

Sugar Beet

Technical Update

UPL ABLW Trials Suffolk 2015

This season UPL Europe Ltd has two sugar beet trials based in Suffolk (Table 1) with the following key objectives:

- Comparison of conventional with delayed 3 spray programmes
- Comparing 2, 3 and 4 spray programmes
- The effect of adding an adjuvant at the T2 and T3 spray timings
- Comparison of Betasana Trio with other formulated products
- The performance of two new products from UPL

Dewar Crop Protection will again be carrying out the trials work and first sprays are due to be applied this week.

Table 1. Details of sugar beet trials 2015

Location	Trial objective	Drilling date	Crop growth stage	T1
Mendlesham Suffolk	ABLW's	23.03.15 (Hornet)	Crop emergence	Due this week
Yaxley Suffolk	ABLW's	15.03.15 (Haydn)	Expanded cotyledon	Due 13.04.15

Yaxley trials site

Weeds are emerging at the Yaxley site with the dominant ones so far being black-bindweed and volunteer oilseed rape. Also present are common field speedwell and red dead-nettle. Information on the importance of these four weeds follows.

Ideally the black-bindweed should be sprayed before it reaches the first true leaf stage, the volunteer oilseed rape can be controlled more easily and delaying sprays until it has true leaves would not cause a problem, the other two weeds, common field speedwell and red dead-nettle are generally not considered to be of major importance. A useful first spray is given below, the metamitron is added in for residual activity. This treatment is included within our trials programme.

- BETASANA TRIO (phenmedipham + desmedipham + ethofumesate) **1.5 l/ha** + BETTIX FLO (metamitron) **0.75 l/ha**



Black-bindweed (*Fallopia convolvulus*)

Diagnostic features of seedlings

- Stem (hypocotyl) is crimson
- Heart shaped first true leaves
- First true leaves reddish in colour

Yield effect	Key actives	Comments	Suggested products **
1 polygonum plant/m ² can reduce yields by 3 t/ha *	phenmedipham desmedipham chloridazon lenacil	avoid metamitron alone	Betasana Trio – can be used from crop emergence up to 2.0 l/ha.

* Ref: Weed biology series – the polygonums. British Sugar Beet Review, Summer 2001 Volume 69 No.2 ** Using UPL products



Red dead-nettle (*Lamium purpureum*)

Diagnostic features of seedlings

- Backward directed lobes at the base of cotyledon
- Cotyledons are borne on long stalks
- First true leaves heart-shaped with toothed edges
- Can be confused with henbit dead-nettle, impossible unless you are a weed scientist to differentiate at cotyledon stage

Yield effect	Key actives	Comments	Suggested products **
No information available but not considered to be a significant problem	phenmedipham desmedipham ethofumesate choridazon (pre-em)	Avoid using phenmedipham or metamitron alone. Use a combination of actives.	BETASANA TRIO – can be used from crop emergence up to 2.0 l/ha.

Sugar Beet

Technical Update

UPL ABLW Trials Suffolk 2015



Volunteer OSR (*Brassica napus ssp. Oleifera*)

Diagnostic features of seedlings

- Kidney shaped cotyledons
- Leaves are smooth-surfaced and blue green in colour
- First leaves oval in shape with shallow indentations
- Can be confused with charlock and not easy to differentiate between the two at cotyledon stage – field cropping history is a good clue!

Yield effect	Key actives	Comments	Suggested products **
One plant/m ² can reduce yields by 10% or more. *	triflusaluron-methyl phenmedipham desmedipham lenacil	OSR can be controlled relatively easily and suits a delayed spray programme. Seedlings will continue to emerge until crop canopy closure.	BETASANA TRIO + Debut from fully expanded cotyledons. *** Suggested rates: 1.0l/ha + 20g/ha

* Ref: BBRO Sugar Beet Reference Book 2015 *** Debut = triflusaluron methyl



Common field speedwell (*Veronica persica*)

Diagnostic features of seedlings

- 'Spade' shaped cotyledons – like on playing cards.
- First true leaves are in opposite pairs.
- Leaf margins of true leaves shallowly and regularly notched.
- Cotyledons **much** smaller than ivy leaved speedwell which are more similar to cleaver cotyledons.

Yield effect	Key actives	Comments	Suggested products
Information not available but a low lying weed that is not generally considered to be a problem	phenmedipham desmedipham ethofumesate	Most spray programmes will control common field speedwell so base product choice on other weeds present.	BETASANA TRIO alone or in mixes.



Black-grass (*Alopecurus myosuroides*)

Black-grass is emerging and in some cases at quite high levels, in this situation the use of a graminicide should be given priority over annual broad-leaved weed control. Trials carried out by UPL in 2014 demonstrated that early control of black-grass was most successful. It is not advisable to tank-mix graminicides with herbicides being used for annual broad-leaved weed control. Further information can be found in 'Black-grass control in sugar beet' produced by UPL Europe Ltd and is available to download at www.upsugarbeet.co.uk or www.upleurope.com.

BASIS points for the technical information provided by Sugar Beet Technical Update are CP/37161/1415/g (2 CPD). To claim please e-mail scott@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.upsugarbeet.co.uk.
Bettix and Betasana are registered trademarks of United Phosphorus Limited.
Some brand names used in this document are trademarks of other manufacturers, in which proprietary rights may exist.
Use plant protection products safely. Always read the label and product information before use.