

September 2016

2016 2017 season outlook.....

The season has massive potential if we are able to get the cotton planted. It is forecast for the Macquarie to have around 28 000 ha of irrigated and 3000 ha of dryland or semi irrigated cotton. We have current general security allocation of 100%. We will need to go back to some of the basics around planting this season if the soil temps are lower than normal as disease issues that have been left dormant due to the drought could raise their ugly heads again.

The industry is well prepared for this and there is heaps of info around planting conditions and setting up your planter to get the best results.

If you haven't already check out the CSD website as it has the soil temp networks plus heaps of other useful tools

http://www.csd.net.au/soil_temperatures

The CottonInfo website is pretty handy as well. You can also subscribe to the enewsletter to get the latest weather news from Jon Welsh as well as other timely information

<http://www.cottoninfo.com.au/seasons/planting>

<http://www.cottoninfo.com.au/subscribe>

2015 2016 awards night...

Friday the 26th of August we held the grower awards night at the savannah room at the Dubbo Zoo. 150 growers and industry peeps attended the night, we broke a few records in terms of the winning yields and farm averages. Ben Egan took out the Tracserv young achiever award. Well done to Ben and his family for

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all the efforts over and above that they give to industry and to growers in this valley.

Mike Bennett was the well deserving recipient of the Jim Beale services to the Industry award. Tony Wass presented the award and gave us a great reminder of the contributions that Jim made to the industry and why he was so well respected. He outlined the tireless work Mike has done in his various leadership roles within the Industry and how the valley has benefited from his contributions.

The Suncorp top field award went to the Dickson family of "Marebone" with a worthy yield of **17.23 bales/ ha**.

They also won the chesterfield farm of the year in the large category with an average of **15.5 bales/ ha** and the Anderson family at "Ningawalla" took out the small farm category with **16.1 bales/ha** average (you have got to be happy with those for farm averages)

A new award was also created for the "quote of the year" and this year we had a stand out winner, Bobby Ford took it out with "I'm like most men I prefer a bigger bush" he was presented with a big bush to go straight to the pool room. Need to start looking out for next year's quote so write them down people.

Gus Obrien "Hatton" won the photo comp this year with a great shot of the kids swimming in the channel (see attachment), it was hard to pick as we had heaps of great photos to choose from. Thanks to all who sponsored, attended and send it photos, it was a great night we all had a good catch up and listened to some great live music.

Starter fertiliser and what to do if you don't have it down.....

With such a wet lead up to the approaching cotton planting we may not be exactly where we would like to be in terms of fertiliser application this season.

By now we have a few different modes of action to get our Nitrogen to the plant by the time it is needed, but what if we don't have any starter fertiliser down????

The first step would be to go back to basics and do some soil tests, you might need to take different soil types into account and do a few more tests than you otherwise would have to get a good handle of what is in the ground and where it is. As we know that P is not mobile in the soil it's pretty important it is where the roots can reach it.

I have posed the question to Brendan Griffiths and Oliver Knox who have been doing some research around the placement of P in different soil types across the cotton growing regions.



Brendan Griffiths, Lecturer of cotton production at UNE

Brendan's key messages were;

“have a look at both your Colwell P in the surface, and your Colwell P and BSES P deeper in the profile which will give you some idea of whether you are immediately deficient, or if you may be able to get away with not applying

for a season, and try to grow a crop on some residual or native P, possibly from deeper in the profile”.

The question is then, if P is applied how do you go about doing so, and if we do what is the likelihood of getting a response?

If soil tests show you don't have enough.

“I would say that if you are deficient with respects to low Colwell P in the surface, and you have a lower BSES P at depth, probably an application of P with the seed, either as solid starter or as a liquid, at sowing would be better than doing nothing.”

If soil test say you should be okay.

“If your Colwell is Ok, and/or if you have reserve BSES P levels that are OK, you may get away with running the gauntlet and not applying for this season, as the logistics of application and getting P to where we need it for a response may outweigh the benefits or simply not be logistically possible”.

What if we can only get it on top of the bed?

“The trap that we could fall into would be to apply our P shallow into the bed. As I have been saying in my presentations, in order to get a response to applied fertiliser P we must at least apply it to and area in the profile where we know our roots will be active”.

“If we apply fertiliser P higher in the profile it is likely to be in area that is dry for a large part of the season, and if the soil is dry our roots are not going to be working in that area, so my thoughts in this instance is that you are wasting your money even if your soil is deficient with respects to P”. This might help fill up the pools for the following season's but



in respect to getting response for this season would be unlikely from the research we have seen.

Can we side dress it and get a result?

“In the work that Richard Flavel and Chris Guppy, and Mike Bell and David Lester and I have done, and using the standard method of applying using a side dressing shank and dropping the P into slot at the bottom, I would have say the answer would be that is fairly unlikely”. “The issue, again, is it seems in all of our work, is that cotton doesn't see these bands of P in the soil, and so it seems is fairly unlikely to pick it up”.

“In saying this, it does seem, anecdotally, that a lot of the Southern soils do not always seem to be behaving chemically in the same manner as the Northern vertosols that we are all familiar with, and in which all of our research work has been done”.

What about if we have drip or overhead irrigation?

Brendan says “the other caveat to what I have been talking about is in either overhead or drip irrigation, where you will be having a greater proliferation of roots closer to the surface, and have the upper profile wetter, for longer during the season so you may have a greater chance of increasing your uptake of late applied fertiliser P.

I have also posed the broad question of “***what if we don't have P down prior to planting***” to Dr Oliver Knox Senior Lecturer, School of Environmental & Rural Science.



Once again Oliver suggest doing some soil samples asap (deep would be best). “If you have good Cowell P levels and good K levels then in theory it should get you across the line”. However, he says “both are largely immobile and I would suggest a replacement increase at the end of the season”.

“If K is a bit short then there are options to consider in crop application, but you'd need to have the roots active high in the soil (i.e. under a lateral) to likely see any benefit or failing that go foliar.”

He also says to “remember some of the pre applied N may be getting lost due to the wet conditions so factor this in when doing your N budgets for the season”. As the peak demand is not until later in the season we have options of side dressing or water running N.

Dr Chris Dowling of “Back Paddock”

Chris agrees with the above points but has a few tips to make sure we remember if we are doing a post planting application.

- In theory cotton appears to have the ability to respond to P applied after emergence as a result of it being indeterminate in fruiting habit i.e. yield is not less affected by low nutrient supply in its vegetative stage. Have a look at these references

[Cotton Response to Multiple Applications of Phosphorus Fertilizer](#)



Performance of fertigation technique for phosphorus application in cotton

- “Disturbance and or pruning of the root system voids any potential P response so application method must be non-damaging or repaired before start of squaring”
- “We saw a response in a side dress trial at Moree in 1990s in a sidedress application on a very low P soil low PBI, was better than not applying, but not as good as preplant. It was flushed immediately after application. Beds were explored for the location of white roots and bands were placed 5 cm outside that zone. Application was aimed at being ASAP after crop establishment but before squaring likely to give best response.
- “Would be careful with fert in seed trench (nominally 4 g/m MAP). Most safety data based on older larger seeded varieties, no telling what will happen with smaller seed varieties and a rapid soil drying post sowing.
- If you are unsure of your soil N supply post wet conditions i.e. how much of the preplant N is left, deep N sampling in crop, before squaring, is an option providing sample collection is feasible. Less than 10 % of the crops total N requirement is taken up by squaring and this can be accounted for in making N decisions.

As with all information this is just to provide growers with some ideas of best management practices and some research that has been done over time. It is in no way

agronomic advice. Thanks to the “gurus” who have helped me to put this together.

What does the research say are the optimum rates of N, P and K in high yielding cotton crops?

Nutrilogic is the best place to start as you can input your soil test results and particulars such as your region, soil type and yield targets and get the required levels.

<https://www.cottassist.com.au/> you might have to register on the Cottassist sight if you haven't before. Once you a registered it will remember you each time you go in and very easy to navigate from there.

My BMP has a great collection of useful info in the soil health module as well as direct link to soil pak and many other industry resources, its quick and easy to register.

[myBMP linkhttps://www.cottassist.com.au/NutriLOGIC/About.aspx](https://www.cottassist.com.au/NutriLOGIC/About.aspx)

The cotton info website also has some great links to research papers and much more

<http://www.cottoninfo.com.au/crop-nutrition>

“Mite have a few resistance issues this season”

Abamectin resistance in Two Spotted Mite now common

Prior to 2010-11, Abamectin resistance was rarely seen in Two Spotted Mite (TSM) populations. Since then, resistance has regularly been detected, and is at concerning levels.

The 2015_16 resistance testing results of TSM by Dr Grant Heron, NSW DPI, showed 6 of the 9 populations tested had resistance. Percent susceptibility ranged from 44 to just 25% susceptible.

These results for Abamectin suggest restraint in usage is now required. A common use pattern for Abamectin has been to apply in combination with mirid sprays as an ‘insurance spray’. Mirid sprays can be disruptive of beneficials so the inclusion of Abamectin reduces the risk of subsequent mite outbreaks. However, this practice may ultimately lead to Abamectin failure against mites. In general, the numbers of TSM in crops across most regions has dramatically reduced. This would suggest that insurance sprays against mite outbreaks in most situations may be unnecessary, and may be having a negative impact by increasing the levels of Abamectin resistance.

Issues to consider:

- Spraying mirids below threshold may increase the chances of flaring other pests, such as mites and SLW
- The use of an ‘insurance’ spray against mites at below threshold values may increase the risk of resistance

- Correct identification of mites is important as the strawberry mite and two spotted mites don’t cause the same amount of damage.

Take Home Messages:

- Control pests at or above industry recommended thresholds
- When making spray decisions and insecticide choices, consider the impact on beneficials and risk of flaring non-target pests

More information on insect thresholds, control options and impact on beneficials can be found in the 2016 2017 Pest Management G

<http://www.cottoninfo.com.au/sites/default/files/documents/CPMG%202016%20PrintVersion.pdfuide>.

Grass Roots Grant for 2016-17”

The MCGA has been successful in a CRDC Grass Roots Grant application. The aim of the grant is to help growers and industry minimise spray drift. The MCGA has been able to collaborate with Delta Ag and gain access to an existing network of weather stations. Nine weather stations in our Valley, the grant money will enable of the upgrade of the weather stations to include 10m inversion monitoring poles. Members of MCGA will have access to this as well as be able to give their neighbours the log in to use the weather stations as well. We hope that better weather monitoring systems and inversion warning text messaging will lead to better spray application and reduce the risk of spray drift affecting our cotton crops.



To get in on the action you just need to be a member of the MCGA see flyer attached for details.

Hope you enjoyed the latest copy of the Macquarie Bale up, let me know if you have ideas for next month's edition

Cheers

Amanda

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