



**Information** when you need it



# the **cotton thread**

Border Rivers, St George and Dirranbandi

February 2018

Welcome everyone to the first newsletter of the Border Rivers, St George and Dirranbandi areas "The Cotton Thread"!!!

I intend for this newsletter to be a local information source and to be relevant, local and timely. I hope you do find this informative and interesting.

I can't believe how quickly the season is going it only seems like yesterday it was Christmas and really now picking doesn't seem that far away. It was great to catch up with a number of you recently at the Area Wide Management group meetings and I look forward to these smaller group sessions continuing as a great way to catch up on what is happening locally and discuss relevant issues. These were really well attended and There seems to be a preference for all of these groups to get together late afternoon which suggests some social needs are being met as well!!! The main thing on the agenda at the moment is the field day at "Mundine" on Tuesday 13 February. I hope this is well supported with a healthy roll up to support the event, the speakers and host. Thanks to Brett Corish and the team at "Mundine" and consultant Jim O'Connor for their support for this trial work, it is greatly appreciated. As is all the efforts from growers and consultants who are supporting industry work and trials.

Look forward to catching up soon.

Thanks

Sall



## Pests

### CGA Window for Silverleaf Whitefly

Industry data from Silverleaf Whitefly (SLW) resistance monitoring showed an increase in pyriproxyfen (e.g. Admiral) resistance for the 2016-17 cotton season.

To reduce the risk of SLW developing widespread pyriproxyfen resistance and potential product failure, Cotton Growers' Associations (excluding Central Queensland) have nominated a voluntary 30-day window for each region in which pyriproxyfen can be applied. The 30 day window for the McIntyre Valley started 20 January, consultants in the St George area are coordinating their Admiral application.

The aim of narrowing the pyriproxyfen window is to minimise consecutive generations of SLW being exposed to resistance selection, and ensure the product is being applied once per season when most effective.

Reminder - when controlling SLW populations:

All spray decisions should be made based on the SLW matrix in the Cotton Pest Management Guide: <https://www.cottoninfo.com.au/publications/cotton-pest-management-guide>

- Growers and consultants should adhere to their regional window applying pyriproxyfen
- Try to coordinate pyriproxyfen application by talking to your neighbours.
- Growers or consultants with concerns regarding their ability to manage SLW within their regional window should contact Sally Ceeney, Bt Cotton and Insecticide Stewardship Technical Lead by calling 0459 189 771 or [emailing Sally Ceeney](#)

### Mealybug reports

There has to date been 1 report in the McIntyre Valley and a couple of reports in the St George area of Mealybugs. Please take this as a reminder to be vigilant about farm hygiene. I know that AgNVet at St George stock BioCleanse if you need any for cleaning vehicles.

For more information:

- The [Cotton Pest Management Guide](#) has the most up to date information regarding the relative impacts of the different insecticides currently registered in cotton.
- The [beat sheet blog](#) is also a good source of information and photos of key beneficials.
- Richard Sequeira, QDAF, has been leading a program of extensive pesticide and ecology research on mealybug and can be contacted on 07 4991 0810 or via [richard.sequeira@daf.qld.gov.au](mailto:richard.sequeira@daf.qld.gov.au) if you have concerns.
- Watch the three CottonInfo videos from Paul Grundy, QDAF, on mealybug: [mealybug in cotton](#), [mealybug hotspots](#), and [what to do if you find a mealybug hotspot](#).

### Impact of insect pressure on early season retention trial

I have been working with James & Christina Duddy at "South Callandoon" and consultant Pablo Vega to find out if high Mirid pressure during early squaring really makes a difference to final fruit retention and yield. Tents were placed on plants in the crop just before Christmas for a 2 week period with half of the tents having a high number of Mirids added to them.

It is important that we are careful about our early season pest management in order to conserve beneficials. Beneficial's play a crucial role in Silverleaf Whitefly management and are imperative in our fight against Mealybug. Retention is another interesting consideration. Retention was discussed at the "Korolea" Area Wide Management group meeting where there was detected a loss of pin squares even though Mirid numbers were not being seen as particularly high. Could there have been Apple Dimpling bug about doing some of that damage? Was there something physiological going on with the plant? It was suggested that before Christmas where we saw a loss of pin squares

and even blackened ones on the ground that the plant, with only a small canopy may have been protecting itself from a bit of heat after having a relatively stress free start. We look forward to presenting these results at the End of Season Review.



## Water

Water running short? How do we manage our irrigation?

When irrigation water is limited, stress has less of an impact if it occurs early or late in the season, compared to stress during the flowering period which can lead to significant yield loss. The crop is most susceptible to stress during flowering (see Table 1 - extracted from [WATERpak](#) chapter 3.1). In fact, stress during peak flowering is likely to result in double the yield loss compared to stress during squaring and late boll maturation (as shown in Table 1).

Table 1. Yield loss (%) per day of water stress (extraction of > 60% plant available water) (Source Yeates et al. 2010#; Hearn and Constable 1984\*)

	Bollgard <sup>a</sup>
Squaring	1.1
Peak flowering	1.7
Late flowering	2.7
Boll maturation	0.69 <sup>a</sup>

<sup>a</sup> 14 d post cut out

### So, what can you do on your farm?

- Current recommendations for limited water situations are to aim to concentrate water applications during flowering (first flower to cutout) and minimise stress during this period. This is the period that cotton is most sensitive to water stress and loss of early fruit will require further growth and water to support growth later in the season.
- Monitoring of crop development and using [CottASSIST's](#) crop development tool to determine how a crop is performing in comparison to the expected growth of a well watered crop.

- Continue to use a variety of tools to schedule irrigations including soil moisture and weather forecasts.

**Further Information:**

- CottonInfo Blog: <http://www.cottoninfo.com.au/blog/water-running-short-how-do-we-manage-our-irrigations>
- CottonInfo video: [Strategies to manage limited water](#)
- [WATERpak](#) (see section 3.1, 3.2 and 3.3)

## Weeds

### Herbicide Resistance Testing – 2017 results

Eric Koetz NSW DPI, CottonInfo Technical lead, Weeds, has provided a summary of weeds tested for resistance status in the 2017 season. These samples came from all cotton regions.

- 42 weed samples tested
- Fleabane samples from 2017 season came back as 75% resistant to glyphosate
- 2 Fleabane populations were resistant to paraquat at 2L/ha
- Only 6 populations of sowthistle were collected and all were susceptible
- 11 populations of windmill grass collected, 5 resistant to glyphosate
- ABYG and FTRG being assessed at the moment
- The Ranks are - 1 most dominant weed found through to least. One of sites in our valley wasn't included as the seed collected wasn't viable.
- Individual farm reports will be sent out shortly.

Region	Fields sampled	Rank 1	Rank 2	Rank 3	Other
Darling Downs	12	FTRG	FLB	BYG	Amaranth
Border Rivers & St George	5	FLB	FTRG	BYG	
Gwydir	6	BYG	FTRG	FLB	
Namoi	7	WMG	FLB	BYG & AR	
Macquarie	6	WMG	BYG	FLB	
Southern	7	BYG	AR	FLB	

Table: Most common weeds collected and identified in each cotton valley in 2017.

(AR - annual ryegrass, BYG - barnyard grass, FLB - fleabane, FTRG - feathertop rhodes grass, WMG - windmill grass)

## Soil

### "Soil Your Undies"

Do your own fun soil science experiment to see how healthy your soil is and share your experiences with your local REO. Bury a pair of 100 per cent white cotton undies in topsoil for two months and then check the level of decomposition. If there's not much left of the undies you have good biological activity, which indicates healthy soil. These same soil organisms can break down plant materials in much the same way. To make more sense of your soil health or test how your soil is doing you might want to soil your undies a few times. You might consider the following comparisons:

- Test similar soil types under either different rotations, tillage or water management.
- Compare your field with remnant, revegetated or grassy areas on your farm.

### Dates for your Diary

- Tuesday 13 February, 8am "Mundine" Boggabilla - CottonInfo Optimising Irrigation and Nitrogen Researchers Tour
- Wednesday 28 February 5pm GTT Goondiwindi - CGA meeting, agenda to forwarded
- Wednesday 14 March Boggabilla - MacIntyre Valley Field Day

### What Can I do!!

- Eric Koetz, CottonInfo Weed Technical Specialist will be in the area collecting weed samples at the end of February. If you have weeds that you suspect may be resistant to herbicide and would like them tested please let me know. We may be able to visit your farm.
- Make sure you come along to the Researchers Tour at "Mundine" on Tuesday 13 February to hear the latest research and be a part of the discussion about Water Use Efficiency and Nitrogen Use Efficiency
- MacIntyre Valley Annual Crop Competition 2017/18 - The Macintyre Valley Cotton Growers Association (MVCGA) in conjunction with the Macintyre Valley Field Day Committee (MVFDC) invites growers to enter this year's cotton crop competition. This year with a new water efficiency crop award there will be four categories awarded at the annual awards night, scheduled for the 24th August 2018. These categories include: Irrigated Crop of the Year Award, Dryland Crop of the Year Award, Water Efficiency Crop Award, and Farm of the Year Award. Cotton Crop Competition Entries Close: Monday 5th March 2018. The MVCGA and the MVFDC will again be conducting the Macintyre Valley Cotton Growers Consistency Award, sponsored by Cargill Cotton. Applications have been sent out and this award will be

presented at the field day (14th March 2018). This application form is due for submission for the Consistency Award by Wednesday 7th March 2018.

- Why not "Soil Your Undies"!!! Let me know if you would like to get involved.
- Support your local CGA!
- Register for myBMP!!

**Sally Dickinson**

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