Cotton Catchment Communities CRC

COTTON *TALES*

Darling Downs

Queensland Government Department of Primary Industries and Fisheries

2007/08
9.
18/12/07

Kate Charleston, Regional Cotton Extension Officer, 4669 0815
Jenelle Hare, Senior Technical Development Officer (RWUE), 4669 0825
Geoff McIntyre, Principal Extension Officer Cotton, 4669 0801

Calling for volunteers

As part of the process to benchmark water management in the cotton industry the Cotton CRC Water Team are using WaterTrack Rapid to assess the performance of the 2006/07 crop. This is an ideal opportunity to evaluate this new benchmarking tool and assist the industry to establish water management benchmarks.

We are seeking five growers who are willing to be interviewed by David Williams, from NSW DPI and the Cotton CRC Water team. David will collect information which will be entered into the WaterTrack Rapid program on site. We are looking for data relating to the 2006/07 season and inputs will include storage volumes and soil water deficits at the start and finish of the season. Rainfall data can either be from records kept, local DDCGA weather stations or from SILO data. Some points to note are:

- Aquatech will retain the data as it is entered into their system and this is part of the trade-off for access to their software.
- From our point of view (DPI) growers will remain anonymous and we will collate the data and provide each participant with information showing where they sit in their valley and also where they sit with all growers in NSW and QLD that are being interviewed. The growers will receive a copy of their water summary report and performance indicators.

Please contact Jenelle Hare on 46690825 if interested in helping out with this task.

Herbicide damage to crops

The wetter winter has resulted in large weed infestations in both crops and fallows on the Darling Downs.
When making fallow spray decisions careful consideration must be given to herbicide selection, sensitive crops within the area and spray application conditions. At temperatures over 28 degrees C and low humidity, evaporation rates increase and droplets lose size and mass. This increases potential product loss from the target and reduces spray efficiency. Up to 40 percent of the herbicide may not reach the intended target under these conditions. This means that your herbicide has ended up somewhere other than on your weeds and could likely do damage to crops.

Herbicide damage to summer crops such as cotton and sorghum has been an issue in recent years.
There have been reports of hormone damage to cotton on the Darling Downs this season. One question often asked is how this damage will impact on yield.

Damage levels are influenced by the plant development stage, the rate it received and growing conditions. Herbicide symptoms in a crop do not always mean disaster and can have little impact at the end of the season.

Trial work in the 1990's showed that yield decline in cotton was greatest if exposed to 2,4-D.

1 day after exposure to 2,4-D *42 days after exposure to 2,4-D*
Initial exposure causes bending and twisting of petioles and a wilted appearance. (Photos courtesy of Cotton Catchment Communties CRC).

Herbicides such as 2,4-D are cost effective herbicide options for fallow weed control. Current label requirements for the use of 2,4-D herbicides limit application to coarse to very coarse spray droplets and within wind speeds of 3 - 15 kph. Growers should ensure that the nozzles they use meet this requirement. Standard flat fan nozzles are not suitable.

Highly volatile ester (HVE) formulations of 2,4-D have been restricted with a suspension of these products. Suspensions are in effect from the beginning of September until the end of April.

Consider all herbicide options and minimise exposure to 2,4-D to reduce the risk of damage to susceptible crops such as cotton.

Under the Pesticides Act weather conditions and relevant spray details must be monitored and recorded for each chemical application. Spray Log Books can be purchased from QDPI&F at $6.60 each plus postage and handling. Contact DPI&F on 4688 1460.

Merry Christmas

We wish all our readers a very merry and safe Christmas and all the best wishes for 2008.