

Beet Crops

Technical Update 04

10 May 2017

UPL Europe Ltd, Annual Broad-leaved Weed (ABLW) Sugar Beet Trials – Suffolk 2017

Conditions continue to be dry and cool with rainfall amounts variable across the beet growing regions. There is a mixture of crops with some looking very well with 6 true leaves plus, others continue to struggle and in some cases are still to germinate. Variable crop growth stages within the field are causing some headaches regarding herbicide choices, but don't delay spraying especially where weeds such as knotgrass are present. It is worth doing a quick germination test to determine viability of seed that has not yet emerged, use damp kitchen towel/tissue and a warm environment. Photo 1 shows "chitted" seed after incubating (Source: Dr. G Champion). The three UPL trials sites are progressing, a summary of activity at the three sites is given in Table 1. All three sites are due to receive herbicide treatments this week.



Photo 1. Chitted sugar beet seed

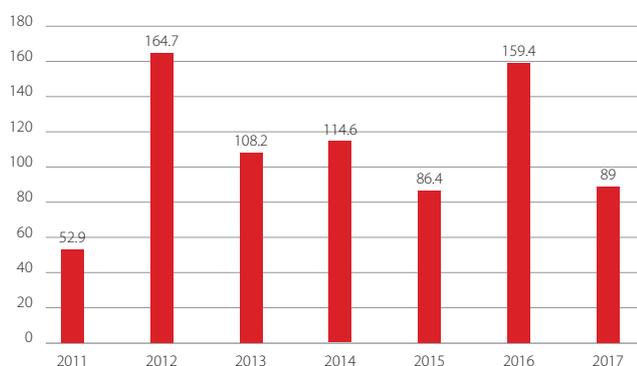
Table 1. Details of Sugar Beet Trials 2017 – Suffolk (6th May 2017)

Location	Drilling Date	Crop Growth Stage	Pre-em	1st Post-em	2nd Post-em
Mendlesham 1	28.03.17	4 true leaves	30.03.17	19.04.17	
Mendlesham 2	24.03.17	4 true leaves	28.03.17	19.04.17	
Yaxley	16.03.17	6 true leaves	25.03.17	11.04.17	20.04.17

Weather Conditions in East Anglia

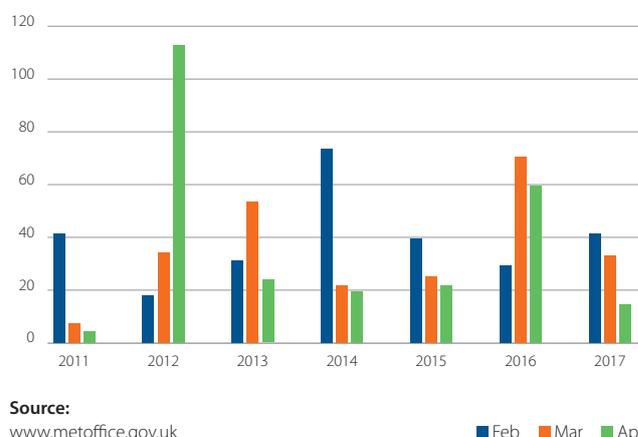
Total rainfall for the months February – April inclusive for East Anglia (Graph 1) show that conditions are very dry compared to last season. The total rainfall for April was almost as low as 2011, which was very dry and warm (Graph 2). Mean temperatures for East Anglia (Graph 3) show a warm start but then a cooler April with some hard frosts in some areas. In summary, this season the recent cool and dry conditions are proving difficult for some crops drilled in the later part of April and weeds are more difficult to control this season compared to last year.

Graph 1. Total Rainfall (mm) for East Anglia (Feb – Apr)



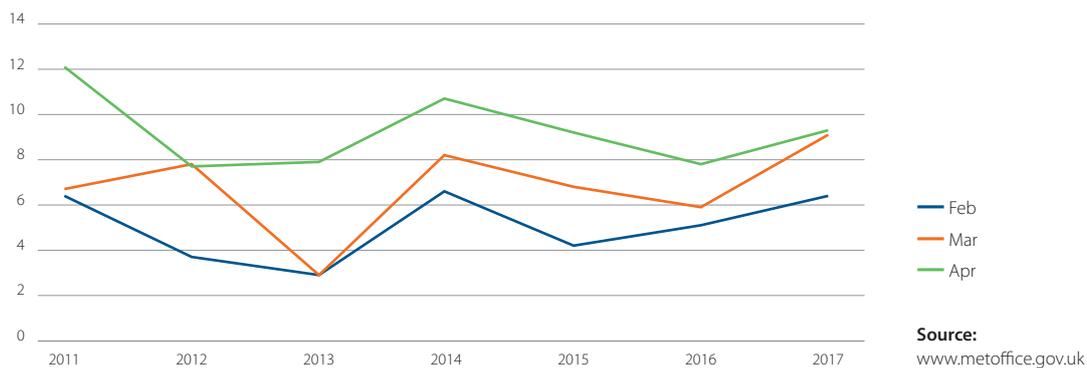
Source: www.metoffice.gov.uk

Graph 2. Monthly Rainfall (mm) for East Anglia (Feb – Apr)



Source: www.metoffice.gov.uk

Graph 3. Mean Temperatures (°C) for East Anglia (Feb – Apr)



Key Points for Weed Control in Beet Crops in the Current Dry and Cool Conditions

- Keep spray intervals close if herbicides are not performing as well as expected, inspect fields 3 - 4 days after spraying to check for efficacy.
- Include desmedipham in the programme, don't rely on straight phenmedipham products. Products such as **BEETUP COMPACT SC** (phenmedipham + desmedipham) are useful tank mix partners.
- The formulation of herbicides can also have an impact on weed control with EC (emulsifiable concentrates), often being slightly more effective on tougher weeds. Be careful with the use of adjuvants when using EC products as they can be hot on the crop.
- Aim to control difficult weeds such as knotgrass and persicaria at the cotyledon stage, do not allow to get to the 2 leaves stage. See Technical Update No. 3 for options where variable beet growth stages are an issue.
- Metamitron e.g. **BETTIX FLO**, and lenacil e.g. Venzar Flowable are useful for knotgrass and lenacil for black-bindweed control even in dry conditions.
- Low doses of triflusaluron-methyl e.g. Debut/**SHIRO** are effective on brassica weeds but they will definitely perform better if an adjuvant oil is included.
- Continue to include metamitron e.g. **BETTIX FLO** in a programme if fat-hen is expected.
- Mineral oils will be harsher than vegetable oils on the crop and weeds. Where difficult weeds are 'getting away' and the crop is able to stand it, then consider mineral oils. Do not use a mineral oil if the crop is still emerging or with an EC formulated product early on. If in doubt, obtain advice from British Sugar Fieldsmen/BBRO or Manufacturers on permissible options.
- Where volunteer potatoes and thistles are emerging, clopyralid e.g. Dow Shield 400/**VIVENDI 200** should be used to control these weeds, although this active does work better in warm and moist conditions. Remember these products are different strengths, where Dow Shield 400 is applied at 0.25L/ha then the equivalent rate of **VIVENDI 200** is 0.5L/ha.

Grass Weed Control

Grass weeds, i.e. black-grass and wild oats are present in crops, but control, if possible, should be delayed until we receive some rain, but this will depend on growth stage and if the weed is actively growing or not. Aim to control black-grass before it starts to tiller but take into account emergence and growth of the weed. In hard water areas consider using a water conditioner, especially where Centurion Max is being used for black-grass control. Apply the water conditioner to the tank prior to the graminicide.

Herbicide Restrictions

- Don't forget that a maximum permitted total dose of 1.0kg/ha of active over a three-year period on the same field applies to ethofumesate.
- Remember, applying a second product containing an ACCase inhibitor to a crop will increase the risk of herbicide resistance development; only use a second ACCase inhibitor to control different weeds at different timings. This is of particular relevance where cover crops are being removed. Examples of ACCase inhibitors are; Centurion Max, Falcon, Fusilade Max, Laser and Panarex.

BASIS points for the technical information provided by this series of updates are CP/51900/1617/g. To claim them email assistant@basis-reg.co.uk.

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