



Issued: 14th October 2020



IN BRIEF

- Whilst virus levels remain relatively stabilised and infected leaves continue to senesce, there has been some canopy re-growth in crops, especially those affected by earlier drought.
- Any re-growth will help increase yields in later harvested crops but leave a few weeks between the start of re-growth and harvesting to maximise sugar return in the plant. However, heavily diseased/virus-infected canopies will have little, if any, future yield potential.
- Cercospora infection has also resulted in loss of leaf cover but cooler temperatures are now slowing further progression.
- With harvesting underway, continue to assess crops individually and prioritise for harvesting order according to virus and diseases infection levels. This may need to change during campaign. Where harvest plans change, make sure you observe fungicide harvest intervals.
- We are now seeing some root rots such violet root rot, fusarium & rhizoctonia. Check for these and if found, prioritise these crops for early lifting as disease is likely to be progressive.
- Sugar levels are variable this season and below average, so it is important to work with your harvest operator to assess and minimise root damage and breakage to avoid accelerating sugar loss. Aim to deliver crops as soon as possible after harvesting.
- As campaign progresses, continue to practice good crop hygiene. Make sure beet heaps are cleared away completely and any leaf growth on spoil heaps controlled. This is essential to remove potential sources of aphids and virus. Suction trap data in late-Sept showed that aphids were active and we are now finding wingless green aphids on BBRO autumn sown beet for aphicide trials in Norfolk.



ADVISORY

Canopy health

- Canopies are showing the impact of the challenging season with a combination of the effects of drought, virus, and disease. Canopies of different crops will senesce and 'open up' at different rates as autumn proceeds so keep checking crops to prioritise your harvest schedule. Selecting those healthier green canopies will help to ensure you maximise autumn growth, root yields and sugar content.

- Most crops have received two fungicides, but you need watch crops destined for later harvesting carefully to assess the need for a third fungicide (although it is getting quite late for this). Of course, this does depend on when you started your fungicide programme. Do not let the interval between applications become too large, allowing diseases to become active again. Check crops with new canopy re-growth destined for later harvesting to decide on the need for any further protection. BBRO trials have shown that a third spray can help improve and sustain sugar levels, if not root weight, especially for beet destined for lifting after Christmas.
- Many crops have recently recovered from the early dry conditions and the canopy is re-growing, this may lead to a depression in sugar levels until the new canopy is able to replenish sugar in the root. Avoid harvesting these crops too soon, leaving for a few weeks after the regrowth has occurred. This period will be determined by temperature and sunshine with warm and sunny conditions allowing more photosynthesis and more rapid sugar production.

Harvesting 'watch-outs'

1. Whilst temperatures are dropping it is important to keep storage time and associated sugar losses to a minimum making the most of just in time delivery, keep Harvesters & Hauliers informed.
2. After a dry spring, many crops had variable emergence, this will lead to uneven root size and crown height making consistent crowning difficult. Always remember cleaner-loaders will also remove top allowing the harvester to leave more, preventing over-crowning.



3. Variable emergence can also lead to difficulties lifting small roots, ensure you check for both surface and subsurface losses to make sure maximum yield recovery.

Follow our 3-step guide to assessing harvesting, monitoring losses in order to see if further gains can be made.

Guide can be downloaded

<https://bbro.co.uk/publications/harvesting-assessment-guide>

If you have registered for BBROplus via the main BBRO website (available to all growers and UK sugar beet advisors) then you can also access our Harvest Loss calculator.

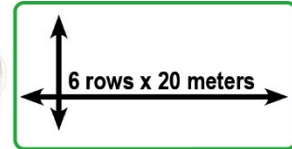
By entering your row spacing, yield (or estimated yield) and approx. crown, surface and root breakage losses you will be assess how much yield is being lost overall.

Register here: www.plus.bbro.co.uk

3 Step Guide to Assessing Harvesting MONITOR LOSSES TO FIND YOUR GAINS

1. SURFACE LOSSES

Collect whole beet left on surface from set area.



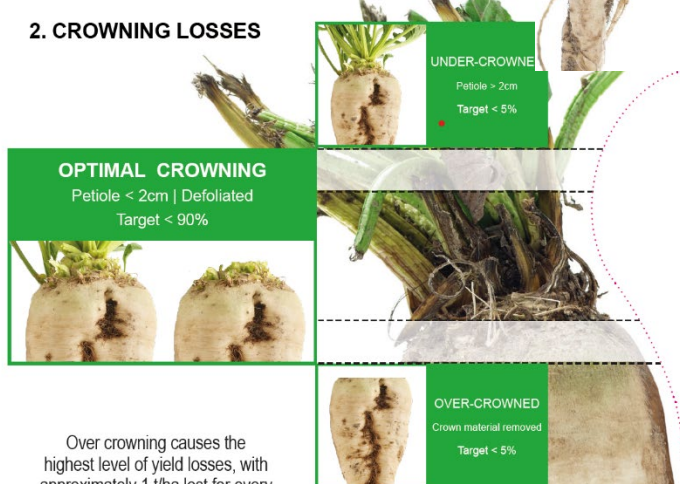
6 kg of root equates to 1 t/ha of lost yield



Surface loss (kg)	Yield loss (t/ha)
6	1
9	1.5
12	2
15	2.5

WWW.BBRO.co.uk/on-farm

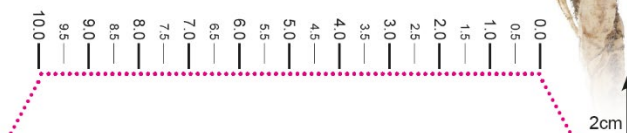
2. CROWNING LOSSES



Over crowning causes the highest level of yield losses, with approximately 1 t/ha lost for every 5% of beet over-crowned. For more details and latest test results visit: www.bbro.co.uk/on-farm

3. ROOT BREAKAGE

Measure the diameter of root damage in at least 20 representative roots, ideally 100 roots per sample		
Root breakage diameter (cm)	For every 10% of roots in each sample	Yield loss t/ha
2-4	10%	0.5
4-6	10%	1.0
6-8	10%	2.0
8-10	10%	3.0



Crop Hygiene

We have just launched a BB#5 campaign. By following these basic guidelines, we hope to help reduce sources of aphids, virus and other diseases such as cercospora leaf spot ahead of your next sugar beet crop. Brief your teams on the importance of this, as remaining vigilant to potential sources and dealing with them swiftly will be key. If you want more information regarding 'green-bridging' and what to look out for, visit <https://bbro.co.uk/our-news-opinions/our-opinions/>

Brilliant Basic 5: Don't keep the **virus** alive



<https://bbro.co.uk/on-farm/brilliant-basics/>

Farm hygiene is crucial in reducing sources of virus over the winter period and protecting your next beet crop. Virus Yellows can survive winter in aphids, infected beet material and other host plant species.

- 🌱 **minimise harvester losses** to reduce potential sources of regrowth
- 🌱 **monitor spoil heaps** and destroy any growth
- 🌱 **revisit fields regularly** and **eliminate groundkeepers**
- 🌱 **stop aphids green-bridging** the virus by destroying winter cover crops at least 5 weeks before you drill
- 🌱 **control crop volunteers and virus-hosting weeds** with well-timed herbicides and cultivations



Know your **virus** hosts

#DontKeepVirusYellowsAlive

Infected sugar beet,
either groundkeepers or leaf material sprouting from clamps, is a major source of virus

Fodder and AD beet

are equally susceptible to Virus Yellows, therefore all beet species should be harvested ahead of drilling the next crop. Where this is not under your control, use your powers of persuasion or pass on this message!

Aphid hosts:

Myzus persicae has a large range of host plants. These include: brassicas, potatoes, legumes, lettuce and sugar beet

Weed hosts

BYV		BMYV	
Common chickweed		Common chickweed	
Common poppy		Common poppy	
Corn spurry		Corn spurry	
Red dead-nettle		Red dead-nettle	
Common purslane		Scarlet pimpernel	
Common orache		Corn marigold	
Garden orache		Groundsel	
		Shepherd's purse	
		Field pansy	

Varieties for 2021

- If you are still to select your varieties for next season remember that you can access a video run-through of the 2021 RL using the BBRO Variety Demonstration strips at Park farm Thorney. Use the link below:

<https://youtu.be/Aw9Bj0fz9Uw>



EVENTS



BBRO Box trials
Self-guided tours available
2nd - 5th November
Bridgham NR16 2SA



Limited spaces
available to view
Virus Yellows &
BCN screening trials

NRoSO & BASIS points



Max. of 6 visitors per session
Booking essential: www.bbro.co.uk/events
#DontKeepVirusYellowsAlive



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BASIS POINTS

Two BASIS points in total (not per bulletin) have been allocated for the period between 01/06/20 and 31/05/21 reference **CP/100686/2021/g**. To claim these points please email michele@basis-reg.co.uk

Two NRoSO points in total (not per bulletin) have been allocated between 01/06/2020 and 31/05/2021 reference **NO468433f**. To claim these points please email NRoSOCPD@cityandguilds.com