

BBRO Advisory Bulletin No.12 - Week Ending 20th October 2017

- **Recent unseasonably mild weather has ensured further crop growth potential but will continue to favour foliar disease build-up.**
- **Rust and cercospora continue to develop in crops.**
- **Root rots are becoming evident.**
- **Root breakage levels increase in BBRO Harvester tests.**

Recent unseasonably mild weather has ensured further crop growth potential although the drying soils conditions are beginning to limit growth, especially on lighter soils. Differences in the growth potential of crops will be determined by the health of their canopies and the warm conditions will continue to favour foliar disease build-up. All fungicide inputs should now have been applied.



Cercospora clearly visible on leaf.

We continue to receive reports of varietal differences and their reaction to rust and cercospora. It is clear from further samples and BBRO inspections that stemphylium is more widespread than previously seen, as it has now been found across four counties. We are also observing petiole infections of rust and cercospora too, which can lead to accelerated leaf loss. There is a range of disease responses in BBRO trials and this year, more than ever, fungicide timing has been critical, to maximise disease control.

Root rots are also evident and further samples have been confirmed in the BBRO plant clinic, either violet root rot, rhizoctonia or fusarium. Watch out for yellow patches developing in crops where the leaves are not brittle and then dig several roots for inspection. Please consult with your area manager if you are concerned about rotten roots as infected roots will not store and the crop may deteriorate further.

There are some very visible differences between canopy vigour and greenness at this stage of the season. This may be between varieties in the same field or just due to field variability. Be aware that differences between varieties will be in part due to their genetics and may not reflect yield potential.



Varietal differences in canopy colour.

As a guide to optimising the further yield potential, use the following criteria to select crops:

1. Lower level of foliage disease.
2. Uniform plant populations.
3. Less senescence (yellowing) of the lower leaves of plants.

The photos on the right show two different varieties on one of our BBRO Demonstration Farms exhibiting different levels of lower leaf senescence.



The BBRO Harvester Testing Programme Report



Root breakages have increased over the last two weeks. This is particularly the case with large beet producing high impact forces resulting in large diameter breakages. In dry conditions, try to avoid 'snatching' the beet from the ground by driving slightly slower with the shares set a bit deeper. Slow down cleaning rollers and keep turbine speeds as low as possible to achieve cleaning and then keep all drop heights to an absolute minimum, especially into the trailer. Remember to load 'beet on beet'.

Surface losses are low with some very small beet in the sample escaping but as the results show the cumulative weight of these lost roots is very small when compared to the breakages.

Varied crop size due to poor establishment is making crowning difficult, the majority of tests still suggests that growers could leave more top on, especially where beet aren't being delivered immediately.

	Root breakage (t/ha)	Surface loss (t/ha)
Average	3.08	0.07
Range	1.19 – 7.94	0.07 – 0.14

We have also seen some significant damage from additional handling through pushing up at the heap. Whilst this damage is not counted in the root-tip breakage assessment this will in result in physical yield loss and also sugar content.

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

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