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Seasonal Update

Day Degree accumulation to the 14th November.

District	Season 06/07	Season 05/06	Season 04/05	Hot Days	Hot Day Percentile
Emerald (from 15 th September)	738	806	835	8	40 th (30/50)*
Theodore (from 25 th September)	594	675	643	9	80 th (11/50)*

Crop Stages versus Day Degree Accumulation.

Emerg.	5 th leaf	1 st Sq	1 st Flow	Peak Flow	Cracked Boll	60% open
80	330	505	777	1302	1527	2050

*Refers to the No. of years in the last 50 that we have had the same number of Hot days within the same period.

Crop Water Use

Table 1 gives the calculated Evapotranspiration figures for the last 10 days. These calculations are based on a crop that was planted on the 15/9/06 in Emerald and 25/9/06 in Theodore. The evaporation data has been extrapolated from FAO56 figure's that are available from the Bureau of Meteorology website (www.nrw.qld.gov.au/silo/ppd/)

Table 1. Crop Water Usage

Date	Emerald (mm/day)	Theodore (mm/day)
4/11/06	4.8	2.7
5/11/06	6.1	3.5
6/11/06	6.8	3.9
7/11/06	6.9	4.2
8/11/06	7.3	4.3
9/11/06	5.4	3.5
10/11/06	5.8	3.5
11/11/06	6.6	4.6
12/11/06	8.5	5.7
13/11/06	9.6	6.0
14/11/06	7.5	4.9

These figures can be used as a rough guide for irrigation scheduling for those people who do not have access to soil moisture probes. As the days get hotter and the crop moves into peak flowering the above numbers could help to plan irrigation intervals.

Obviously these numbers are theoretical and do not take into account periods of stress; such as the water logging that occurs straight after an irrigation. The calculations are assuming an ideal growing environment. These numbers are an indicator of how quickly the plant is having to move water through its system.

What is worth noting is how the numbers change in relation to periods of hot weather and the stage of crop development. For example the crop in Emerald has accumulated 738 day degrees (as above) therefore it is getting close to flowering and you would expect the crop canopy to be close to 75% of ground cover, this has a major impact on how much sunlight it is intercepting and therefore how much water it is using.

Alternatively the crop in Theodore has accumulated nearly 600 day degrees therefore its crop factor would be less as it would be only 9-10 nodes and have a canopy of somewhere between 35%-45% of ground cover.

If you would like further information on this data please do not hesitate to give me a ring on the above numbers.

In Crop herbicide options for Pigeon Pea

The RMP for transgenic cotton dictates that all refuge crops should be planted within 2 weeks of Bollgard cotton being planted.

This means that most pigeon pea trap and refuge crops should be planted by now and well established; with the Bollgard planting window now closed. Therefore it may be an opportune time to review the herbicide options for Pigeon pea.

Options for Pre-plant residual herbicides include:

1. Prometryn (eg. Gesagard 500SC). Apply at label rates and incorporate (Up to 4.5L/ha)
2. Trifluralin (eg. Trifluralin 480) Apply at label rates and incorporate (Up to 2.3L/ha).
3. Pendamethalin (eg. Stomp Xtra). Apply at label rates (1.8 to 2.2L/ha).
4. Metribuzin (eg. Sencor 480 SC). Apply at label rates (750ml/ha).

Options for In Crop application include:

For Broadleaf weeds.

1. Metribuzin (Sencor 480SC). This chemical is really the only option for an over the top application @ 750ml/ha.
2. Prometryn (Gesagard 500SC). This chemical should be applied as a directed spray towards the base of established plants. Use label rates

For Grass weeds.

1. Butoxydim, Sethoxydim. (Falcon 180g/ha, Sertin 1.6L/ha). Both come from the DIM's group of selective herbicides. Can be applied over the top. Use specified rates.
2. Fluazifop-p, Haloxypop. (Fusilade 1L/ha, Verdict 600ml/ha). Both come from the FOP's group of selective herbicides. Can be applied over the top. Use specified rates.

Last but not least, cold steel (interow cultivation) is always an effective option.

Make sure you read the labels before applying any of these herbicides. Some of these options are on a specific APVMA application permit (PER7942) so the label may not have all the application rates. Use the APVMA website if you need further details (www.apvma.gov.au).

DCCA Water Use Efficiency Incentive Scheme

Growers in the Dawson Catchment should be aware that there is now funding available to undertake measures to improve water use efficiency such as the purchase/lease of soil moisture monitoring probes. If you are interested please contact Jennifer Gleeson (DCCA) on (07) 4993 1004.

Date Claimers

Wednesday 22nd Nov – Research Update for CQ Cotton Farming systems project. 4:00pm @ Ag College.

Thursday 30th Nov – Closing date for enrolments into the Cotton Production course at UNE for 1st semester 2007. Contact Dr. John Stanley 0428 223 332 or UNE on (02) 6773 3758.