



SPECIAL HERBICIDE EDITION



IN BRIEF

- The decision to ban the use of neonicotinoids on all outdoor crops was agreed at the European Commission in Brussels on the 27th April. We will continue to keep you informed of the situation as things progress.
- Painfully slow and erratic progress with drilling, with an east-west divide in the weather over the last few week.
- On a positive note, recently drilled crops that went into warm and moist soils are emerging quickly, in some cases within a week.
- With such a protracted drilling season, many crops are at different stages of development and need careful tracking to ensure operations and applications are made at the right time.
- Keep an eye out for differences between seed treatments where used and don't forget to mark up where different varieties are drilled as you go.



ADVISORY

Weed control

This edition of the Bulletin is focusing on herbicides and weed control.

We would like to thank Pam Chambers (pam.chambers@uniphos.com) for her contribution to this bulletin.

The spring weather is providing a challenge for weed control in beet crops and localised differences in weather makes it difficult to provide topical advice for all beet growing areas. In some areas beet still has to be drilled and questions are being asked about the need for pre-emergence sprays, whereas those who managed to drill in March are applying post-emergence sprays but spray days are few and far between. A significant acreage of beet was drilled the week commencing 16th April on the slightly heavier soils and these crops tend to be just emerging; leading to a range of crop and weed growth stages to contend with!



Picture of fat hen.

Using adjuvants

The use of adjuvants is common in post-emergence herbicide programmes, key facts for this season are:-

- Where crops are suffering due to cold and wet weather conditions, nutrient stress or are only just emerging, then don't use a mineral oil. Mineral oils are much harsher on the crop as well as the weeds! Vegetable oils tend to be kinder.
- Some herbicide actives respond more than others to the inclusion of an adjuvant e.g. triflurosulfuron-methyl (Debut, Shiro) but check manufacturers information regarding supported mixes and crop growth stages.
- On early sown crops where sprays have been delayed then the inclusion of an adjuvant is particularly beneficial where persicaria, knotgrass, redshank or cranesbill are present. These weeds can be more difficult to control once they progress beyond the cotyledon stage.
- Be very wary of including adjuvants if the weather suddenly changes to hot, cloudless skies and high relative humidity. This is especially important if using a 'Broad-acre' programme. In this situation delay spraying until evening/early morning, use a vegetable oil and use a lower rate of adjuvant. Warm weather following wet conditions can result in rapid growth of crop and weeds with both being tender!
- Check the maximum concentration (% of spray solution) that applies to the adjuvant being used. Some may prohibit the use of adjuvant rates suggested according to the temperature chart conventionally used (Table 1).
- Adjuvants known as water conditioners can improve the efficacy of graminicides especially for black-grass control.

Max. temp (°C) on day of spraying	Dose of adjuvant oil* (l/ha)
Up to 14	1.0
14 to 18	0.75
18 to 21	0.50
Above 21	Not recommended

* Check adjuvant label regarding rates, not all will support rates as high as 1.0 l/ha in 80-100 l/ha of water.

Pre-emergence herbicides or not for late drilled crops?

Generally pre-emergence sprays should:-

- Save on post-emergence spray costs.
- Provide some flexibility regarding timing of first post-emergence spray – important if spray opportunities are likely to be limited due to travelling conditions or work capacity issues which is likely this season.
- Where black-grass is expected then pre-emergence sprays based on ethofumesate should always be considered.
- This season the generally wet/moist soils will ensure good activity from pre-emergence sprays.
- Look at options where pre-emergence sprays can be tank mixed with liquid fertilisers, this may save time but be cautious with some chloridazon mixes.

Black-grass control

A few reminders:-

- If there is still time, then apply a pre-emergence spray based on ethofumesate.
- Time post-emergence graminicides according to the emergence of black-grass, ideally this will be before any post-emergence applications of ethofumesate.
- If applying a graminicide after an earlier post-emergence ethofumesate then ensure that the black-grass is actively growing.
- Consider the use of a water-conditioner.
- Do not tank mix graminicides with herbicides being applied to control annual broad-leaved weeds.

Tailoring your choice of herbicide to control the key weed species present is key and being prepared to change rates and even products between fields may give you the best control. A summary of key post emergence options is given below.

Active (s)	Product (examples)	Strengths
ethofumesate	Efeckt 500 SC Ethosat 500, Oblix 500	Cleavers, Knotgrass, Black bindweed
lenacil	Venzar Flowable	Brassica species, Black bindweed, Knotgrass
metamitron	Goltix Flowable Bettix Flo	Mayweeds, Knotgrass, Annual nettle, Fat-hen, Annual meadow grass
phenmedipham	Betasana SC Beetup Flo	Black bindweed, Fat-hen, Charlock, Ivy-leaved speedwell
triflusaluron-methyl	Debut/Shiro As in Safari Lite WSB	Volunteer OSR, Brassicas, Fool's Parsley, Mayweeds, Cleavers
desmedipham phenmedipham	Beetup Compact Betanal Turbo Betanal Maxxim	desmedipham is useful in cool dry conditions or/and where weeds difficult to control.
clopyralid	Vivendi 200 Dow Shield 400	Volunteer potatoes, Thistles, Mayweeds

Crop Nutrition

As early drilled crops reach full emergence don't delay with your second application of nitrogen. Crops are likely to develop canopies rapidly and will need adequate nutrients. Sufficient nitrogen is essential for leaf growth. We expect canopies to grow rapidly this season so don't delay in applying manganese too. There were a lot symptoms of manganese deficiency seen in crops last year when the canopy grew rapidly. Don't wait until you see symptoms. Many products can be mixed with herbicides and this will be a good opportunity to apply for many crops.

BBRO drill testing is still available to you. This will help monitor:

- **Seed population**
- **Drilling depth and moisture levels**
- **Monitor and benchmark row unit performance**

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 Area Manager to organise a test.



EVENTS

Beet Yield Challenge.

Applications are now invited for the 2018 BYC competition. For further info please visit our website <https://bbro.co.uk/on-farm/beet-yield-challenge/>

Join us at Cereals on the 13th June, 10:30 at the NFU stand to hear more about the BYC and find out who are the 2017 finalists.

Summer Open Days.

Plans are proceeding for the BBRO Summer Open Days, with lots of opportunities to see our trials in progress, speak directly to the research team and view the RL varieties for 2019.

Invites will be released in May.

BEET 2018

3rd July @ Swanton Morley
5th July @ Bracebridge

BBRO's targeted approach to sugar beet growing



CONTACTS

British Beet Research Organisation, Innovation Centre, Norwich Research Park, Colney Lane, Norwich, NR4 7GJ

Dr Mark Stevens mark.stevens@bbro.co.uk 07712 822194

Dr Simon Bowen simon.bowen@bbro.co.uk 07718 422717

General Enquiries info@bbro.co.uk



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