



## BBRO Advisory Bulletin No.6 - Week Commencing 5th June 2017

### General crop update

After the cold, dry start to the season, crops have made great progress over the last two weeks with the more advanced crops now meeting across the rows. Later planted crops and those struggling in poorer seedbeds are playing catch up but most have rapidly developing canopies and are recovering from a slow start. However, variable plant populations and patches of delayed emergence are typical of many crops, reflecting soil type differences and underlying soil issues such as compaction. Headlands seem particularly slow in some crops.

BBRO evaluate seed lots on two sites every season. This involves drilling and monitoring seed from all the key commercial seed bulks and associated treatments. To date we have not observed any emergence issues but under the cold, dry conditions in April germination and emergence has been much slower than usual at one of these sites.

With the longest day of the year rapidly approaching, the importance of early canopy establishment is clear.



For every forward crop, there's a later and variable one this season.

As plants pass through the 6-leaf stage it is worth taking some plant population counts, to see how close you are to the **target of 100,000 per hectare**. There is a guide on how to do this in the BBRO Sugar Beet Reference Book which is also available on the publications section of the BBRO website. Remember to make your counts at several representative areas of the field including at least one headland count.

## Crop Nutrition

The rapid canopy growth is resulting in some manganese deficiency symptoms (see below) so it is worth ensuring adequate manganese is available by foliar application during this period especially on the more prone lighter soils. Regular applications are worthwhile up until canopies meet across the row. This may even apply to crops on stronger-bodied soils when growing rapidly, especially when rain occurs after a lengthy dry period. Often in these situations, root growth and uptake can't keep up with the manganese demands of the canopy even when soil manganese levels are adequate.



## Weed control

Weed control has been a challenge this season particularly in the earlier cold and dry conditions. Adequate soil moisture has ensured herbicides are now working well although a few weed species have got away. Use of adjuvant oils can assist with weed control, especially in these situations but remember that as the temperature increases, so does the risk of damage to the crop. Check recommendations before using.

Using Mineral Oils: vary the dose according to temperatures below. Maximum temperature (oC) on the day of spraying	Dose of oil (l/ha)
Up to 14	1.0
14-18	0.75
18-21	0.5
Above 21	No oil recommended

Weed beet are also showing in some of the most forward crops and are now, or very soon will be, at a stage where they can be hoed. Hoeing can reduce weed beet populations in the crop by up to 80%, but to be effective it should be done before the weed beet have 4 true leaves after which point they can 'ride around' the hoe blade and re-set. Sharp L-blades are best at this stage for their cutting action and duck-foot, or A-blades have a place later when beet is larger and soil can be moved against the beet.

Potato volunteers are now growing rapidly in many crops and need controlling before they get too large and set too many daughter tubers. Herbicides such as Clopyralid are translocated to tubers and can reduce the viability of tubers. Large volunteers will be more difficult and more expensive to control if left too late. A carefully timed split application of Clopyralid is usually recommended and the inclusion of other herbicides can improve activity against volunteers. Check recommendations or speak to your agronomist on how to most effectively control volunteers.



Remember that potato volunteers in sugar beet are highly likely to be a source of infection of blight and virus for potato crops. Don't delay in dealing with these as young potato crops are more susceptible to both at this stage of the season.

### Leaf Miner

Very few reports of leaf miner damage have been received since the last bulletin. The early protection given by the neonicotinoid seed treatments for this pest will now be wearing off. Interestingly at the BBRO trials sites at Morley, Norfolk and Hibaldstow, Lincolnshire, where blocks of beet have been sown without the seed treatments, none of the plants assessed at Morley (on 5th June) were affected by this pest, and at Hibaldstow no eggs could be found but over 70% of plants showed first generation mining damage. Please continue to monitor for the pest, as we anticipate that it will be the second and third generations that could cause problems later in the season; knowing where these attacks are will be the challenge! Remember, control options are limited, e.g. Hallmark Zeon has approval but is primarily contact action and once larvae penetrate the leaf they are very difficult to control.

### Aphids

Increasing numbers of winged peach-potato aphids have been caught across the four factory areas in the yellow water traps, particularly at Fulbourn, Cambridgeshire (520) and Holme, Spalding Moore (319). Seed treatments should continue to work for this pest but remember there are no foliar sprays currently available. Increasing numbers of beneficial insects could be found when assessing the aphicide trial at Morley. Black aphids are starting to make an appearance too.

### Downy mildew

The first signs of downy mildew were recorded in crops in Norfolk at the beginning of June. Currently, in most cases, this is just the odd infected plant, but in one field near Swaffham, sown on the 12th March (with a downy mildew susceptible variety) over 10% of plants were affected. Again, please report any further issues with this disease as we progress through June.



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

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### **BASIS Points**

Two BASIS points in total (not per bulletin) have been allocated for the period between 01/06/16 and 31/05/17 reference CP/52404/1517/g. To claim these points please email [michele@basis-reg.co.uk](mailto:michele@basis-reg.co.uk)



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