



- Recent rainfall in many areas has increased the likelihood of foliage disease developing.
- Symptoms of rust and cercospora continue to be found in crops but their incidence remains sporadic. Don't assume one crop is the same as another. Check each crop carefully.
- Fungicides should be applied as soon as disease is found in crops. Timing is key. There are a range of defects showing on leaves so be clear on whether there is disease present.
- Pest levels remain generally in check by Beneficials. Very little second/third generation leaf miner damage reported to date.



### Foliar Disease Control – points to remember

- Know what disease(s) are in your crop to select the best fungicide options. Details on diseases and fungicide options can be found in the BBRO 2018 pest, disease and weed guide. This can be found on-line at <a href="https://bbro.co.uk/publications/weeds-pest-and-diseases-2018/">https://bbro.co.uk/publications/weeds-pest-and-diseases-2018/</a>
- Know where specific varieties are sown within fields to assess disease levels. Infection may be more advanced in more susceptible varieties. Make the most of disease ratings of the 2018 RL list for rust and mildew. Download a copy of the 2018 RL here: <a href="https://bbro.co.uk/sugar-beet-varieties/recommended-list/">https://bbro.co.uk/sugar-beet-varieties/recommended-list/</a>
- Cercospora: we don't have consistent information of varietal susceptibility to cercospora, but differences were observed

last season so check different varieties carefully for this disease. Key symptoms of initial leaf infection to watch out for include: regular circular spots with necrotic, tan-grey centres and reddish-brown borders. If the disease develops unchecked, these spots can coalesce into larger brown necrotic areas on the leaf.



Picture: Early cercospora symptoms



Picture: More advanced cercospora symptoms



Picture: Early rust symptoms



Picture: More advanced rust infection



Picture: Early powdery mildew symptoms



Picture: More advanced powdery mildew infection

- Do not apply fungicides too early. Wait for symptoms to show especially if a one-spray approach is being used. Conversely, do not apply products too late otherwise effective disease control will be difficult for the remainder of the season.
- Always follow label recommendations for applying products at the correct growth stage.
- Ensure water volume recommendations are adhered to and are not cut back. Many products recommend that a higher

water volume in used in crops with dense canopies to get better penetration and coverage.

• Ensure the gap between the first and second (or second and third applications) is kept to within 28 days to prevent significant re-infection occurring between treatments.

### Other leaf-defects

There are a range of other defects showing on leaves. Some symptoms may occur in patches and are associated with changing soil type, others are distributed evenly across the crop. Many of these are drought-stress related and are clearly more prevalent on lighter soil types. Drought-induced leaf senescence is common in light land crops. Recent rainfall will help with new leaf growth.

Magnesium deficiency is being seen in some crops and in most cases, symptoms will decrease following rain. Continue to monitor to assess whether foliar treatment is justified where symptoms persist. A few cases of boron deficiency have also been reported.



General drought-induced leaf senescence on light soils



Picture: Magnesium deficiency



Picture: Boron deficiency

Do you need help in identifying or confirming an issue in your sugar beet crop? We have facilities at our Norwich laboratory and glasshouses for microscopic investigation and virus detection.

We would recommend that you submit at least one plant with the surrounding soil and if possible some photos of the surrounding area. A plant clinic form must be sent with each sample. This can be downloaded from the BBRO website <a href="https://bbro.co.uk/research/plant-clinic/">https://bbro.co.uk/research/plant-clinic/</a> Please send samples to: BBRO, Plant Clinic, Innovation Centre, Norwich Research Park, Colney, Norwich. Norfolk. NR4 7GJ. Alternatively, email your query with photos to: plantclinic@bbro.co.uk

## O EVENTS

# Improving soil health; potential impact on yield (sugar beet focus)

Friday 7th September 2018 10:00am - 1:00pm FREE but Booking essential

Morley Business Centre, NR18 9DF

### Programme:

**09.50** Start

**10:10** Welcome and introduction. Dr Simon Bowen, Research Scientist BBRO.

**10.20** Soil Health Partnership - sustainable soil health research; Dr Elizabeth Stockdale, Head of Soils Group NIAB, UK.

**10:50** Soil tillage and long-term farm trials David Clarke, NIAB. (TBC)

11:20 Use of selected microorganisms to enhance crop growth and establishment; Dr Jamie Stotzka, PlantWorks Ltd 11:50 Use of cover crops to enhance soil health and influence beneficial mycorrhizal associations; Dr Lydia Smith, Food Director of Innovation Farm and East Agritech Innovation Hub, UK

**12:15** Final remarks and resume Dr Simon Bowen, Research Scientist BBRO.

12:30 Discussion & networking

To book your place please email at: <a href="mailto:info@bbro.co.uk">info@bbro.co.uk</a>



#### 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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