

Sugar Beet Technical Update

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1 May 2013

UPL Sugar Beet Herbicide Trials 2013

Location	Trial objective	Drilling date	Crop growth stage	Pre-em	Post-sprays	Main weeds present and growth stages
Cambridgeshire	ABLW	06.04.13	Cotyledon	Not applied	Planned this week	Volunteer OSR, Black bindweed at cotyledon
Lincolnshire	BG	17.04.13	Not assessed	19.04.13		Not assessed
Norfolk	BG	30.03.13	Cotyledon emerging	01.04.13	Planned this week	Black-grass (1 to 2 TL) Volunteer OSR (1 TL) At cotyledon: Fat-hen, Common field speedwell, Black bindweed, Persicaria
Norfolk	BG	30.03.13		01.04.13		
Norfolk	ABLW	30.03.13		Not applied		
Suffolk	ABLW	09.04.13	Expanded cotyledon	Not applied	Planned this week	Volunteer OSR (1 TL) At cotyledon: Fat-hen, Field Pansy, Knotgrass, Common field speedwell, Black bindweed

C = Cotyledon TL = True leaf BG = Black-grass ABLW = Annual broad-leaved weeds

Post-emergence herbicides

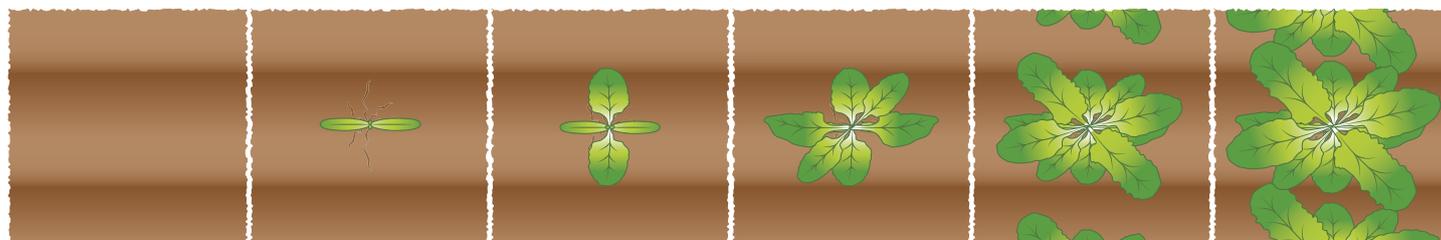
Volunteer OSR continues to be the dominant weed present in UPL trials with some now having first true leaves. Other weeds are now starting to emerge with the polygonums including Knotgrass and Pale Persicaria now putting in an appearance; Black-bindweed and Fat-hen are present in relatively high numbers. Generally most annual broad-leaved weeds are still emerging or are at the early cotyledon stage. Black-grass is now at the 1 to 2 leaf stage at the Stowbridge site. This week we plan to apply the first post-emergence sprays to all sites apart from the Lincolnshire one which was drilled later than the rest.

In commercial crops it should be a busy week with many crops receiving their first post-emergence sprays unless a delayed 'Broad-acre' approach is planned. Delayed programmes generally start when the sugar beet is at the first true leaf 1cm growth stage e.g. **Beetup Compact SC** (phenmedipham + desmedipham) 2.0 + Debut (triflurosulfuron-methyl) 20g + Venzar (lenacil) 0.4 + **Ethofol 500SC** (ethofumesate) 0.4 + **Bettix Flo** (metamitron) 0.5 + Oil.

Some beet fields are showing variable emergence with beet plants varying from just emerging to cotyledons fully expanded, care needs to be taken with first sprays as frosts are forecast for this week. **Betasana Trio** (ethofumesate, phenmedipham + desmedipham) 1.25 is known for being a relatively kind formulation and can be a useful first choice in this situation in tank mix with **Bettix Flo** 1.0.

Where control of OSR is required then Debut (triflurosulfuron-methyl) or Safari Lite WSB (triflurosulfuron-methyl + lenacil) can be tank-mixed with **Betasana Trio** from the fully expanded cotyledon stage of the crop – but take care when frosts are forecast.

Where black-grass is emerging aim to spray this when it is at the 2 leaf stage, **Oblix MT** (ethofumesate + metamitron) is a useful product to use plus an appropriate tank mix partner. Remember 'Best Use Guides' for **Beetup Compact SC** and **Betasana Trio** together with tank mix information can be found on the UPL website www.upleurope.com.



Dry seed:
BBCH00

First leaf visible (pinhead size):
cotyledons horizontally unfolded
BBCH10

2 leaves
(first pair of leaves) unfolded
BBCH12

6 leaves
(third pair of leaves unfolded)
BBCH16

Leaves cover 30%
of the ground
BBCH33

Crop cover complete:
leaves cover 90% of ground
BBCH39

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1 May 2013

Weather – how does 2013 compare to 2011 and 2012

Weather has a huge impact on the growth of weeds as well as the beet crop and obviously impacts on how effective herbicides will be. In brief 2011 was a relatively warm but very dry season with weeds being small but quite 'tough' to control especially if herbicide rates were on the 'low' side. The 2012 season was cooler with a very wet April and sprays were often delayed. However weeds, although sometimes large when sprayed, were relatively easy to control when robust herbicide programmes were used. So far 2013 is shaping up to be cooler than the last two seasons and slightly wetter (Fig 1). The big question is what will happen over the next few weeks, if the weather warms up then we should see good activity from herbicides but if it remains cool then both crop and weed growth will remain slow and weeds will be more difficult to control.

Fig. 1. East Anglian Rainfall (mm) (Source: Met Office)

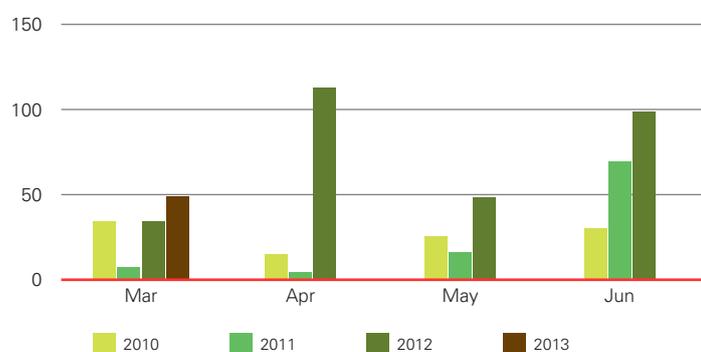
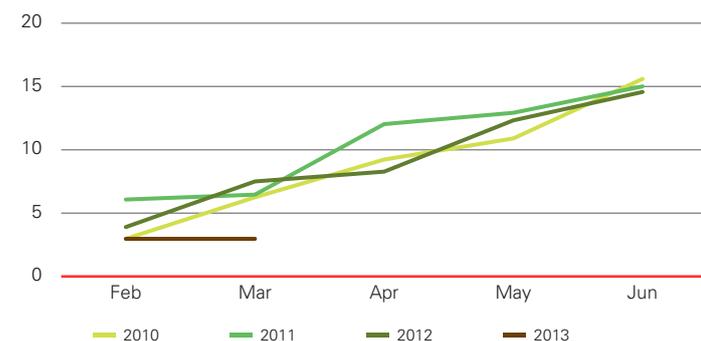


Fig. 2. Mean Daily Temperatures °C 2010 to 2013 (Source: Met Office)



Weed identification – Fat-hen (*Chenopodium album*) and Orache (*Atriplex patula*), how to tell the difference.

With both Fat-hen and Orache now emerging in sugar beet fields it can sometimes be difficult to tell them apart, a quick guide is given below.

Fig. 3. Orache leaves (1 at cotyledon and 1.1 at first true leaf) and Fat-hen leaves (2 at cotyledon and 2.1 at first true leaf)



(1) Orache (*Atriplex patula*)

- Cotyledons and the first true leaves are mealy
- Cotyledons are green beneath, and narrower
- True leaves are long, with two distinct teeth at the base
- Annual plant differs from fat-hen in that it has a generally prostrate habit, only the flowering stems being upright
- Control as for Fat-hen but also include ethofumesate in the spray programme, consider **Betasana Trio** (ethofumesate, phenmedipham + desmedipham) + **Bettix Flo** (metamitron)

(2) Fat-hen (*Chenopodium album*)

- Cotyledons and first true leaves are mealy, giving them a silvery appearance
- Cotyledons are purplish beneath, borne on a purple stem
- Control should be based on sufficient residual e.g. **Bettix Flo** (metamitron) and a contact spray e.g. **Beetup Compact** (phenmedipham + desmedipham)

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BASIS points for the technical information provided by Sugar Beet Technical Update are CP/30259/1213/g (2 CPD). To claim please e-mail scott@basis-reg.co.uk

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Beetup Compact SC contains phenmedipham + desmedipham, Betasana Trio contains ethofumesate, phenmedipham + desmedipham, Bettix Flo contains metamitron, Defiant SC contains metamitron and Ethofol 500SC contains ethofumesate.

Information in this Technical Update does not constitute a recommendation it is for guidance only.

Use plant protection products safely.
Always read the label and product information before use.

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