



## IN BRIEF

- **Foliar diseases such as rust and cercospora are developing in crops though spread is generally being kept in check due to the continuing dry conditions.**
- **Test digs have indicated some improvement in root yield and sugar content since the earlier drought. However, where conditions have remained dry, improvement has been slow despite many crops retaining good crop canopies.**
- **Initial harvester test results indicate operators are managing to keep losses to a minimum but dry and hard soil conditions are extremely challenging with the ever-present threat of higher surface losses due to root breakage and snapping in the ground.**
- **Regular monitoring of surface losses, over-crowning and root breakages is key in helping to recover as much of the crop as possible.**



## ADVISORY

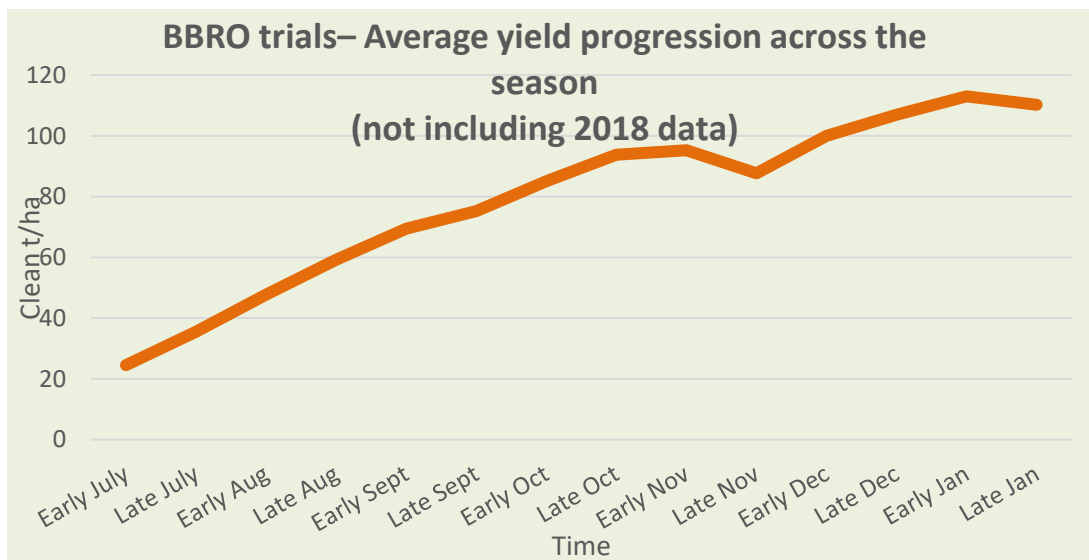
### Foliar Diseases

We are seeing variable levels of foliar disease, with rust and cercospora being found more frequently. However, levels in most crops remain generally low and have been kept in check by the dry weather and previous application(s) of fungicides.

- There are differences between varieties in terms of rust development so ensure that you check different varieties to establish the levels of infection in your crop. Disease ratings can be found on the Recommended List.
- Be aware of specific label restrictions for the number of applications of different products that can be made to crops and follow recommendations for water volume and spray quality. Some products such as Escolta recommend the use of a higher water volume in 'dense crops'.
- Remember also to check and comply with the harvest interval (HI) of different products. These range between 21 and 42 days, so check the label of the product used. Information on fungicides, including harvest interval, are also available on the BBRO website <https://bbro.co.uk/publications/weeds-pest-and-diseases-2018/>

## Harvest planning

- Root rots. Any crops with root rots should be candidates for first harvesting. It is worth checking crops for potential problems, especially areas where seedbeds were poor, emergence and development were backwards, or crop affected by earlier Aphanomyces infection. Any areas where there was standing water following rain are also worth checking.
- Crop yield potential. Many crops have regenerated canopies since the drought and most are very green, active and healthy. Test digs are encouraging, showing that root weights and sugar levels are increasing and Amino-N levels decreasing as the crop matures.
- The graph below used previous BBRO data (but not 2018 data) to demonstrate how on average, yields can increase in the latter part of the season.



- An average yield increase of 30% highlights the potential progression between September and December. However, this clearly depends on the weather in this period, with the recent dry conditions reducing this value. This average also masks some variation between crops due to factors such as soil type, canopy health and canopy vigour. Last season BBRO measured the range as between +21% and +45% on a sandy clay loam site and between +22% and 36% on a light sandy loam site.

## Harvesting

- Scalping- this is proving very difficult, expect a mixed bag of excessive green and over scalped crowns in the sample. Not only are harvesters confronted varying sizes of beet but a variation in crown height, due to dry hard conditions and the beet growing out of the ground.



*Photo : Be aware of variable crown height*

- Scalping is also contributing to surface losses, with some protruding roots being knocked over by the scalping knives. Keeping scalping knives as high and sharp as possible will help to reduce this effect.



*Photo: Beet caught by scalper and dislodged before lifting*

- Surface Losses were predicted to be the area of concern going into this campaign, but whilst they are making up a large percentage of the total loss compared to last year, levels are still low. Dry soil conditions are allowing operators to close-up gates to keep small beet in the machine with minimal clod or soil tare to deal with.

- Root shape was an early concern, but dry conditions have led to some very uniform crops although perhaps slightly elongated. The typical root shape, combined with the dry conditions is leading to some very low soil tare off the harvester. Minimal cleaning with low turbine speeds and bar gates is more than enough to keep soil tare low and beet quality high. Harvesters should be making the most of the dry weather, utilising bar gates or plates to keep damage to a minimum, as reducing turbine speeds can be challenging where small beet are present.



*Photo: Use of bar gates/plates to minimise damage and losses.*

- Root breakage appears to be under control with the only major threat coming from the dry soil conditions and the tap root being left behind. When planning a lift, be sure to evaluate surface conditions for compaction, and check when harvesting begins to ensure that taps root are being lifted fully.



*Photo: Assessing soil surface compaction is critical for evaluating harvest process.*



*Photo 1 - Check beet rows behind the harvester for remaining tap root & adjust share depth where possible*



## **BBRO Plant Clinic**

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 <https://bbro.co.uk/research/plant-clinic/>

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](mailto:plantclinic@bbro.co.uk)



## EVENTS

### Demonstration Farm Network

The autumn programme includes sessions on:

- Harvesting and storage
- Seed varieties
- Crop nutrition
- Fungicides & insecticides

Invitations will be issued to local growers but please feel free to book a place <https://bbro.co.uk/events/>

16<sup>th</sup> Oct. – Rougham 8:30 – 11:00

30<sup>th</sup> Oct. – Morley 8:30 - 11

16<sup>th</sup> Nov. – Newborough 8:30 - 11

### Winter Technical Events (bookings via <https://bbro.co.uk/events/> )

5th February – Newmarket Racecourse

7th February – Belton Woods

Both dates offer an optional Cercospora workshop in the afternoon (booking essential).

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

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## BASIS POINTS

Two BASIS points in total (not per bulletin) have been allocated for the period between 01/06/18 and 31/05/19 reference CP/67099/1819/g. To claim these points please email [michele@basis-reg.co.uk](mailto:michele@basis-reg.co.uk)

Two NRoSO points in total (not per bulletin) have been allocated between 01/06/2018 and 31/05/2019 reference NO465447f. To claim these points please email [NRoSOCPD@cityandguilds.com](mailto:NRoSOCPD@cityandguilds.com)