



16th January 2025



#### IN BRIEF

Have you taken part in the BBRO Growers survey? We would love to hear what you think about the service you receive from us. If you can spare a few minutes, please take part <a href="https://www.surveymonkey.com/r/NM9W558">https://www.surveymonkey.com/r/NM9W558</a>

- First hard frosts seen across most of the growing region. Urgent attention is required as sudden warmer temperatures have accelerated deterioration of crops affected. Growers urged to check all crops as levels of damage vary considerably from field to field
- Now is the time to be planning your early herbicide use. Think about the issues
  faced in each field in 2024 and watch our helpful video of the BBRO Herbicide trials,
  delivered by Pam Chambers, British Sugar
- BBRO BeetCast BeetCast January: Concentrating on the detail for 2025 | RSS.com



#### **ADVISORY**

#### **Frost impact**

Most growers experienced quite sharp frosts over the weekend, whilst the initial damage may have been minor, the following sudden rise in temperature could accelerate the rate of deterioration. It is therefore important to check your crops in the next couple of days as the extent of damage may not have been obvious at the start of the week.

#### Beet in field

- Check every field. Don't assume they have reacted to the cold weather in the same way.
- Dig and slice roots across the whole field, concentrating in low lying areas and where the sun has not come into contact with beet i.e. under hedgerow and treelines.
- Frost damaged roots once lifted should not put into long term storage, make sure your haulier can deliver before you lift any damage roots.
- Keep checking fields and clamps for any further deterioration, particularly in fluctuating temperatures

- Where high levels of damage are found lowering the scalpers during harvesting to remove frost damaged crowns
- Harvest with care to reduce further damage
- Keep time between lifting and delivery to a minimum.

For further support view our video: Managing the impact of frost

With periods of unseasonally warm weather and constant fluctuations in temperature, it is also important to closely manage unaffected crops by keeping the time beet is clamped prior to delivery to a minimum. This will help to preserve sugar levels and reduce rot roots.

Minimising root breakage when harvesting is key to avoiding accelerated sugar losses. The average sugar beet clamp loss rates are usually at 0.1% of total sugar volume/day but in poorly harvested and handled crops sugar loss can be 3-4 times greater. Losses will be even greater where temperatures are above 10°C. Some clamps have been pushed excessively high over recent weeks, leading to severe root rotting, figure 1 (right).

Make sure there is someone regularly checking on the condition of beet at the clamp.

Follow these guidelines to minimise sugar losses:

- When planning a Maus clamp, calculate the estimated tonnage and length, to avoid overspill into unsuitable areas
- Choose a firm, well-drained site which will be suitable for loading and unloading
- Clamps should be built in an open area to aid ventilation and cooling
- Never push beet up the face of the clamp. This
  will damage beet, compact the clamp and restrict
  air movement, allowing heat to build-up and
  increase rate of sugar loss.





Figure 2: Damaged beet will deteriorate quickly in clamp

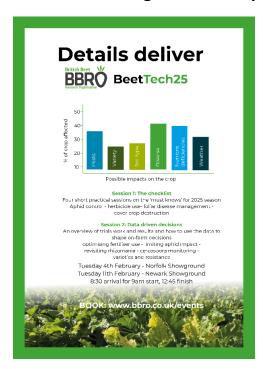
See our handy <u>Harvester assessment guide</u> for our 3-step guide to assessing harvesting losses to help maximise yields and returns.

#### Water-logged crops

Unfortunately, another weather impact is a number of water-logged crops. Sugar beet, like many crops has an ability to withstand water logging for a short period of time. The amount of time that the crop is underwater is key as this will affect the extent of anaerobic conditions the roots are exposed to. After this time there is an increased risk of 'hypoxia' in plants leading to cell death. There is no precise critical period that roots remain unaffected as temperature, soil sediment levels and soil structure (soil aeration) will have an influence, but the crop should be able to tolerate 5-7 days underwater.



### Diary dates: Click on images to book a place





## CONTACTS

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

Prof Mark Stevens <u>mark.stevens@bbro.co.uk</u> 07712 822194 Francesca Broom Francesca.broom@bbro.co.uk 07710 285689

Stephen Aldis <a href="mailto:stephen.aldis@bbro.co.uk">stephen.aldis@bbro.co.uk</a> 07867 141705

General Enquiries info@bbro.co.uk

# **Ö** BASIS POINTS

Two BASIS points in total (not per bulletin) have been allocated for the period between 01/06/2024 – 31/05/2025 - CP/138145/2425/g. To claim these points please email <a href="mailto:cpd@basis-reg.co.uk">cpd@basis-reg.co.uk</a>
Two NRoSO points in total (not per bulletin) have been allocated from 1st September 2023 to 31st August 2024 - NO500860f and NO503154f from 1st September 2024 – 31st May 2025. To claim these points please email nroso@basis-reg.co.uk.