



Day Degrees

The Cotton CRC website has a day degree calculator that you can use to calculate the day degrees for your particular region and planting date. Go to

<http://tools.cotton.crc.org.au/Tools/Agronomy/SILODayDegCalc.htm>

Regional Update

There has been approximately 4000ha of cotton planted in the Macquarie Valley this season. The majority of this (3000ha) is being irrigated from bore water. The remaining area has been planted on rain moisture or stored on farm water and will be looking for some significant rainfall events to get it through to harvest. The crops are currently at the 10 node stage on average. Early season cool temperatures combined with seedling disease and thrip pressure to slow early season growth in some areas but with the warmer weather crops have since recovered from this and are growing well. There were also some instances of wireworm damage in crops. Early season Heliiothis and aphid pressure has been light so far.

The early planted crops are currently coming up to their first irrigation, while some lucky growers have received significant storm activity and may be able to hold off the first irrigation until just before Christmas.

Let's hope this current rain keeps up and we see some significant falls both on farm and in the catchment!

Egg and Larvae Collection Kits

Egg collections are an important tool for the cotton industry and are used for both insecticide and Bt resistance monitoring. Eggs can be collected from *any* host crop (e.g. cotton, sorghum, maize, pigeon pea) so please contact your extension officer ASAP if there is a

significant egg lay on your property so that collection can occur.

Kits are also available for *Helicoverpa* larvae collection. We are interested in collecting any large larvae (>6mm) found on Bollgard II® crops for resistance testing. *Please contact your extension officer immediately if there is more than 1 large larvae per 2 metres in any Bollgard II® field.*

Larvae can also be collected for testing if you have an insecticide spray failure that you suspect may be due to resistance.

Risk of Herbicide Damage in Cotton Crops

With the recent storm activity, many growers are considering summer fallow sprays for weed control. Careful consideration should be given to herbicide choice, neighbouring crops and weather conditions. When considering herbicides for weed control it is important to know your neighbours and what susceptible crops are located close by. Weather conditions, timing and spray application is critical when using herbicides to minimise drift. Cotton crops are particularly sensitive to 2,4-D herbicides and non Roundup Ready® crops are sensitive to glyphosate.

An Herbicide Damage Identification and Information Guide can be found on the Cotton CRC website at: http://web.cotton.crc.org.au/content/Industry/Publications/Weeds/Herbicide_Damage_Identification_and_Information.aspx. WeedPAK, also available on the Cotton CRC website, contains a lot of useful information on weed identification and control.

Cotton Australia has put together the following information on the Risk of 2,4-D Damage to Cotton Crops.

Cotton along with a number of other summer crops is susceptible to damage from exposure to 2,4-D herbicides. In most cases damage is caused by the off target movement of 2,4-D herbicide onto cotton by way of vapour drift or droplet drift. The conditions which contribute to drift are well documented and readily available. Product labels for 2,4-D products now contain details of the more important factors which will contribute to drift and provide information as to how risk of drift may be minimized.

Among other things the following must be considered when applying 2,4-D herbicide products:

- Appropriate meteorological conditions
- Risk assessment to determine the risk of movement to nearby crops
- Appropriate 2,4-D product or formulation
- Communications with neighbours

Restrictions On The Use Of High Volatile 2,4-D Esters

In 2006 the Australian Pesticides & Veterinary Medicines Authority (APVMA) conducted a review of 2, 4 – D herbicides and as a result of this review, significant restrictions were placed on the use of the **high volatile ester** formulations. From the cotton industry's point of view, the most significant restriction includes:

1. The registrations and label approvals of products containing 2, 4-D ethyl, butyl and iso- butyl esters are suspended. Use is permitted under permit; however the permit has a number of conditions attached.
2. Applications of 2, 4-D ethyl ester, butyl ester or isobutyl ester must only take place during a spray window between **1 May and 31 August**.

IT IS A LEGAL REQUIREMENT THAT NO HIGH VOLATILE ESTER APPLICATIONS TAKE PLACE DURING THE COTTON SEASON

What to do if you suspect herbicide damage

1. Have a qualified agronomist inspect the suspected damage ASAP to establish the cause of the problem and have this person make an official record of what they observed. Photographs and samples may be useful.
2. Establish as accurately as possible when the off target herbicide may have contacted your crop and attempt to obtain accurate weather data for that time and record this data. Damage may appear within 24 hours of contact. If odour has been detected, the time of this occurrence should be recorded.
3. Attempt to establish the source of the herbicide drift. Check the possibility that more than one application has been made in the area at that time.

4. Report the matter to Cotton Australia GSM's or your Regional Cotton Extension Officer.
5. If you consider the damage serious or the result of an unlawful act such as use of high volatile ester outside the use window, the matter should be reported to the appropriate regulatory authority in your state (NSW DECC/EPA or QLD DPI). This should also be done without delay.

Secondary Action

1. Continue to have an agronomist document the progress of the crop/damage on a regular basis.
2. If preliminary enquiries indicate a commercial applicator (aircraft or ground applicator) is involved, then legal advice should be obtained to look at a possible claim on any off target drift insurance.

Adverse Experience Reporting Program

The Australian Pesticides and Veterinary Medicines Authority (APVMA) conducts the "Adverse Experience Reporting Program " which encourages people impacted adversely by pesticide use to provide details of the matter to the APVMA. Cotton growers who have crops affected by herbicides are encouraged to submit a report to this program. Information collected is used to identify recurring problems with specific pesticides. Remedial action is formulated from these reports.

For details on submitting a report, contact Cotton Australia Limited (Local GSM) or the APVMA.

FOR FURTHER INFORMATION CONTACT:

Cotton Australia Toowoomba Office: 07 4639 4908
Narrabri Office: 02 6792 6041