Cotton Catchment Communities CRC
NSW DEPARTMENT OF PRIMARY INDUSTRIES

COTTON *TALES*

Gwydir Valley *"What's happening in the north west"*

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2006/07
6.
6/12/06

Incentives for irrigation evaluations

The Border Rivers-Gwydir Catchment Management Authority has incentive funding to put toward undertaking evaluations of irrigation systems as part of the National Action Plan for Salinity and Water Quality. The aim is to assist land managers to increase water use efficiency.

To start the process, the CMA is seeking Registrations of Interest (ROI) from landholders who would be interested in receiving some funds towards having an evaluation/s undertaken on their property.

The ROI will be used to determine the level of interest in irrigation evaluations and whether funding will be directed towards incentives for irrigation evaluations. So far there have been few responses and if there is insufficient interest then funding may be directed to other activities.

Landholder details provided in the ROI will not be used for any purposes other than in regard to the evaluations and will not be given to anyone else without gaining landholder's approval to comply with the Privacy Act.

To register interest, landholders must fill out an ROI and return it to the Inverell CMA Office before Dec 11th 2006. To obtain a ROI or if you have any questions contact Nicole Gammie at the Inverell CMA office on 6721 9841.

Water use and scheduling of Bollgard II®

Thanks to Stephen Yeates and Dirk Richards for the following information.

CSIRO research carried out over the 2004-05 and 2005-06 seasons compared the impact on yield and fibre quality (particularly staple length and micronaire) of increasing irrigation deficits at four crop stages on both Bollgard II® and conventional cotton. The following conclusions could be drawn from this:

Key Points

- Soil moisture extraction under fully irrigated conditions was the same in Bollgard®II and conventional varieties, except where season length allowed later crop and leaf growth in the conventional variety.
- Bollgard®II grown under fully irrigated, that is soil water deficits averaging 60mm, required 6.3ML/ha of irrigation water as opposed to 7.0ML/ha for the conventional full irrigation treatment.
- **Yields and soil water extraction of Bollgard®II and conventional cotton were the same when moisture stress occurred at early flowering**. However a significant yield loss occurred when compared to fully irrigated.
- With full irrigation, Bollgard®II had the same yield or higher yield than conventional cotton but matured earlier due to more rapid boll setting.
- **Bollgard II was less able to compensate for water stress, particularly from peak flowering to cutout.**
- A greater reduction in water use efficiency was apparent in Bollgard®II where moisture stress was experienced at or close to cut-out, except where late season rainfall alleviated this stress.
- The differences between Bollgard II® and conventional could be explained by a more rapid accumulation of yield due to higher retention and lower levels of terminal damage.
- Increasing deficits towards the latter part of the crop or reducing the final irrigation did not have a large impact in the one trial where this was included due to some beneficial rainfall at the end of this season.
- Micronaire is a complicated measure and very difficult to predict, however water stress during the fruiting period can have the tendency to increase micronaire.
- Research in 2006/2007 is focusing on optimising scheduling of Bollgard for yield and water use efficiency

  For more information, contact Stephen Yeates or Dirk Richards on 02 67991500.

Egg collections for resistance testing

Once again our entomologists are looking for Helicoverpa eggs for resistance testing. I realise that Helicoverpa pressure is currently low but if anyone does see any Helicoverpa pressure in crops can you please let me know so I can arrange for some egg collections. Alternatively if you can collect any eggs they can be dropped off to me at the NSW DPI office. It is best that this happens Monday–Wednesday so that there is time to get them to Narrabri before the weekend.