BRO Advisory Bulletin

Ö IN BRIEF

- Good progress with drilling over the last week but some soils remain wetter than ideal at depth, whilst becoming very dry in the top 50mm
- Some heavier land still requires drying before acceptable seedbed can be produced. Patience is key!
- As soils dry, keep a close eye on drill depth to ensure seed is placed in contact with moisture.
- If drilling into fields with a poor, cloddy seedbed or areas of poor seedbed quality such as headlands, consider increasing the seed rate
- If considering the use of a pre-emergence herbicide remember that the dry conditions may reduce efficacy. Monitor weeds carefully and aim to take out weeds when they are still relatively small

ADVISORY

Monitor drilling depth

Rapidly drying soils are creating a challenge to ensure seed is being placed into moisture. This is key to quick and uniform emergence. Normally, the target drilling depth is 2-3cm but in very dry soils, drilling slightly deeper (4cm) into moist soil will help with germination. Check your drilling depth regularly. Remember this may change across the field, especially where the soil type and the seed bed conditions can change. Check that clod pushers and row cleaners are set up to increase penetration depth, where required, such as in a dry seedbed.

Keep checking that seed is adequately covered and soil coverers and press wheels are working correctly, especially in more cloddy seedbeds, as this will help to maximise seed/soil contact and preserve moisture.

Wet and Dry!

With light land drying very quickly and seedbeds becoming very fine it is vital to ensure aggressive press wheels are not disturbing seed placement. If this is the case, consider removing any spring tension or additional weights.

Where seedbeds continue to hold moisture at seed depth ensure that seed firmers and firming wheels run clean and free, so seed spacing is not compromised. Where possible, ensure scrapers are set correctly with a sharp edge and all wheels and firmers are clean before starting. If effective running cannot be achieved, consider removing the firmer or wheel, or allow seed bed to dry.

Photo: Press wheels running in seed trench in fine and dry conditions disturbing seed placement



Within row spacing

Remember to check your seed spacing regularly. The BBRO drill testing programme is currently assessing drill performance and results have shown actual seed rates can range by 0.5% - 10% from the target population. Consider increasing the seed rate in areas where the seedbed is poor, and establishment is likely to be lower. This is frequently the case on headlands but also on some of the heavier land which has produced very cloddy seedbed.



Photos: The BBRO plot drill working on the Recommended List site at a dry Bracebridge Heath site. Note that seed is drilled closer than normal and subsequently thinned to give a standard population to allow comparisons across varieties.

Use the chart below to work out the seed rates (for 50cm rows) and adjust for seed bed conditions. A similar chart for 45cm rows can be found in the BBRO Reference Book and BBRO Establishment Guide.

Seed spacing cm	14	15	16	17	18	19	20
Seed units/ha (one unit = 100,000 seeds)	1.43	1.33	1.25	1.18	1.11	1.05	1.00
90%	129	120	113	106	100	95	90
80%	114	107	100	94	89	84	80
70%	100	93	88	82	78	74	70
60%	86	80	75	71	67	63	60
50%	71	67	63	59	56	53	50
40%	57	53	50	47	44	42	40

Seed rates need to based on the expected establishment value

Plant populations above optimal requirements that can still produce maximum yields but not maximum profit. Optimum plant populations (within 5% of 100,000 plants/ha).

Rolling

It is difficult to provide a general recommendation for rolling as it depends very much on individual field conditions and every field will be different, especially where land continues to dry. However, it is worth considering this as an option if seedbeds on heavy soils are poor and cloddy and seed/soil contact is poor and also if planting depth is variable and seed is being left on the surface. However, if seed beds have resulted in ridging whilst drilling, be careful that rolling does not push too much soil over the seed, increasing seed depth. Also, don't roll if heavy rain is forecast.

Pre-emergence herbicides

The use of a pre-emergence herbicide will give you some flexibility regarding the timing of your first post-emergence spray which will be important if spray opportunities are limited. It may also help avoid herbicide damage by being able to spray in optimum conditions and when plants are more developed and less susceptible to damage.

If blackgrass is expected, then pre-emergence options such as ethofumesate are worth considering.

Be aware that dry conditions will reduce the efficacy of pre-emergence herbicides so monitor weeds carefully and aim to treat when weeds are still relatively small.

Drill Testing – limited number of tests available



- 1.Seed populations monitoring
- Seed counts
- Calculate actual Population
- Compare to Target & Drill readout
- Record Skips
- Record Doubles
- 2. Soil moisture @ seed depth
- 3. Seed bed levelness
- 4. Seed depth consistency



The test will not interrupt or slow your normal drilling operation, but it will give you confidence that the right amount of seed is being drilled in the right place. Those interested should contact their British Sugar Contract Manager to organise a test.



BeetTech19

For those of you that missed or would like a reminder of the BeetTech19 events please see <u>https://bbro.co.uk/our-news-opinions/our-news/news-</u>2019/beettech19/ for the presentations and audio.

BBRO and AHDB GreatSoils event - 14th May. Terrington area.

More details to follow.

Morley Innovation Event – 20th June. Morley Farms.

Join BBRO and many others at this event, which will be crammed to the hilt with agricultural innovation and know-how. More details to follow.

Summer Open Days

Tuesday 2nd July Fotheringhay, Peterborough. PE8 5HZ Thursday 4th July Thelveton Estate, Diss. IP21 4HP Book now: https://bbro.co.uk/events/

BASIS POINTS

Two BASIS points in total (not per bulletin) have been allocated for the period between 01/06/18 and 31/05/19 reference CP/67099/1819/g. To claim these points please email <u>michele@basis-reg.co.uk</u>

Two NRoSO points in total (not per bulletin) have been allocated between 01/06/2018 and 31/05/2019 reference NO465447f. To claim these points please email <u>NRoSOCPD@cityandguilds.com</u>

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