Welcome to the 3rd edition of the Cotton Wrap!!

**Dryland Cotton**

The Dryland group of concerned growers has been granted some funds by the Local Lands Service to conduct a number of meeting to engage dryland cotton growers. A Chairman will be selected in each area to coordinate a meeting and collect ideas and priorities of Dryland growers in regards to cotton. These Chairmans will meet then to collate ideas from all valleys and collate them for actioning. Again please pass on any Dryland contacts who would like to receive the Newsletter and updates on progress.

The trial looking at ways to mitigate compaction will not go ahead due to the ongoing dry and the feeling that time is too short now for a rotation to be effective in the time available.

Some dryland is in East of Moree, east of Narrabri and around the Liverpool plains with more to go in with some rain before end of November.

Mike Bange has a good dryland research programme this year at ACRI which I will update throughout the year.

Thanks to Peter Birch from B and W in Moree for this photo from the US. The idea being to get the fertiliser into the root zone and being more readily taken up.

Liquid fertilizer is nested at 8” intervals, 3 1/2” below the soil. The row widths can be adapted to your crop requirements

http://www.liquidsystems.net/bins/content_page.asp?cid=2-14

**Around the Traps**

Not far behind in progress at Harparary, mostly growers are planting later this year and some is out of the ground in 4 days. This crop is Chris Goulden’s at "The Myalls" who often sets the pace.

This photo below shows a rotation of oats and vetch at North Nowley after cotton last year. Planted into enough moisture to get going and provide useful bulk for cover over summer. Quentin plans to put back into irrigated cotton (water permitting) next year.

The **Spoke Injector** consists of a wheel with 12 hollow stainless steel spokes which penetrate the soil as the wheel turns..
Central Queensland early planting trial and field walk

An early planting cotton trial in Central Queensland is generating considerable interest for growers wanting to get their crops out of the ground early and avoid some of the management challenges associated with peak summer which can be quite wet or hot and humid. By using a degradable plastic film to increase soil temperatures, growers may be able to plant from early August onwards, shifting the whole season forward.

Senior Research Scientists Paul Grundy (QDAFF) and Stephen Yeates (CSIRO) yesterday presented an update on the progress of the trial, held at Cowal Agriculture’s ‘Orana’ in Emerald’s western irrigation area. The field walk was well attended, with nearly 40 growers (including a group from the Dawson Valley), agronomists, industry representatives and even a film crew from ABC’s Landline all keen to take a look at this exciting research which aims to produce an easier to manage crop with reduced production risks.

The trial was developed out of a necessity to better manage the impacts of cloudiness, high night temperatures and hot humid days that are characteristic of many peak summer seasons in the Central Highlands. Realising the optimal temperature, rainfall and radiation profile from late September through to mid-December, Dr Grundy began examining tactics to enable an earlier flowering in spring – potentially shifting forward the time to crop maturity and thus avoiding the more variable conditions that can occur during mid to late summer for boll filling.

As crop development is temperature dependant, the most obvious way to bring forward flowering is to plant earlier. However, August is often too cold for reliable crop establishment and cold shocks may sufficiently limit development that may have cancelled out any actual gains. To offset this, a plastic oxy-degradable pre-slotted film is laid over the hill directly after sowing in an effort to improve germination and development during August.

The trial is in its second season, with encouraging results so far. The photo below compares cotton sown in early August (with and without film) and cotton sown mid-September – when the planting window is normally opened for the Central Highlands. The cotton planted under film on August 3rd has developed approximately 30% faster than unfilmed cotton sown at the same time.

From left to right: Sown 3 August with film, sown 3 August without film, and sown 15 September. Photo taken 6/10/14.
The DegriCover™ film utilising a film design and laying technique was developed and tested with Dave McGrath from EnviroPlas Australia during the 2014 winter in Central Queensland, and is currently being deployed at a number of other sites from Griffith to Moree.

My thanks to Ngaire Roughley & Paul Grundy, 24th October 2014 for putting this article together.

**Weeds Update**

Sudheesh Manalil is doing a weed survey throughout all cotton valleys this year looking at the amount of resistance about and also some control experiments at ACRI. He will take samples back to ACRI and test for resistance so if you suspect some problem weeds let me know and we may be able to take some samples.

**Nitrogen**

I will have 3 Nitrogen trials going this year East of Narrabri looking at varying the second application to look at changes in Nitrogen use efficiency

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**What is happening at ACRI**

These cotton seedlings are emerging from a Cotton/ Cereal/ Summer Fallow/ Vetch/ Cotton rotation.

† This ongoing long-term (2002-current) farming systems experiment at the ACRI has contributed to a wide range of knowledge about crop rotation, crop residue management, nitrogen nutrition and soil quality

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**Welshy's Weather**

Coming into November the fate of the remainder of spring rainfall will largely be determined by the Southern Annular Mode, needed to direct the abnormally warm Tasman Sea moisture into inland NSW. Broader ENSO indicators (SOI & Niño3.4) are not in a good place, but have a poor correlation with rainfall in the summer season. Key drivers as we head into summer will be an active Madden-Julian Oscillation and the Coral Sea Temperatures warming up; currently a band of cool water through north-eastern Australia not assisting active monsoonal moisture circulation critical for troughs and cut-off lows;

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**Saying of the Month**

Don't try to teach pigs to fly, it will waste your time and annoy the pig. Anon

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For further information contact Geoff Hunter on 0458 142 777

CottonInfo is a joint venture of CRDC, CSIRO and Cotton Australia.
http://www.ospo.noaa.gov/Products/ocean/sst/anomaly/index.htm

Jon Welsh also passed this onto me which I find very interesting. You can see the neutral water temperature along the date line, hence not a full blown El Nino but we also see the very cold water in the Coral sea which is a key factor in our summer rainfall. An indicator to watch in the coming months.

What's On

26th November- "Windy Station" Tour with Researchers.

12th November- CQ grower meeting with Mike Bange