



Drilling

Key Points:

- ▶ Soil temperature and moisture levels are key to determining when to drill
- ▶ Drilling should commence as soon as soil conditions allow for effective cultivations, without detrimental effect to soil structure
- ▶ Your cultivation strategy should allow for the completion of drilling by the end of March (should conditions allow)
- ▶ Drilling after mid-April could lead to yield losses of over 4 adjusted t/ha per week on average. However, crops drilled slightly later into good seedbeds, as opposed to earlier into poor seedbeds, often emerge and establish quicker. Don't drill by date alone

Establishing a uniform population of 100,000 established plants per hectare is arguably the single most important factor that drives high yields in sugar beet crops.

Hitting this 'target' requires a combination of a good seed bed and accurate drilling of seed into the seedbed.

Seed spacing

Ideal spacing is 15 to 18cm for 50cm row and 17 to 20cm for 45cm rows. Aim for a minimum of 1.25 units/ha; use a higher seed rate in poor seed bed conditions (see charts on page 37).

Seed spacing should be checked regularly whilst drilling, adjusting if necessary. Poor seed spacing will be obvious at early stage of establishment, so remember to go back and check you got it right

Plan to drill different varieties as distinct blocks rather than mixing varieties across drill units. This will allow you to monitor and manage different varieties appropriately. This may be important for the application of herbicides and fungicides as well as harvesting

Drilling depth

Before drilling starts, set all units to the same depth. Seed should be placed into moist soil, ideally drilled between 2cm and 3cm depth. Check drilling depth regularly as it will vary within fields as well as between each field

Drilling depth should be increased in dry conditions to ensure seed is placed into moist soil

Ensure that all seed is well covered to help avoid mouse damage

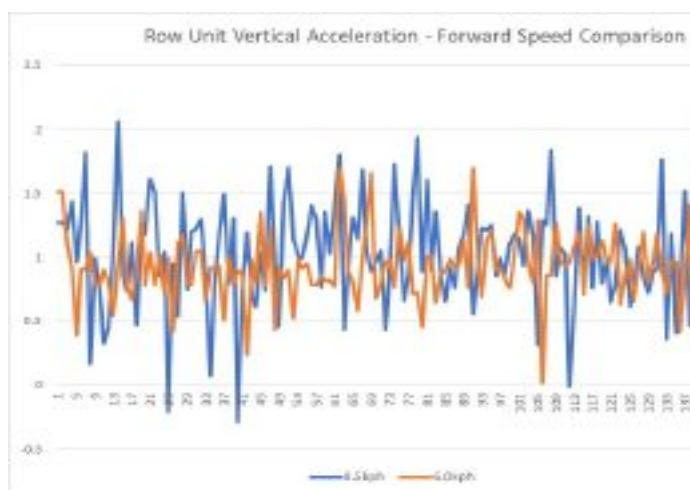
Further Reference:

BBRO Drilling maintenance and seed bed preparation guide is available via the BBRO website

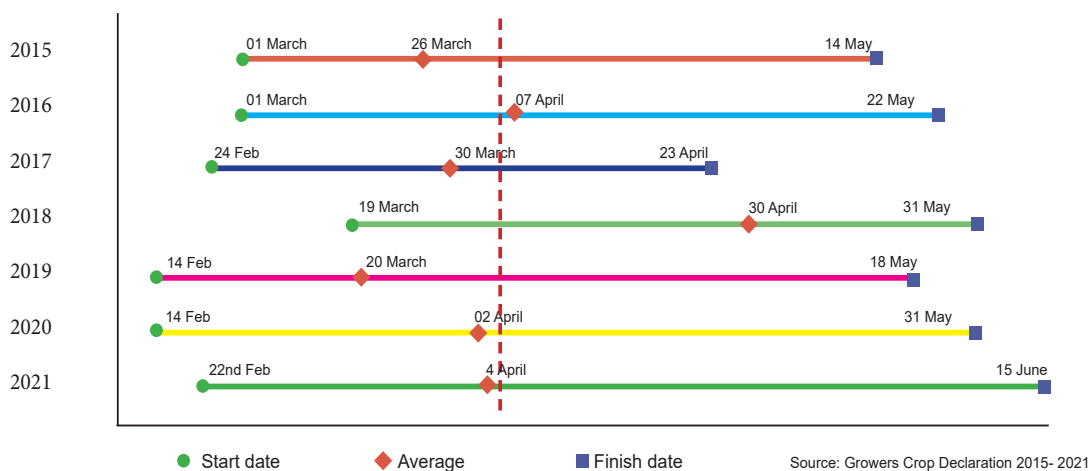


Drilling speed

Optimum drilling speed is between 5 and 8kph (3 to 5mph). The following graph highlights the impact of forward speed on row unit performance. To ensure optimum placement it is vital to travel at a suitable forward speed relative to seed bed conditions and cell wheel or seed disc fitted.



Current Crop Situation: Record of drilling dates, 2015-21



Land should be prepared in advance of drilling, ensuring a level seedbed and good soil structure. A poor uneven seedbed can lead to yield loss through reduced establishment and increased harvester losses.

Pay particular attention to soil temperature. Seed germination will start where soil temperatures are above 3°C but will be slow below 5°C. Germination can be adversely affected if heavy rainfall occurs within 48 hours of drilling.