basis-reg.co.uk)

City and Guilds are currently closed due to Covid19. NRoSO points will be made available as soon as possible.