

Beet Crops

Technical Update 06

17 June 2019

UPL Europe Ltd, beet trials – Suffolk 2019

This is the final beet bulletin for 2019 as spraying is complete on the UPL sugar beet herbicide trials, and weeds in the untreated plots are romping away! Table 1 provides details of the spray timings at the trial sites. Tours of the site are now in progress, with some interesting wet weather gear being modelled! Visits will continue until the middle of July, so please get in touch if you would like to see the work we have been doing.

Recent weather has been **VERY** wet and relatively warm which means any late germinating weeds are putting on soft growth and should be relatively easy to control with a final spray when conditions allow. Most canopies are now closing but there are a few "gappy" ones around especially in the fodder beet crops which tend to be later drilled, volunteer potatoes and thistles may also require a final spray.

Recently we were lucky to have David Foster (Desangosse) visit the trials sites with his 'High speed continuous excitation fluorimeter', also known as the 'Handy P', very exciting. It was interesting to see that the photosynthetic index (PI) varied between treatments, much lower readings were obtained where lenacil and triflurosulfuron-methyl had been used at very early stages compared to plots that remained untreated or had received kinder sprays at the T1 timing. Further information during winter technical updates on this, but useful information when crop emergence is variable, frosts are forecast, and kinder herbicide actives and adjuvants are required.



Visitors from UPL New Zealand



Cheap and cheerful water proofs!



Checking the photosynthetic index (PI.) of the crop.

Table 1. Spray timings of UPL Sugar Beet Trials 2019 – Suffolk

Location	Pre-em	1st Post-em	2nd Post-em	3rd Post-em	4th Post-em
Mendlesham	—	23.04.19	01.05.19	19.05.19	—
Yaxley Varieties	—	23.04.19	01.05.19	18.05.19	31.05.19
Yaxley Screen	—	17.04.19	30.04.19	18.05.19	—
Yaxley Programmes	03.04.19	17.04.19	30.04.19	18.05.19	31.05.19

Beet yellows virus (BYV) and Beet mosaic virus (BMV)

Dr Mark Stevens from the BBRO visited the UPL beet trials this week, to look at herbicides but we couldn't stop him spotting the first symptoms of virus in a commercial crop and not just BYV, BMV as well! Hopefully sprays have prevented secondary spread. Check out [BBRO Beet twitter for a photo](#).

Yield effect from BMV is much less than those caused by virus yellows, with losses seldom exceeding 10%. Symptoms first appear as vein clearing and small chlorotic spots on the heart leaves, followed by paler green patches on all the leaves.

Insecticides

A number of plots at the trials site were sprayed with the following combinations a few weeks ago:

- Centurion Max (clethodim) + Teppeki (flonicamid) +/- water conditioner
- Centurion Max (clethodim) + Biscaya (thiacloprid) +/- water conditioner

No issues with compatibility were experienced and no visual crop effects were observed. UPL will review data from this trial and others within Europe, and hopefully for 2020 we will be able to give full physical and crop safety support for these tank mixes if approvals for these insecticides on the beet crop remain available.

Latest information on desmedipham

The Standing Committee on Plants, Animals, Food and Feed (SCoPAFF) voted on desmedipham in late May with a qualified majority for non-renewal. As yet we do not know what the use-up dates will be in the UK. It will take some time for an official publication to be produced at EU level followed by an announcement by Chemicals Regulation Division (CRD) in the UK. It is expected that there will be a 6-month sell-out period for manufacturers and distribution followed by another 6 months for the farmer to use all desmedipham based products. – **There should therefore still be a season in 2020 for desmedipham containing products.** This is what we expect, but more certainty can only be given once the CRD has published their national decision on the withdrawal periods.

Sadly, I can remember carrying out weed control in beet crops before desmedipham was introduced and we managed! During the last three years UPL has been carrying out herbicide trials in beet looking at a number of herbicide programmes that do not contain desmedipham – final weed assessments have to be carried out but lots of promising results using UPL products and also some tank mix options with competitor products. Perhaps the phrase going ‘back to basics’ is appropriate.

Herbicide x Variety Interactions

The herbicide x variety interaction trial contains the Limagrain UK Ltd variety BTS4100 which sits on the 2020 recommended list with 101.8% adjusted yield and 18.4% sugar content (the highest on the list). It was useful to see that all 4 UPL herbicide programmes tested on this variety proved to be safe to the crop. It was a good test for the variety as early in the season we had variable emergence, frost and dry conditions to contend with. Useful information for next season when a significant acreage of sugar beet is likely to be drilled with this variety.

Last sprays for broad leaved weeds

There are a few sugar beet crops and quite a few fodder beet crops where last sprays are required. In fact, some phone call/texts and emails this week from fodder beet growers where first sprays have yet to be applied! In this situation, it is best to go for a ‘Broadacre approach’ if weeds and beet are getting big and follow up as soon as labels allow with a second spray. Table 2 is included again this week as a reminder of ‘Broadacre programmes’ supported by UPL from beet 1st true leaves 1cm stage. However, IF the beet is under any kind of stress, i.e. swimming in water then delay spraying with ‘Broadacre’ and use a kinder holding programme until conditions allow a stronger approach.

Table 2. Broadacre programmes supported by UPL from beet 1st true leaves 1cm, but avoid spraying stressed beet

Option	Products	Rates/ha	Comments
1	BETASANA SC + SHIRO + Venzar 500 + BETTIX FLO SC + EFECKT + Oil	1.5 + 20g + 0.4 + 0.5 + 0.45	Option that excludes use of desmedipham.
	BETASANA SC + SHIRO + Venzar 500 + BETTIX FLO SC + EFECKT + Oil	1.5 + 20g + 0.4 + 0.5 + 0.45	
2	BETASANA TRIO + SHIRO + Venzar 500 + BETTIX FLO SC + Oil	2.0 + 20g + 0.4 + 0.5	Reduces the number of products used by using Betasana Trio.
	BETASANA TRIO + SHIRO + Venzar 500 + BETTIX FLO SC + Oil	2.0 + 30g + 0.4 + 0.5	
3	BEETUP COMPACT SC + EFECKT + SHIRO + Venzar 500 + BETTIX FLO SC + Oil	2.0 + 0.4 + 20g + 0.4 + 0.5	Allows flexibility in the rate of ethofumesate that is being applied.
	BEETUP COMPACT SC + EFECKT + SHIRO + Venzar 500 + BETTIX FLO SC + Oil	2.0 + 0.4 + 30g + 0.4 + 0.5	
4	BETASANA SC + SHIRO + VIVENDI 200 + BETTIX FLO SC + EFECKT + Oil	1.5 + 20g + 0.25 + 0.5 + 0.4	Useful if thistles or volunteer potatoes are present.
	BETASANA SC + SHIRO + VIVENDI 200 + BETTIX FLO SC + EFECKT + Oil	1.5 + 20g + 0.25 + 0.5 + 0.4	

BETASANA TRIO = phenmedipham + desmedipham + ethofumesate. BEETUP COMPACT SC = phenmedipham + desmedipham
 BETASANA SC = phenmedipham. BETTIX FLO SC = metamilon. SHIRO = triflusaluron-methyl. VIVENDI 200 = clopyralid.
 EFECKT = ethofumesate. Venzar 500 = lenacil

A final reminder that for ethofumesate the following applies ‘a maximum permitted total dose of 1.0 kg/ha of active over a three-year period on the same field must not be exceeded’. Don’t forget to consider any ethofumesate applied to previous crops such as wheat (as in Xerton) and herbage seed crops.



Centurion Max in Fodder Beet

A reminder that Centurion Max (120 g/L clethodim) can be used in fodder beet and red beet, this is covered by an extension of authorisation for a minor use of a plant protection product, fondly known as an EAMU. A copy of the EAMU is available from www.hse.gov.uk/pesticides. EAMU No. 2727 of 2017.



Brucie the emu

Table 3. Centurion Max in fodder beet and red beet

Crop	Maximum individual dose L/ha	Maximum number of treatments (per crop)	Latest time of application
Fodder beet, red beet	0.8 (when weeds are at the stage of 2-5 true leaves)	1 (BBCH 12-35)	When plants have covered no more than 50% of interrow. 56 days before harvest.
OR			
Fodder beet, red beet	2.0 (when weeds are at the stage of 4-6 true leaves)	1 (BBCH 12-35)	When plants have covered no more than 50% of interrow. 56 days before harvest.

In all crops to avoid the build-up of resistance, do not apply products containing an ACCase inhibitor herbicide more than twice to any crop. Applications of Centurion Max should be in a minimum water volume of 200 L/ha.

If you require further technical information on the UPL beet product range then please contact me at pam.chambers@upl-ltd.com.

BASIS points for the technical information provided by this series of updates are CP/84152/1920/g. To claim them email assistant@basis-reg.co.uk.

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