Welcome to the 9th edition of the Cotton Wrap!!

Dryland/ Irrigated Cotton
The multi-species cover cropping trial is in with planting completed yesterday thanks to the Kalyx team. This will run for 3 years and be planted back to Cotton after 3 years and it is being hosted by Paul Slack at “Belvedere” near Moree.

An update from Michael Josh on our limited irrigation trip last month. The crop is yet to be ginned but looks like yields will be close to that 4 bales per Ha close to expectations which is pretty good for 3 in crop water. Michael also mentioned a new machine they are using this year for pupae control.

https://www.youtube.com/watch?v=e1JHdI0-79o

Steve Carolan and Andrew Greste out at Merah North also had some different row configurations and water strategies from last year with some very good results which I will follow up for the next edition. There has generally been some pleasing results with limited water scenarios this last season. I was speaking to Andrew Gill from Narromine who is planting double skip on the flat and watering each 4 metres down between the cotton and this has improved water efficiency greatly compared to watering every second and pulling up into hills. Amanda and I will look to organise a trip down there in the next couple of weeks if anyone is interested.

CRDC Funded Projects
Management Options Enhancing Beneficial Microbial Communities and Functions in Cotton Soils - Dr Gupta Vadakattu.

There are 3 parts to the Project with;

1. Fungi populations in different soil types and areas. What affects does management have? Is there a typical population for each area? Does this have an effect on cotton growth and development?
2. What effect crop rotation has on microbes and Nitrogen transfer, mineralisation and nitrogen fixation. This across a number of different rotations at Rocky and Nilanthas’ trial sites will be utilised.
3. Compost addition, which in a laboratory experiment, has shown to improve microbial activity for a short period when applied at field rates (less than a month) and more importantly all compost’s are different. There will be analysis of different types of microbial numbers over time.

What we do know is that populations of microorganisms involved in N cycling vary between soil types and regions. Zero till will promote Fungi and the level of diversity has been shown to be high in disease suppressive soils and we know that continuous cotton soils are low in diversity. Our ability to influence pathogens like Verticillium and Fusarium may be possible with greater knowledge of these little critters.

Research
The Research Panels got together last week to discuss research directions and gaps. The process has been changed a little so that Preliminary Research Projects are not required as part of the CRDC process and the Panels will instead highlight the priorities and researchers will be asked to submit a Final Research Project based on the identified gaps from these discussions. A full list of the current research projects are on the website so follow the link to find more.


The latest Boyce Comparative analysis has also been released which is funded by CRDC.


Trials
Trials are picked and some differences are evident in one of the trials which has been to the Gin. A small summary is below.

For further information contact Geoff Hunter on 0458 142 777
The Bellevue Pix trial has just been picked so here are a couple of graphs from the report.

### Yield bales/ha
(Estimated from 5m hand picks)

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<thead>
<tr>
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<th>Yield bales/ha</th>
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<tbody>
<tr>
<td>Pix</td>
<td>9.25</td>
</tr>
<tr>
<td>Nil</td>
<td>8.86</td>
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</table>

### Total # fruiting positions/plant

<table>
<thead>
<tr>
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<th>Total # fruiting positions/plant</th>
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<tbody>
<tr>
<td>Pix</td>
<td>28.75</td>
</tr>
<tr>
<td>Nil</td>
<td>35.70</td>
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I will have a more comprehensive report in next month’s Newsletter.

**Around the Traps**

Winter crops are going in on the Liverpool Plains where it was actually a little wet after around 40mm or rain a couple of weeks ago with further small falls since then. Bellata is flat out as are most areas East of the Newell where rainfall was more like 10-15mm. West of the Newell has marginal moisture, although there was a still activity going on around Rowena with the last fall of around 15mm and a little more planting is still going on.

Some very good cotton yields about but rest assured it is still up and down and 6 bales per acre is not the widespread average for most. Yields have still been good though with reports of 16 bale per ha crops and higher in some areas. Quality before the rain was particularly good with an easy defoliation assisting with some of the best quality seen for some time. A few quality issues with some spotting particularly causing some pain. Another pretty low year for insects with a few mirid and mite sprays and some heavy. A consistent comment has been the success of limited water on yields this year. Heliothis pressure on late conventional dryland crops was experienced in January and then pressure was generally not too bad and a good frost in early May has brought some of that cotton in fast. The crop below could be the last to be picked this year?

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Macquarie Valley
A quick overview of the season to our South thanks to Amanda, my contemporary at Warren. The southern End of the Valley is just about finished picking and yields have been consistently higher than last season, 12 bales to the hectare is a common average, The Northern end of the valley has had a great season as well, most growers were able to get a good amount of picking done before the rain. A lot more ginning needs to be done before we go sprouting around the big yields, but if rumours are true we have a few fields sitting well above the 16 bales /ha mark. The end of the season didn’t have too many surprise issues with insects, with a few growers having to control some pale cotton stainer and late season Whitefly. Defoliation was pretty smooth sailing, with an average of about 2.5 hits, this was attributed to the warm conditions and light winds that got rid of the leaf in a pretty swift manor.

What’s On
16th June CSD AGM
20-21st July-EM38 soil moisture monitoring workshop: Toowoomba
28th July IrriSat Workshop in Emerald
27th July IrriSat Workshop in Moree

Sayings of the Month
“Everyone is a genius at least once a year. The real geniuses simply have their bright ideas closer together”.
—Georg Christoph Lichtenberg
“We learn something every day, and lots of times it’s that what we learned the day before was wrong”.
—Bill Vaughan

Welshy’s Weather
A real challenge to find good news out of any weather and climate media lately. The waters around Australia have cooled in line with a signature El Niño event but interestingly above average rain is predicted for July and below average rain for June. A basin wide warm Indian Ocean is one of the few shining lights for atmospheric moisture supply. We are also entering the season for east coast lows with two notable ECL’s occurring already wetting the Darling Downs and Hunter Valley this autumn. El Niño has no correlation with these events which can improve higher catchment storage levels with as little as 4 days’ notice. The big picture drivers in the Tropical Pacific are not where we need them for rainfall this spring. One thing we can guarantee is higher temperatures during this period, so modest fertiliser applications of winter crops are essential given the current outlook. Caution is definitely the word for this month when planning winter crop and running scenarios on summer cropping areas.

Until next time

Cheers
Geoff