BBRO Advisory Bulletin



Issued: 8<sup>th</sup> May 2024

## Ö IN BRIEF

- > Cut-off date for drilling Cruiser SB treated seed is the 1<sup>st</sup> June 2024.
- If re-drilling is required in areas where Cruiser has already been used, do NOT redrill with Cruiser treated seed.
- Many non-Cruiser SB crops are reaching aphid threshold (5 green wingless, per 20 plants). However, with only 2 (possibly 3) sprays available and, for many, the crop at such an early stage, growers are urged to consider plant size to soil ratio to maximise spray efficacy under these circumstances. Make sure you are at threshold across the field but don't delay too long once determined, especially as early virus infection will lead to the greatest yield losses at harvest.
- Insyst should be used as the first spray for non-Cruiser SB crops. Further guidance will be issued once emergency authorisation decisions are known.
- Select appropriate seed rates in line with expected establishment. Remember Cruiser SB treated seed must be drilled at a maximum rate of 1.15 units/ha. Ensure all drill operators are aware of the <u>guidelines associated with the use of</u> <u>Cruiser SB</u> treated seed, particularly ensuring all drilled seed is covered.
- Aphid Survey now live
- Listen to May's Beet Cast: The trialling choice of tillage

## ADVISORY

### Aphid update

As of the 8<sup>th</sup> May 201 aphids (*Myzus persicae* and *Macrosiphum euphorbiae*) have been caught in the yellow water pan network. Of those, 156 have been tested for polerovirus (BMYV and BChV) and 1 has been found to be carrying polerovirus. (Due to the relationship of BYV within the aphid it isn't possible to detect this virus reliably in individuals at present). Recent warmer temperatures of 21-23°C are conducive to aphid population growth and careful management is now critical.

At this stage of the season, the threshold for spraying non-cruiser crops is 1 green wingless aphid per 4 plants (5 green wingless aphids per 20 plants). As plants are at small growth stage (cotyledon/1-2 true leaves), consider the timing of the first aphicide application and only apply at this aphid threshold to ensure there is as much leaf area as possible to

maximise product uptake and extend its efficacy when the crop enters its rapid canopy extension phase.

Currently, only 2 foliar insecticides are available. Therefore, careful management is essential to ensure optimal protection. Under these circumstances, Insyst should be used as the first spray for non-cruiser treated crops, followed by Teppeki or Afinto (only one application of either flonicamid based product is permissible). We have applied for an Emergency Authorisation for a third spray and further guidance on this will be issued once EA decision is known, but this will NOT be Movento this year.



Figure 1: Aphid Survey map as of 8<sup>th</sup> May 2024

Remember Cruiser-treated crops should be protected for up to 8-10 weeks from drilling so should not require a foliar insecticide at this stage. Make sure you have the drilling date of each crop recorded so you are clear on where aphid monitoring is a priority.

#### Annual Broad Leaved Weed (ABLW) control on conventional beet varieties

With a range of drill dates and warm soil with plenty of moisture, 'keeping on top' of weed control especially in conjunction with application of foliar insecticides is a challenge but the first post-emergence sprays are important, delays in applying these can add to the cost of the over-all programme. Aim to be a day early rather than a day late.

There are some fields with variable crop emergence, if polygonums such as knot-grass and pale persicaria are present then consider a 'holding spray' such as metamitron + oil – labels will support high rates of both actives, this is an old fashioned but safe mix. The worst decision is to do nothing until full crop emergence!

Other weeds such as black-bindweed can be controlled once they have true leaves, actives with contact activity such as phenmedipham and ethofumesate with oil, applied at short spray intervals can take out large black-bindweed. Once the crop has reached first true leaves visible then the addition of clopyralid will add further activity against this weed. See following information for advice regarding fat-hen control.

Key notes to consider for weed control in sugar beet:-

 Physical tank mixes are supported for annual broad-leaved herbicides and insecticides but ideally, they should not be applied together. Insecticides require a minimum of 200 l/ha of water whereas ABLW herbicides are likely to perform better at 80-100 l/ha with a fine spray.
A tank mix of graminicide and insecticide is a better option as both require 200 l/ha water volume and coarser sprays.

3. If temperatures increase to the predicted 20° C plus, then avoid spraying herbicides in the middle of the day especially if cloud cover is absent. Aim to spray in the evening or early morning. Beet and weeds are likely to be sensitive to herbicides when conditions are warm, moist, and humid.

4. When controlling black-grass clethodim should be first choice, remember to add in a water conditioner even in non-hard water regions.

5. As soon as the beet crop reaches 1st true leaves 1cm there is support for 'Broadacre' mixes these can be useful where weeds are getting large, manufacturers provide examples of supported mixes.

6. Remember to always add in an adjuvant oil when using triflusulfuron-methyl (Debut) as performance can be reduced by 50% if it is omitted, depending on the weed species being targeted.

7. Aim to use the actives that are strongest on the key weeds present e.g., for fat-hen phenmedipham + ethofumesate + adjuvant will work well on emerged weeds. See the BBRO Reference book for strengths and weaknesses of actives on other key weeds.

8. Tank mixing graminicides and annual broad-leaved herbicides is not ideal, the efficacy on grass weeds and in particular black-grass can be compromised. Physical compatibility support does exist but where possible apply separately especially if you have a serious black-grass problem.

9. Make sure that the interval between sprays is short where large weeds are being targeted. Adhere to product labels and take a note of crop health but 5–7-day intervals may be optimum for controlling large weeds.

10. A mix that has worked well in BBRO trials over a number of years is 3 applications of the following:-

phenmedipham (320 g a.i/ha) + metamitron (700 g a.i./ha) + ethofumesate (150 g a.i/ha)

Note, where problem weeds are present then other actives may need to be added to the mix and rates should be adjusted according to size of crop and weeds.

### **Plant Clinic**

We are seeing the first signs of leaf miner, though no damage reported. It is worth monitoring the number of eggs for spray threshold. This is based on the square ratio of eggs to leaves i.e. 24 eggs = 2 leaves, 16 eggs = 4 leaves. Cruiser SB will give incidental control of this pest, as will Insyst, but flonicamid based products will not have any impact. We have also seen several queries relating to soil pests: slugs, symphilids, millipedes, leather jackets, etc., but nothing of major concern. We have also seen crop growth being checked in areas where the temperature dropped and even signs of minor frost damage from cold conditions experienced in late April.

Other issues relate to wind damage, particularly where this has been followed by a herbicide spray, escalating the damage level. It is always best to allow the crop 24-48 hours to recover from weather related damage before spraying.



Figure 1. Leaf miner eggs being found in isolated areas.

### Stewardship of Cruiser SB crops - reminder

There are several key conditions summarised below that must be adhered to:

- A maximum seed rate of 1.15units/ha of treated seed. If there are concerns about poor establishment and a higher rate of seed is required, untreated seed can be used but the rate of Cruiser SB treated seed must not exceed 1.15 units in each hectare drilled. It is essential to make accurate records of where all Cruiser SB treated seed is drilled within fields.
- Careful and targeted use of herbicides is required to minimise the number of flowering weeds in treated sugar beet crops and reduce the risk of indirect

exposure of pollinators to neonicotinoids. The use of BASIS recommended herbicide programmes must be adopted by growers and their agronomists. Ensure all drill operators are aware of the <u>guidelines associated with the use of Cruiser SB</u> <u>treated seed</u>, particularly ensuring all drilled seed is covered.

• No thiamethoxam seed treatment i.e. Cruiser SB may be used on the same field area for 46 months from the date of sowing treated sugar beet seed in 2024.



You will also be able to find us at the Morley Innovation  $Day - 20^{th}$  June. Please see below to book.



# O CONTACTS

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### Ø BASIS POINTS

Two BASIS points in total (not per bulletin) have been allocated for the period between 01/06/23 and 31/05/24 reference CP/126447/2324/g. To claim these points please email cpd@basis-reg.co.uk

Two NRoSO points in total (not per bulletin) have been allocated from 1st September 2023 to 31st August 2024 - NO500860f. To claim these points please email <u>nroso@basis-reg.co.uk</u>.