



Issued: 4th October 2022



IN BRIEF

- Mild conditions continue to encourage further canopy recovery and root yield increase, but previous beet moth damage is limiting growth in some crops. Further indications of root rots are being reported. Foliar diseases such as rust continue to increase. Cercospora is also present in crops but ongoing BBRO cercospora risk monitoring indicates that the temperatures are below optimum for significant cercospora development.
- As harvesting 'picks up pace' it is vital to monitor the incidence and development of root rots. This may be due to primary fungal infection such as fusarium and/or rhizoctonia or bacterial infection. Further infections can occur following physical damage to roots e.g., cracking due to drought. Some cases of violet root rot have also been reported. Crops which have been affected by beet moth feeding damage in the crown, and/or have drought stress cracking and secondary growth will be more susceptible to further infection by root rots. Some crops may have symptoms of rotting at the point of harvest, but many may develop symptoms a few days post harvesting. Keep monitoring crops in the first days after harvesting and ensure high risk crops are delivered as soon as possible.
- Harvesting conditions are generally good with many canopies remaining upright and with good soil moisture for share depth. Check for surface losses of roots when conditions change or when moving between fields, soil types and varieties. Crown height is more variable this season, so it is important to monitor crowning losses. In general, avoid over-crowning of large roots at the expense of leaving more top on smaller roots. Avoid root breakage and damage as this will accelerate sugar loss, especially whilst temperatures remain mild. Avoid pushing up beet and levelling at the heap. Ensure that any clamps that are likely to be left for more than a few days prior to delivery are not too high and have low soil tare to ensure good airflow.
- Please listen to the latest [BBRO Beet Cast](#) for more detailed information and advice on beet moth, foliar diseases and harvesting.



Beet moth

BBRO continues to gather information on beet moth incidence and severity. This is a relatively new sugar beet pest in the UK commercial crop, and we have very little previous experience of such widespread infection. Symptoms vary between crops and region, but generally appears to be more severe in the Bury factory area, and especially where crops suffered relatively more drought stress. The ability of crops to recover depends on the level of previous stress and of course, continuing moth and caterpillar activity. The photos below show the range of leaf recovery from poor to better (left to right).



Fig 1: Severe crown damage with no re-growth (left) to various stages of re-growth (some atypical) following earlier caterpillar damage.

Where beet moth has been found in crops, and especially where populations have been large, consideration to managing the crowns and leaf trash is required to reduce risk in subsequent seasons. The beet moth may survive overwinter both in the larval and pupal stages. Ploughing-in of crop residues will reduce numbers. Additionally, avoid returning spoil from cleaning and loading (especially from infected areas) back on to future sugar beet fields. Soil under Maus clamps may have a higher pest burden and should ideally be ploughed.

Foliar disease

It is vital to keep checking crops for foliar disease and to ensure fungicide programmes are up-to-date and in line with disease development. Don't let the interval between applications become too long (more than 21 days) especially where foliar disease is active. Remember that any new growth will need protecting against disease, especially where later harvest dates are planned. Some secondary

infection with diseases such as Phoma and Alternaria have been seen at the BBRO Plant Clinic. In many cases this is associated with leaves that have been drought stressed and/or with leaf senescence, virus infection and in some cases infection with other foliar diseases.

The photo below shows some cercospora infection on the leaf on the left and some secondary infection (possibly phoma) following dried-up rust infection on the leaf on the right. Both leaves are from the same plant, showing that more than one infection can be at play.



Fig 2: Cercospora (left), rust and possible early Phoma (right)

Depending on the levels of active foliar disease and where the anticipated harvest date is post December, a T3 application may be warranted. The weather forecast for the remainder of October indicates a relatively mild period, so this is a factor to consider.



EVENTS

17th - 19th January 2023
(3 full days)

British Beet
BBRO
Research Organisation



ADVANCED SUGAR BEET COURSE

Improve your knowledge of sugar beet production and management.

Course themes:

- Crop physiology and agronomy
- Varieties and plant breeding
- Crop protection
- Soil management
- Harvesting and storage

Learn how to mitigate the evolving world of sugar beet management and put the latest technical knowledge into practice to improve sugar beet agronomy.



For an application form and full details please contact: Sara.long@bbro.co.uk



Limited places
£550 pp (inclusive of meals/accommodation) **HOLKHAM**
BASIS points available



BBRO BeetTech23 dates confirmed (details to follow):

7th February – Newark Showground

9th February – Newmarket Racecourse



CONTACTS

British Beet Research Organisation, Centrum, Norwich Research Park, Colney Lane,
Norwich, NR4 7G

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

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

Stephen Aldis stephen.aldis@bbro.co.uk 07867 141705

General Enquiries info@bbro.co.uk



BASIS POINTS

Two BASIS points in total (not per bulletin) have been allocated for the period between 01/06/22 and 31/05/23 reference **CP/120094/2223/g**. To claim these points please email cpd@basis-reg.co.uk

Two NRoSO points in total (not per bulletin) have been allocated between 01/06/2022 and 31/05/2023 **NO471260f** reference. To claim these points please email NRoSOC PD@cityandguilds.com