

Beet Crops

Technical Update 04

5 June 2018

UPL Europe Ltd, Annual Broad-leaved Weed (ABLW) Sugar Beet Trials – Suffolk 2018

Spraying of the UPL herbicide trials is now nearing completion with the majority of final sprays being applied this week (Table 1). It is interesting to see that temperatures recorded at spraying, on the trials during 2018 were all over 21°C even though all applications were applied in the evening (Graph 1). In commercial situations some crops received sprays during the heat of the day – so no surprises that more crop effects from herbicide applications have been reported this season than usual. Table 2 provides a summary of average drilling dates and spray dates for UPL herbicide trials from 2013 – 2018 and this season is definitely the latest we have been with respect to drilling and sprays, however crops are growing rapidly now due to recent rainfall and warm conditions.

Graph 1. Temperature at Spraying of UPL Herbicide Trials 2013 – 2018 (Suffolk)

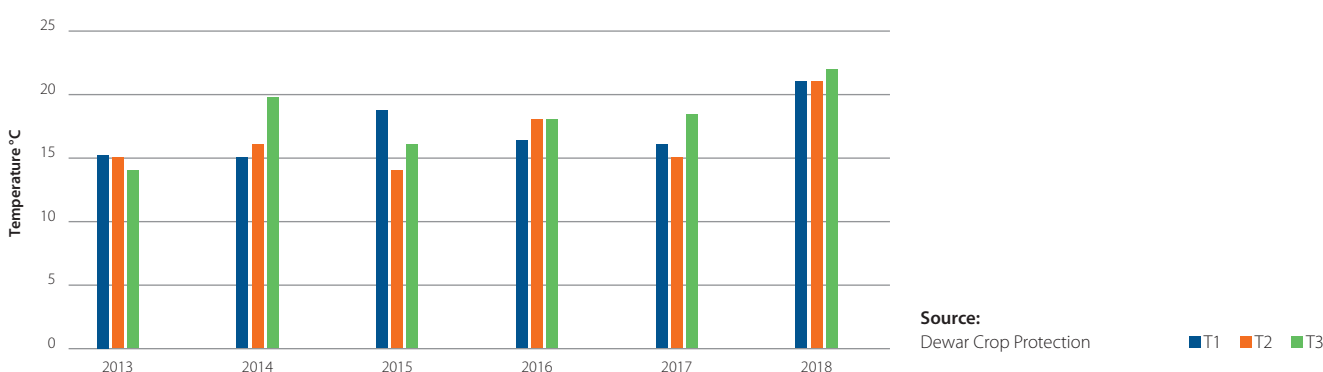


Table 1. Details of Sugar Beet Trials 2018 – Suffolk

Location	Drilling Date	Pre-em	1st Post-em Crop 1st True Leaves	2nd Post-em Crop 4 – 6 Leaves	3rd Post-em Crop 6 – 8 Leaves
Mendlesham	21.04.18	22.04.18	10.05.18	28.05.18	04.06.18
Yaxley (Kemp's)	19.04.18	20.04.18	09.05.18	26.05.18	05.06.18
Yaxley (Barn Field)	17.04.18	None applied	09.05.18	21.05.18	30.05.18

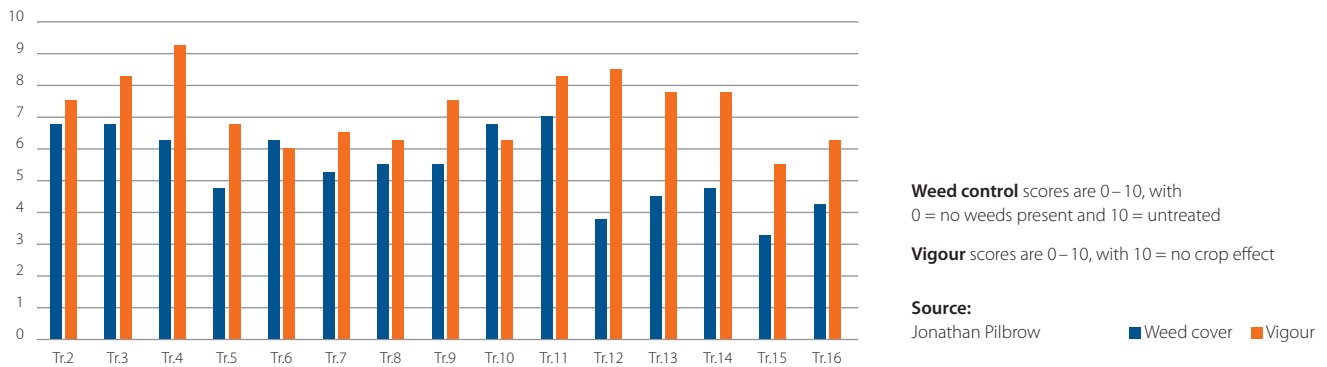
Table 2. Summary of UPL Trials Drilling and Spray Dates 2013-2018

Year	Average Drilling	Pre-em	T1	T2	T3	T4
2013	09.04.13		01.05.13	16.05.13	27.05.13	
2014	20.03.14		10.04.14	22.04.14	21.05.14	30.05.14
2015	23.03.15		16.04.15	01.05.15	21.05.15	03.06.15
2016	03.04.16		30.04.16	09.05.16	26.05.16	06.05.16
2017	16.03.17	25.03.17	11.04.17	20.04.17	10.05.17	23.05.17
2018	19.04.18	20.04.18	09.05.18	21.05.18	05.06.18	14.06.18 TBC

UPL Herbicide Screen – Initial Comments

The UPL herbicide weed screen is looking at the strengths and weaknesses of individual actives and combinations of actives. As an example treatment 4 shown in Graph 2 is **BETTIX FLO SC** (metamitron) applied twice at T1, T2 and a third application was applied on 30th June a day after these assessments. The graph shows that with respect to weed control **BETTIX FLO SC** is scoring 6.25 and for crop vigour 9.25 which indicates it has been very kind to the crop and the level of weed control is average. Treatment 12 is **BETTIX FLO SC** plus **SHIRO** (triflusaluron-methyl) applied twice at the time of assessing. This shows that on this particular site the effectiveness of adding **SHIRO** to the **BETTIX FLO SC** with respect to weed control. Key weeds on this particular site are polygonum and chenopodium species. Final assessments will be carried out in July with detailed analysis of weeds species present and level of control obtained. The trial will be used for demonstrations from now until mid July to illustrate the efficacy of beet herbicide actives, if you are interested in visiting the site then please send an email to pam.chambers@uniphos.com.

Graph 2. UPL Herbicide Weed Screen



Restrictions on Herbicide Actives

As final spray decisions are approached, don't forget that certain restrictions apply to some actives, a summary of these are provided in Table 3, but also check product labels. Note that sometimes restrictions for fodder beet and red beet are different to those that are given for sugar beet, in particular check grazing intervals for fodder beet and harvest intervals for red beet.

Table 3. Restrictions for Herbicide Used in Beet Crops

Active	Example Product	Restriction
chloridazon	Pyramin DF	A maximum total dose of 2.6kg/ha of chloridazon may only be applied every third year on the same field
clopyralid	VIVENDI 200	Applications should be completed by end of June
ethofumesate	EFECKT, ETHOFOL, OBLIX 500 and in BETASANA TRIO, TRILOGY, OBLIX MT, TEAMFORCE, PHEMO, BETA TEAM	A maximum permitted total dose of 1.0kg/ha of active over a three year period on the same field
lenacil	Venzar 500SC	A maximum total dose of 500g/L lenacil per hectare may only be applied every third year on the same field
ACCcase inhibitor herbicides	Centurion Max, Fusilade Max, Falcon, Laser etc.	Apply only one ACCcase inhibitor herbicide to reduce risk of resistance developing. Only use a second (different) ACCcase inhibitor to control different weeds at different timings



Question of the Week!

'What is a good option for a final spray?'

Scenario 1: Volunteer potatoes and/or thistles requiring final spray and general broad leaved weed control

Suggested Programme ⁽¹⁾	Actives	Comments
BETASANA TRIO 2.0L/ha + SHIRO 20g/ha + VIVENDI 200 0.5L/ha	phenmedipham desmedipham ethofumesate triflusaluron-methyl clopyralid	Will be useful for mayweeds as well as thistles and volunteer potatoes

Scenario 2: Weed control good, final spray required before canopy closure

Suggested Programme ⁽¹⁾	Actives	Comments
BETASANA SC 1.75 – 2.0L/ha + EFECKT ⁽²⁾ 0.6 – 1.0 L/ha	phenmedipham ethofumesate	A cost-effective final spray with good contact activity, useful where formulated mixes are not readily available
BETASANA SC 1.75 – 2.0L/ha + EFECKT ⁽²⁾ 0.4 – 0.8L/ha + SHIRO 10 – 20g/ha	phenmedipham ethofumesate triflusaluron-methyl	Addition of SHIRO will add to control of larger brassica weeds

Scenario 3: Panicking because weed control is not as good as it should be and wide range of weed species!

Suggested Programme ⁽¹⁾	Actives	Comments
BETASANA TRIO 2.5L/ha + SHIRO 30g/ha + BETTIX FLO SC 0.5L/ha + Venzar 500SC 0.4L/ha	phenmedipham desmedipham ethofumesate triflusaluron-methyl metamitron lenacil	Broad-acre approach that will cover most weeds
BEETUP COMPACT SC 2.0L/ha + SHIRO 20g/ha + Venzar 500SC 0.4L/ha + EFECKT ⁽²⁾ 0.4 – 0.8L/ha + BETTIX FLO SC 0.5L/ha	phenmedipham desmedipham triflusaluron-methyl lenacil ethofumesate metamitron	Broad-acre alternative approach to using BETASANA TRIO.

⁽¹⁾ Suggested products are based on the UPL beet herbicide range. BETASANA TRIO (ethofumesate, phenmedipham, desmedipham) BEETUP COMPACT SC (phenmedipham, desmedipham), SHIRO (triflusaluron-methyl), EFECKT (ethofumesate), BETTIX FLO SC (metamitron) and BETASANA SC (phenmedipham). To all of the above add in oil according to temperature.

⁽²⁾ Do not exceed the 1000g ai of ethofumesate over a three year period on the same field restriction

Strengths of Beet Herbicide Actives

Where specific weeds are a problem then it is worth checking out the strengths of individual actives – only 10 are currently registered for use in the UK (Table 4). Tailor final herbicide applications to suit key weed species present.

Table 4. Strengths of Post-emergence Herbicide Actives

Active(s)	Product Examples	Strengths
ethofumesate	EFECKT, OBLIX 500, ETHOFOL	Cleavers, knotgrass, black bindweed
lenacil	Venzar 500SC	Brassica species, black bindweed, knotgrass
metamitron	BETTIX FLO SC	Mayweeds, knotgrass, small nettle, fat-hen, annual meadow grass
phenmedipham	BETASANA SC	Black bindweed, fat-hen, charlock, ivy-leaved speedwell
triflusaluron-methyl	SHIRO	Brassicac, fool's parsley, cleavers, mayweeds
desmedipham + phenmedipham	BEETUP COMPACT SC	Useful in dry, cold conditions
clopyralid	VIVENDI 200	Volunteer potatoes, thistles, mayweeds
quinmerac + dimethenamid-p	Tanaris, Topkat	Crane's bill, chickweed, cleavers, mayweed, speedwell, shepherd's purse

BASIS points for the technical information provided by this series of updates are CP/67237/1819/g.

To claim them email assistant@basis-reg.co.uk.

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