In Case You Missed It...

Soil Compaction Field Day

Way back in March, we had a look at 5 soil pits on the Compaction Remediation Trial at Red Mill, which was conducted through the Grass Roots Grants program at CRDC. The 5 pits were dug over the 5 treatments of ripping, vetch, safflower, irrigated wheat and dryland wheat, with the aim of assessing how effective each treatment is at remediating compaction. Dr Michael Braunack from CSIRO provided us with his summary of the results:

“My take is that rotation crops differ in their ability to dry the profile to depth, with Safflower being better than dryland wheat (not by much) and that vetch has little impact on profile drying and the effect of ripping is restricted to the rip line. This suggests that soil moisture at the time of ripping is crucial in determining the result. Growers need to assess soil moisture to below the depth of ripping and ensure that it is lower than the soils plastic limit; as determined by the rod test.”

This trial will be monitored into the future, to determine if there are any differences between treatment sites on subsequent cotton crops.

The Gwydir CGA now has 4 steel boxes that can be used to complete the white paint test. The test will give you an idea of where your moisture is going, any obvious layers of compaction and root development. Growers are free to borrow the boxes and a protocol on how to carry out the test.

The Grassroots Grants Program provides $10,000 for grower driven projects to be conducted through the Cotton Growers Associations. The Gwydir CGA is currently compiling project ideas to apply for Grassroots funding. If you have a project idea please let me know, as the funding is distributed on a first in first served basis.
Agro Update with Ben Dawson

What is keeping you busy at the moment?
Resistance management audits, conducting pupae busting inspections. Everyone’s done a really good job this year, we haven’t had any major issues for the 14/15 season.

Tell me something that has had you puzzled or challenged recently.
Defoliation rates and timing. The general trend is that we’re defoliating more times, what can we do to minimise the passes? Should we be doing or using something different?

What should growers be thinking about at the moment?
Even with the low water availability, still ensure good ground prep is done, pre plant fertilisers should go out now so you can take advantage of any water that becomes available. In particular, be prepared for dryland cotton planting opportunities.

Thanks Dawson and good luck in the Australian Cotton Awards as our local Young Achiever nominee!

Research Update

Back in April, researchers involved in the Emissions Reduction Fund Reference Panel gathered together in Moree to provide updates on their research. Here are a few interesting updates that I picked up:

- Ian Rochester’s been looking at timing and placement of N. He’s been looking at split applications and found significant decreases in Gross Margin, the later the N is applied in the season. Rocky suggests putting the whole amount down up front so that it’s there for when the crop needs it. This raised discussion around the issue of losses too. Best practice may be deep placement pre sowing into cool soil.
- Ben Macdonald presented indirect nitrous emissions in irrigation results (Red Mill, Moree trial). Found no significant differences between 3 rates in emissions. Total loss through irrigation was 44kg N/ha – but 3 irrigations weren’t sampled so total losses would’ve been higher.
- Ben also looked at N residence time in tail water. By 1 day after irrigation, 50% of run off N remaining in tail water, 20% by day 3. Going to continue this work at Moree trial next season.
- Mike Bell has (in his words, finally) had a response to P in cotton. With deep bands of P, he saw early response, up to peak flowering. Response gradually disappears afterwards. Similar results from K studies. He wonders if this is a function of the cotton root system per se, or the irrigation system on root function in the hill? His current research is looking at whether foliar application can get around inefficient access to soil P & K.
- David Rowlings has looked at enhanced efficiency fertilisers (ie slow release). Found need to be able to reduce N rate by 20% to make using these products cost effective.

Trial Update

The results from the Red Mill trial looking at variable rates and N losses from the soil and through irrigation water are coming together and building an interesting picture. There is still some analysis to go, but a few quick facts so far:

- No significant difference in yield between 363, 463 and 563 kg N/ha treatments
- Post season soil tests showed only about an additional 6 kg N/ha left from respective treatments
- Daily emissions from the highest rate treatment were up to 2.5 kg N/ha/day for a short period
- Seed N% is so far inconclusive as to the treatment effects on seed N

Once all the data from this trial is collated, the researchers will visit Moree and present to interested
The Gwydir Grower

June 2015

growers and consultants what we have found. Keep an eye out for details on this session.

![Yield by Treatment Chart](chart.png)

**Nutrition Webinars**

Dr Chris Dowling and Jon Welsh presented a webinar series focused on:
- Crop nutrition – overview
- Factors affecting yield and nitrogen use efficiency
- Opportunities for growers to participate in the Emissions Reduction Fund

If you missed these webinars or would like to see them again, you can find them at [https://www.youtube.com/user/CottonInfoAust/videos](https://www.youtube.com/user/CottonInfoAust/videos)

**Updated Status of Bollgard III**

By Tom Luff

In Australia, three major regulatory approvals are required to commercially cultivate a biotech crop. Bollgard 3 has now received two of these, that from Food Standards Australia and New Zealand (FSANZ) and the Office of the Gene Technology Regulator (OGTR). The submission to the third relevant authority, the Australian Pesticides and Veterinary Medicines Authority (APVMA), has been made and we anticipate receiving this approval in late 2015.

Monsanto is also working towards obtaining all relevant approvals in countries that import cotton seed, including, but not limited to China, Korea and Taiwan. Until all of these regulatory approvals are obtained, Bollgard 3 must be grown under controlled conditions.

In the 2015/16 cotton season, Bollgard 3 will be planted under an APVMA permit and under stewarded conditions to prevent seed entering the export chain. These trials will cover a limited area and will be part of a research program conducted by Monsanto, CSD and CSIRO. Farmers have been selected to participate in the 2015/16 research trials; however there will be an opportunity for growers who are not participating in these trials to be able to view Bollgard 3 at a series of field days conducted by Monsanto and CSD. Please contact your Monsanto Regional Business Manager, Tom Luff, or CSD Extension Agronomist, James Quinn for more details.

**Aussie Cotton Farmers Grow Communities is back!**

Cotton growers can again direct $150,000 to local not-for-profit community groups or charities, thanks to the Monsanto Fund and the Foundation for Rural and Regional Renewal (FRRR).

Until 31 August 2015, cotton farmers can nominate a community group they think deserves one of thirty $5,000 grants available across 14 cotton growing regions in Queensland and New South Wales. If you aren’t a cotton grower but live in a cotton growing area, you can suggest an idea for a grower to adopt.

This year, we are pleased to announce the program is supported by a new Facebook page, which will be updated regularly with content on previous year grant recipients and the progress of this year’s program. We encourage you to like the Facebook page and share any posts with eligible cotton farmers and communities in your professional and personal networks.

Visit [http://www.aussicottonfarmers.com.au](http://www.aussicottonfarmers.com.au) to submit a nomination or suggest an idea today!

After more information from a Gwydir Grower article? Give Alice a call on 0427 207 167
Dates for the Diary

Gwydir CGA Charity Dinner & Awards Night

Thursday 16th July 6pm Max Centre Moree **Please contact Lou Gall on 6752 1399 to purchase tickets**

CSD Info Tour
- Mungindi Tues 11th Aug 10am Two Mile Hotel
- North Star (Dryland) Fri 14th Aug 4pm North Star Sportsman’s Club
- Moree Mon 24th Aug 4pm Moree Services Club
- Bellata (Dryland) Tues 25th Aug 10am Bellata Golf Club

Cotton Collective & Cotton Trade Show – 5th & 6th August Crossing Theatre Narrabri

IrriSATT Workshop – Thursday 27th August 8.30am-4.30pm Moree Services Club

After more information from a Gwydir Grower article? Give Alice a call on 0427 207 167