



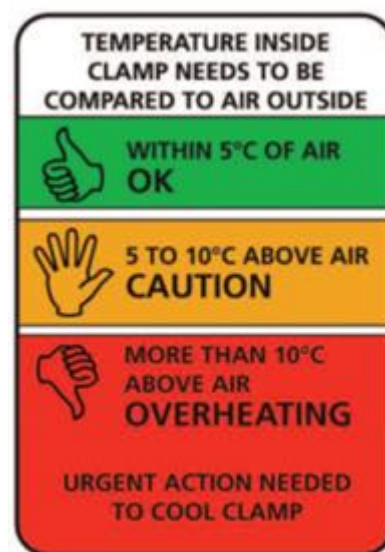
BBRO Advisory Bulletin No.14 - Week Ending 24th November 2017

- **Beet is now being stored for longer periods, make sure you minimise root damage on crops destined for longer periods of storage and construct your clamps correctly to minimise sugar loss, especially as the mild temperature persists.**
- **Root rots continue to be found in crops and warm temperatures increase the risk of further infection. Check crops carefully and prioritise any crops with symptoms for immediate delivery to the factory.**
- **Harvesting tests show that surface losses remain generally low, although root damage levels are increasing.**
- **Drill operator training – 30th January (Bexwell, Downham Market) and 31st January (Riseholme College, Lincs).**

Preparing for storage

Average losses in clamp are circa 0.1% of the total sugar volume per day. BBRO trials have shown that following best practice this can be reduced to <0.05%. Good ventilation and air movement is vital to ensure temperatures are maintained as low as possible and no temperature 'hotspots' develop. This is particularly important this campaign as ambient temperatures remain relatively warm.

- Clamps should be built in an open area to aid ventilation and cooling.
- Choose a firm, well-drained site which will be suitable for loading and unloading.



- Avoid pushing beet up the face of the clamp. This will damage beet, compact the clamp and in turn restrict air movement, allowing heat to build up and increase the rate of sugar loss.
- Minimise the level of damage to beet being loaded into long-term clamps. The wound healing process will result in an increase in temperature as well as reducing sugar content.
- Minimise the drop height when loading clamps. Bruising damage has been shown to reduce sugar content. Aim to keep all drops to less than two metres.
- Avoid root rots (see below) and too much green top, and excessive soil when loading in clamps and piles that are likely to be left for more than two weeks before delivery.



Clamp Construction

Short term clamp



Early in the season beet should be in a clamp for no more than a few days, and certainly less than two weeks. These clamps should not be covered or have retaining walls.

Short-term clamps are designed to give maximum surface area and therefore cooling to reduce sugar loss through respiration.

Clamps should be made up of individual loads and be no more than 2m high.

Late season clamp



Late season long-term clamps should be no more than 2.5m high with a level surface so there are no frost pockets.

Clamps should be built using straw retaining walls. Bales should be placed on pallets with the open end facing outward to aid ventilation.

Only use clamp sheets if the ground temperature is forecast to be below -3c.

Clamp sheets are made of polyfelt which not only offer protection but also allow the beet to breath.

A-shaped clamp - for self-propelled cleaner-loaders



Where a self-propelled cleaner-loader is used, clamps should be built in an 'A' shape of the correct width to allow the machine to operate effectively. The beet must be placed on a flat un-rutted surface.

Clamps are normally built on the headland but consideration needs to be given for machinery to access the clamp easily.

A-shaped clamps are best built with a harvester rather than a trailer to avoid rutting in the clamp base.

BBRO Harvest Testing Update

- The average losses for November have risen to circa 4t/ha compared to the October average of 3.4t/ha.
- Rain over the past few weeks hasn't softened the soil to depth with some land still very tight resulting in tap root breakage.
- There are differences being seen in the brittleness and levels of root breakage between different varieties. It is worth carefully checking damage levels between varieties within fields as harvester settings may need to be adjusted. Make sure the harvest operator is aware that there are different varieties in the field and this may need checking. The difference in the canopies of different varieties are quite visible in many instances (see below).



- Additional pressure on harvester cleaning systems is coming from the large amounts of green top being lifted. When mulched these are introducing high levels of moisture and material into the harvester which can make cleaning more difficult and aggressive, resulting in higher damage levels. It is worthwhile monitoring this and discussing topping options with the harvester operator and the option of discharging the tops for the benefit of less root breakage and damage.

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Drill operator training

Drilling for better establishment and improved crop performance.

A successful sugar beet harvest begins with the preparation of the seed bed and ensuring optimum performance of both drill and operator. Good crop establishment helps to produce healthy uniform plants, improving yield and profitability. Join the BBRO on either Tuesday 30th January (Bexwell, Downham Market) or Wednesday 31st January (Riseholme, Lincs) 8:30 – 13:30, to hear more on:

- Practical soil management.
- Cultivation techniques for the perfect seed bed.
- Pelleting and seeds.
- Drill maintenance for optimum performance.

Places are limited so please book via our website www.bbro.co.uk/events or call 01603 672169.

Event will be supported by Germain's Seed Technology, Kverneland, Monosem, and Vaderstad.



Winter Technical Meetings

Tuesday 6th February 2018 - Dunston Hall, Norwich, Norfolk

Thursday 8th February 2018 - Belton Woods, Grantham, Lincolnshire

Caution: this information is based on results of experiments and experience but cannot constitute a recommendation.

BBRO Office

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BASIS Points

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