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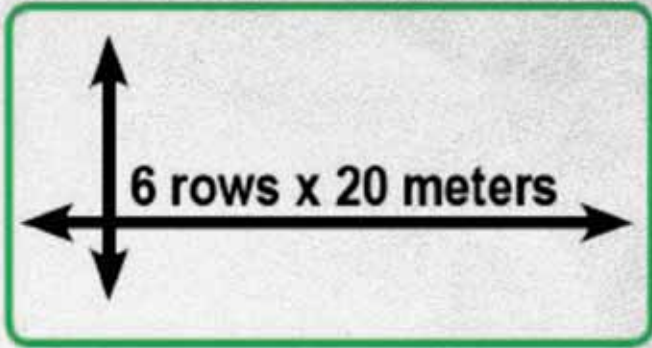
# Three harvesting ‘watch-outs’ and a clamping plea!

As I write this on the hottest day of the year it is hard to imagine we won't have a dry hard start to the campaign, although there is always plenty of time for conditions to change and predictions made now could be woefully wrong. However, certain aspects of the crop conditions can be anticipated with crop establishment playing a big part in what harvesters are faced with.

- 1. Variable crown height** - can already be seen in a selection of crops which can lead to two potential losses. Trying to scalp consistently with such varying crown height is especially difficult, the focus should be on root retention of the larger taller roots meaning smaller, lower lying roots may still have top attached. The other concern regarding scalpers is that with so much root protruding from the ground they can knock them over, especially if ground conditions soften. Knocked over roots will disrupt flow through the shears leading to increased surface losses.
- 2. Hard lifting** - Early season conditions can present a challenge for harvesters often creating its own unique area of loss. Tap root breakage is regularly attributed to turbine or transfer damage however with tap roots anchored tight in hard soil it can lead to them never being lifted all. A quick and easy check is to scrape the loose soil from the shear trench exposing the root break. In this instance it is important to discuss shear depth or speed which can be adjusted to limit this impact.



**Fig.1.** Root breakage clearly visible in the bottom of trench



6 x 1 kg  
root = 1t/ha

**3. Split emergence** – With a dry spring many crops had split emergence and the difference in growth stage can often carry through all the way to harvest. When faced with variable root size it is normally the small roots that can be lost whilst the large ones can be damaged, therefore be as gentle as possible to protect large roots and keep a close eye on surface losses as small roots can add up to tonnes per hectare.

### Clamping

Whilst we associate harvesting losses with the harvester, we must maintain the same diligence throughout the delivery process as any gains in the field can easily be lost at the clamp. Whilst changes in clamping systems can require large capital investment there are some easy early season wins that are more cost effective.

With warmer air temperatures it is important to keep the beet cool, keeping roots intact and maximising clamp surface area is the easiest way to do this. This is obviously contrary to the impact of 'pushing up' beet heaps which should be avoided if possible.

**Fig.2.** Beet being 'pushed up' which can cause root damage

