

Sugar Beet

Technical Update

UPL ABLW Trials Suffolk 2015

Table 1. Details of sugar beet trials 2015

Location	Trial objective	Drilling date	Crop growth stage	T1	T2	T3
Mendlesham, Suffolk	ABLW's	23.03.15 (Hornet)	8 to 10 true leaves	16.04.15	01.05.15	TBC
Yaxley, Suffolk	ABLW's	15.03.15 (Haydn)	8 to 10 true leaves	14.04.15	01.05.15	15.05.15

The Yaxley trials site has now received its third post-emergence spray and the Mendlesham site will hopefully be sprayed at the end of this week. The weeds at Mendlesham are mainly cleavers so it was decided to delay spraying for a few more days to let the newly emerged ones reach the first whorl stage. At both the trials sites the crop is growing nicely, very irritating for those with crops in North Norfolk and parts of Lincolnshire where conditions have been less favourable. The UPL team were at the BBRO Field days last week, and a few of them decided they would like to have a go at checking crop establishment with some of the other visitors (Photo. 1)!

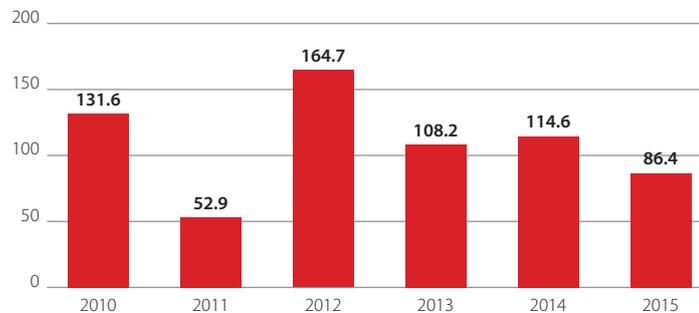


Photo 1: Assessing crop emergence at BBRO Field Day Bracebridge Heath

Weather and early herbicide treatments

Total rainfall for the months Feb – April inclusive, for East Anglia (Graph 1.) show that it has been relatively dry compared to other years apart from 2011 which was very dry. Mean temperatures for the same period (Graph 2.) have certainly been colder than 2014, but not as bad as 2013. For further more detailed weather data see Technical Update No. 2.

Graph 1. Total rainfall (mm) for East Anglia, Feb – April
(source www.metoffice.gov.uk)



Graph 2. Mean temperatures °C for East Anglia, Feb – April
(source www.metoffice.gov.uk)

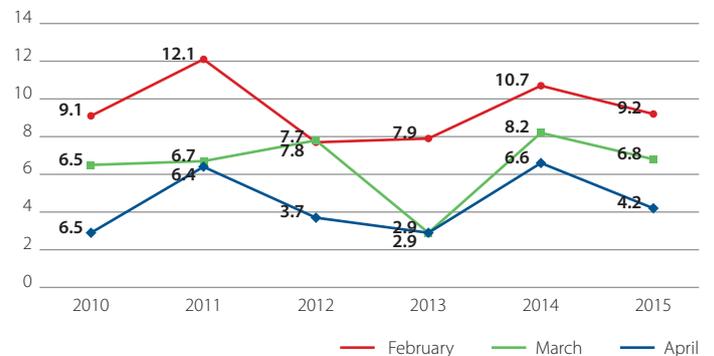


Table 2. Weather at spraying at Yaxley

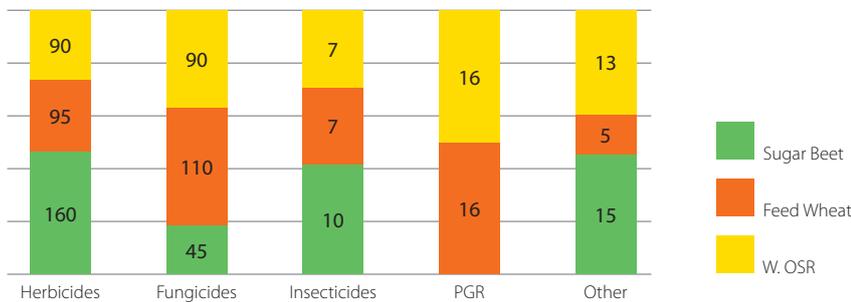
	% Cloud	% RH	°C
16.04.15	15	40	18
01.05.15	100	52	12
15.05.15	90	37	14.6

A combination of dry and cool conditions is not conducive to good weed control and efficacy has been affected by local conditions, with some areas receiving welcome showers and others missing out. In situations where crop emergence is variable then the impact of programmes on crop vigour can be important, see last weeks Technical Update. The inclusion of desmedipham with phenmedipham (e.g. **BEETUP COMPACT SC**) is useful under difficult conditions. Weather conditions when spraying at the Yaxley trials site have been variable with the first spray being applied on the best day so far for good weed activity, it was warm and sunny with soil conditions moist, but we were still having cool nights. (Table 2).

Herbicide costs – what should you be spending?

The spend on herbicides in sugar beet as in other arable crops can be dramatically affected by the presence or absence of black-grass. Graph 3. gives average costs in £/ha from John Nix, Farm Management Pocketbook 2015 for sugar beet, feed wheat and winter OSR. In sugar beet it can be seen that on average £160/ha is spent on herbicides which equates to around 69% of the total spend on crop protection for this crop. In the UPL annual broad-leaved weed trials in 2014 herbicides costs ranged from just over £80/ha to £150/ha, black-grass was not present at these sites so no graminicide costs were included. At the UPL black-grass trials site costs were reaching the £200/ha mark.

Graph 3. Agrochemical spend £/ha (Source John Nix 2015)



The response to herbicides is high in sugar beet but get the herbicide programme wrong and there can be yield penalties and harvesting difficulties which will have a financial impact. Using the same herbicide programme and products for each field with no yearly variation can also be a costly exercise, so with beet prices forecast to be even lower next season, perhaps now is the time to check how much is being spent and look at the options available.

UPL offer a range of herbicide products (Table 3) that provides agronomists and farmers with the flexibility to mix and match actives to weeds present, or the option to select a cost effective formulated product such as **BETASANA TRIO** that will give reliable broad spectrum weed control. Remember there are only 10 key actives used to control annual broad-leaved weeds in sugar beet (Table 4), but a plethora of products!

Table 3. Key UPL sugar beet products – mix and match or ready formulated!

Ethofol 500SC	= ethofumesate
Bettix Flo	= metamiltron
Beetup Flo	= phenmedipham
Vivendi 200	= clopyralid
Beetup Compact SC	= phenmedipham + desmedipham
Betasana Trio	= phenmedipham + desmedipham + ethofumesate

Table 4. Herbicide actives for use in sugar beet for ablw control and mode of action group

Active (s)	Residual	Contact	Pre	Post	HRAC
ethofumesate	✓	✓	✓	✓	N
lenacil	✓		✓	✓	C1
metamiltron	✓	✓	✓	✓	C1
phenmedipham		✓		✓	C1
triflusulfuron-methyl		✓		✓	B
desmedipham		✓		✓	C1
clopyralid		✓		✓	O
quinmerac	✓		✓		O
tri-allate	✓		✓		N
chloridazon	✓		✓		C1

Cut-leaved Cranesbill (*Geranium dissectum*)



Photo 2: Cranesbill – cut-leaved

Diagnostic features of seedlings

- Cotyledons broader than long and asymmetrical
- Stalks long and hairy
- Difficult to distinguish between the different species of cranesbill (Diagrams 1 and 2)
- You should be able to differentiate between cranesbill and brassica species, apparently this has caused confusion for some. (Photo 2 and Photo 3)
- Cranesbill does have pretty flowers though!

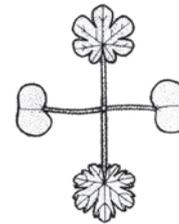


Diagram 1:
Cut-leaved Cranesbill
(*Geranium dissectum*)

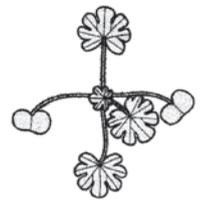


Diagram 2:
Dove's-foot Cranesbill
(*Geranium molle*)



Photo 3: Volunteer OSR

Yield effect	Key actives	Comments	Suggested products*
No information on yield effect but considered to be of growing importance.	triflurosulfuron ethofumesate phenmedipham desmedipham	Important to control at the cotyledon stage. Do not omit the adjuvant oil. Spray in the evening if necessary.	BETASANA TRIO + Debut + Oil BETASANA TRIO + Safari Lite WSB + Oil

*Based on UPL products.

Fodder Beet and Venzar Flowable

Remember if using Venzar Flowable in fodder beet post emergence that this is covered by an EAMU (1765/11) so make sure the necessary paperwork is in place. There is a full label approval for pre-emergence use.

Beet Crops and Avadex Excel 15G

The new authorisation for Avadex Excel 15G (MAPP 16998) currently does not have approval for use on sugar beet or fodder beet. Avadex Excel 15G (MAPP 12109) with a final use date of 30.09.16 has full approval for these crops.

Volunteer Potatoes and Thistles

Where these weeds are present then the addition of clopyralid (as in **VIVENDI 200**) to herbicide programmes is a must.

UPL Trials Visits

The trials sites are now starting to look interesting with differences being seen between treatments, if you are interested in visiting the site then please contact Pam Chambers via email, pam.chambers@uniphos.com or on 07809 227 583.

BASIS points for the technical information provided by Sugar Beet Technical Update are CP/37161/1415/g (2 CPD). To claim please e-mail robert@basis-reg.co.uk.

Information in this update does not constitute a recommendation, it is for guidance only. Up to date information can be found on our websites www.upleurope.com or www.uplsugarbeet.co.uk.

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