



Issued: 18th March 2021



IN BRIEF

- Weather forecasts indicate that a high-pressure system is likely to dictate weather in second half of March, allowing soils to dry and warm further. This should provide a good opportunity to make progress with cultivations and drilling when your seed is delivered onto farm. Seed deliveries have been running throughout March and will be completed by early April. Some crops have already been drilled on some lighter and free-draining land.
- Monitoring soil temperature is important when planning to drill sugar beet seed, as planting into a warming seedbed will help to optimise field emergence and promote strong establishment. Remember seed germination will only start where soil temperatures are above 3°C but will be slow up to 5°C. Monitoring of soil temperatures is showing that many soils are now consistently above 5°C.
- The legacy of the wet winter will mean some fields and areas within field will be slow to dry out. Attempting heavy remedial action when soils are still wet at depth will not achieve ideal results, so a compromise may have to be made, keeping to shallower cultivations.
- There has been reasonable frost-action on soils over winter and this will help in producing final seedbeds. Aim for a level, friable seed bed down to 5cm, whilst retaining moisture for germination. Retaining moisture in the seedbed is key to optimising emergence and established plant populations.
- Set up the drill to place seed in a moist layer of soil. Soil type and depth of cultivation will determine drilling depth to some extent but target seed at 2-3cm. In drier conditions, it is possible to drill at increased depth, up to 4-5cm.
- Plan to drill different varieties where they may provide a tactical advantage. This may include selecting varieties for fields which may be harvested later in campaign. Use the variety foliage disease rating as a guide (see comments below). Make sure you mark-up different varieties as you drill them as this will help with monitoring any different growth stages for herbicide application as well as for any different reactions to pests and diseases later in the season.
- BBRO has been out on farm monitoring a range of potential host crops, weeds and spoil heaps and beet clamps for aphids. There have been very few aphids found to date and this is in-line with the virus yellows forecast. BBRO will continue to monitor the situation and report results in subsequent Advisory Bulletins.



Consider your cultivations.

It has been a wet winter, and although soils are drying out, the likelihood of achieving an optimal seed bed will depend on soil type and whether your beet crop is following cereals or vegetables.

Decisions will need to be taken on whether to try to relieve some damage and compaction now, or to try to achieve a reasonable but not perfect seed bed to get the crop drilled and away.

Attempting heavy remedial operations when soils are still wet at depth will not achieve ideal results, so compromises may be needed.

The past few years of wet winters followed by very dry springs have demonstrated that getting the crop drilled in good time, is more desirable than achieving perfect soil conditions. So, aim to achieve a level, friable seed bed down to 3 or 5 cm, while retaining moisture to aid germination.

Set your drill up for success.

The aim at drilling should be to achieve even crop emergence to deliver target plant populations of 100,000 plants per hectare drilled. Growth stage consistency across the crop will help with virus yellows management and weed control timings.

Setting the drill up to place the seed in moist layer of soil is key. The depth to target will depend on the cultivations that have been carried out, and the soil type, but will be within a range of two to three centimetres. In drier conditions it is possible to drill at increased depth, up to five centimetres, but with this comes increased risk of uneven or poor emergence.

The depth setting on the coulter and the pressure applied by each unit, are both important in ensuring that seed is placed at the right depth. Soil conditions will vary within fields and between fields, so check behind the drill regularly to ensure the seed is being placed correctly and adjust settings accordingly.

Spacing is similarly important, and row widths must be matched to the harvester. For 50 cm row widths, aim for 15 to 18 cm between plants, and for 45 cm rows, aim for 17 to 20 cm. Check your five-year average on plant populations, and aim for an average of 1.2 units/ha within a range of 1.1 to 1.35 units/ha. Higher seed rates may be desirable in poor seedbed conditions.

If you have an electric drive drill, variable seed rates can help to ensure optimal establishment across varying soil types. Whilst there is no definitive trial data on this, one approach is to aim to increase the seed rate in areas where seedbeds are poor and possibly lower the seed rate where seedbeds are better, maintaining the same overall average seed rate.

Any issues with poor seed spacing will be obvious during early stages of establishment, so check early drilled fields, and make any adjustments necessary to before drilling later ones.

Optimise establishment.

Sub-optimal seed bed preparation may result in large clods which will impede even germination and affect good crop establishment.

Rolling after drilling can be a benefit, to aid soil to seed contact, but it can also have negative outcomes. If you have achieved a good friable soil to drill into within the row, utilising clod pushers or row cleaners, rolling after drilling can push larger clods into that microclimate, impeding germination, and establishment even if it looks better visually. The decision to roll should be considered when setting up a drill, especially the use of clod pushers or row cleaners.

Think 'variety'

Hopefully, only varieties with a low risk of bolting were drilled in the first half of March. The risk of bolting is now very much reduced as temperatures increase although it is sensible to drill any remaining low risk varieties as a priority over others. Consult the Recommended List to check the data for early sown and normal sown bolters, and which varieties are suitable for drilling before 15th March.

If you are considering which fields you may be leaving for later harvesting in the 2021/22 campaign, using the foliar disease ratings on the RL list will help to select varieties which will potentially retaining healthier canopies for longer.

As broad guide and using the RL (2021) 3-year percentage leaf infection values across three diseases (rust, powdery mildew and cercospora) the following varieties have lower than average leaf infection levels:

Daphna, SabatinaKWS, CantonaKWS, Degas, BTS1915, KortessaKWS, BTS1140, Lightning & Vixen



EVENTS

If you were not able to join us during the **BBRO BeetTec week** and for the live Q & A on March 11th, you can access a recording of the event and the supporting videos on the BBRO website. There are four video presentations on managing virus yellows, weeds, seedbed, and environmental stress and cercospora in 2021. You can of course, also contact the BBRO team directly if you have any question.



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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 NRoSOPD@cityandguilds.com