



the Mungindi grower

4th November 2022

Well the weather continues to throw challenges at us. Firstly, getting back onto our country and wondering how late we can go with planting. Nutrition management in such a wet year and opportunities to get N on and looking ahead insect management with such a green bridge over our region this year. CottonInfo are on the front foot with these issues with webinars and workshops coming up, along with great information to share.

As your CottonInfo Regional Extension Officer, I'm here to help and if I don't know, after working in the cotton industry for over 20 years, I know who to ask. So please don't hesitate to contact me.

Janelle Montgomery M. 0428 640 990 E.janelle.montgomery@cottoninfo.net.au

How late is too late?

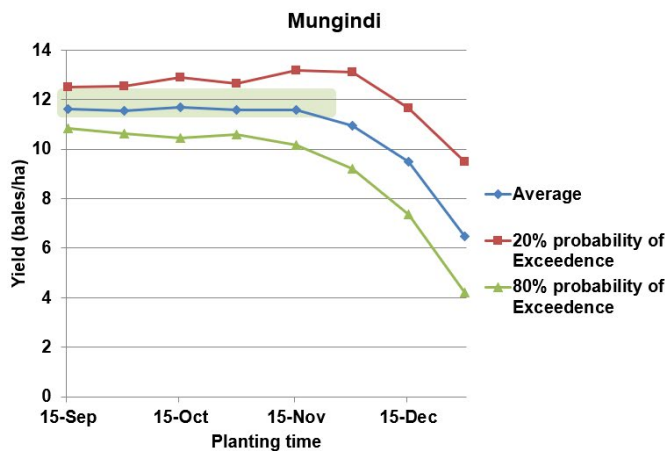
Dr Mick Bange, CSD (formerly CSIRO) has been getting a lot of questions about planting time, and how late is too late. Especially pertinent to the Southern cotton valleys with their shorter season length compared to Mungindi or the Gwydir. However, the floods and wet weather in Mungindi are definitely going to push planting back later than we might have wanted.

The following figures can be used as a guide in your planting date decisions. Produced by Mick Bange by using the OZCOT cotton crop simulation model initially developed by Dr Brian Hearn for CSIRO.

The model uses detailed knowledge of cotton crop physiology and growth and predicts impacts of management, soil conditions, variety and environment (e.g., rainfall, radiation levels and temperature) on lint yield. The model can predict yield for each cotton season where information on soil and weather data exists. **The simulation exercise here has OZCOT estimating yield for each cotton season from 1957 to present day (around 60+ years) for a range of planting times. The average of the 60+ years for each date is the point on the graph.** The crop is managed in a way that there is no water or nitrogen limitations and uses a variety with high fruit retention (like Bollgard®3 varieties).



Mungindi Planting Time



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The graph shows the average yield for each planting time as well as the 20% and 80% probability of exceedance. The 20% probability of exceedance means that over the range of yields estimated with OZCOT, yields at that point (planting date) were exceeded 20% percent of the time. In 20% of the 60+ years we got values above the 20% line at that particular planting date.

Similarly, 80% probability of exceedance means that at that point 80% of yields were above this value (or conversely yield below this value 20% of the time).

The average yield over that 60+ years for those planting dates as modelled by OZCOT is the blue line in the middle.

The shaded area on the graph is an attempt to highlight the time when yields are optimal and there is lower variation in the predicted yields.

When looking at this graph it's important to look at the decline and the variability. As the distance between the 20% and 80% lines increases, the more variable the data.

So this is a risk and probability decision – between 1st October till around the end of November variability is lower, so you are more likely to achieve average yields, which are also at their highest value during this date range.

However, remember it does not take into account pests, diseases, poor nutrition so keep that in mind.

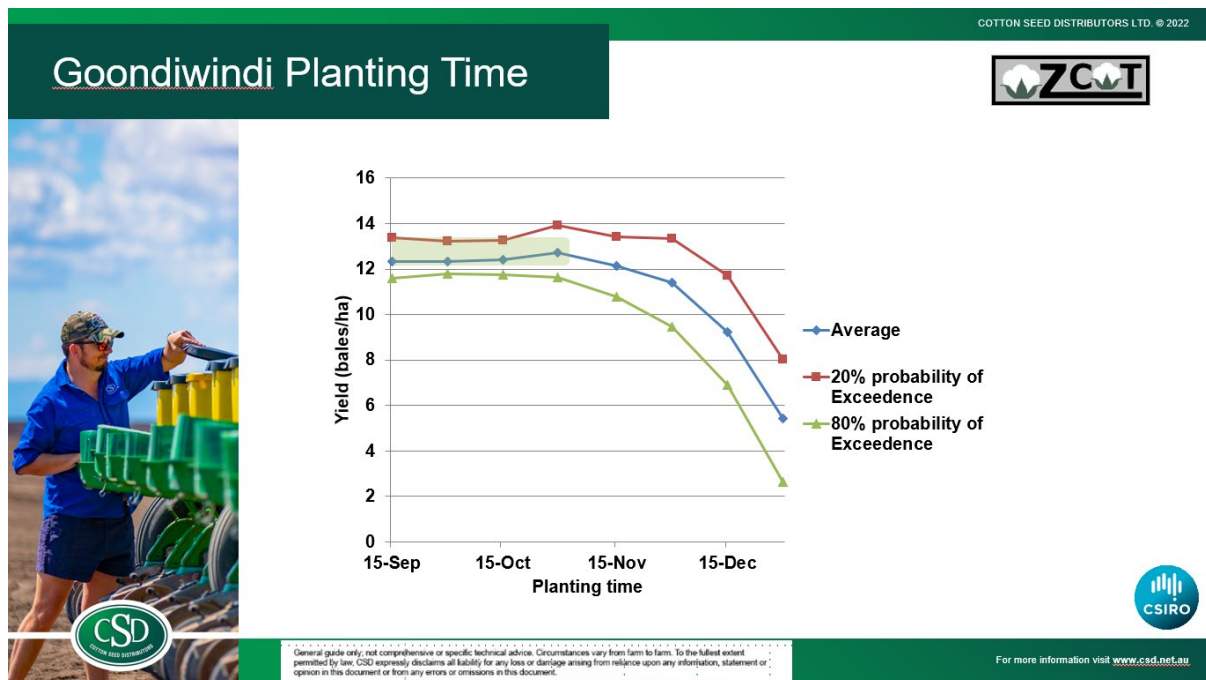
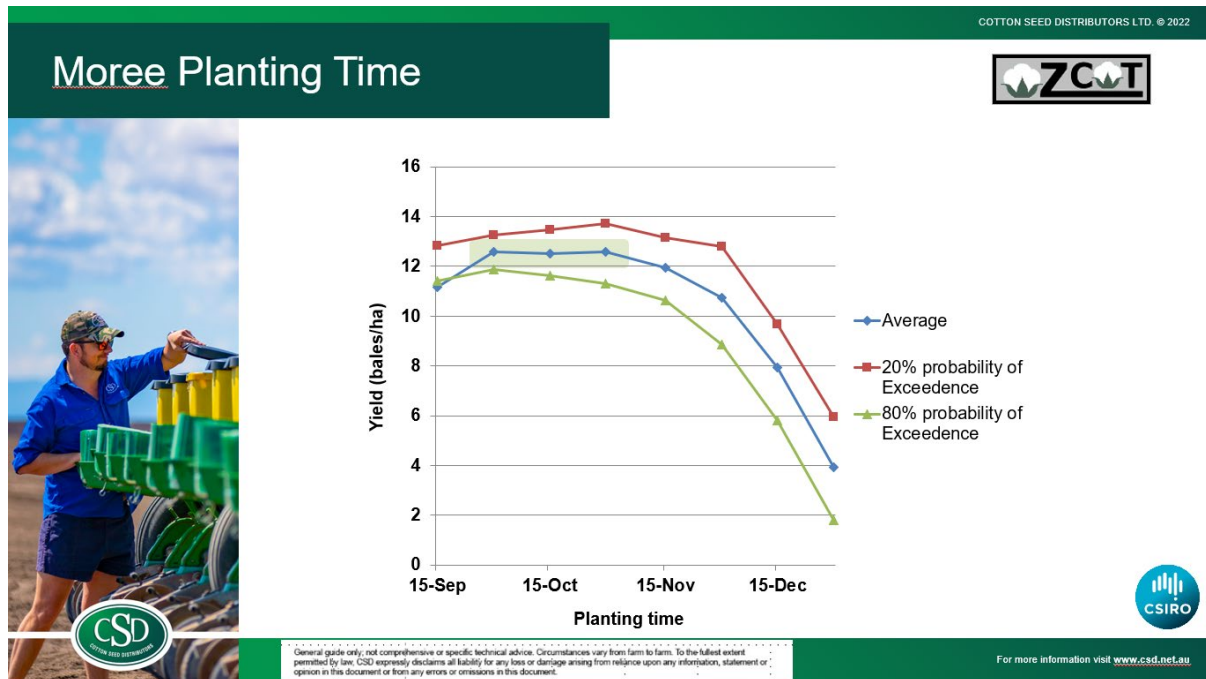
These models suggest that planting dates after late November for Mungindi and mid-November for Moree & Goondiwindi will potentially have greater variability in yield outcomes with the average yield starting to decline.



By December planting dates, the yield potential declines more rapidly and growers may need to consider:

- Dialling back their yield expectations
- Adjusting nutrition to these yield expectations
- Monitoring the seasonal potential via seasonal outlook models
- Determine appropriate cut out dates with your consultant and stick to them
- In some cases, factor in possible quality discounts

Below is the Moree and Goondiwindi graphs for comparison.



Nutrition Webinar

CottonInfo are hosting a Nutrition Webinar with Jon Baird, Graeme Schwenke and Chris Dowling on Friday 11th November @ 7am NSW Time. [Register here](#). Once registered a confirmation email with webinar link will be emailed to you – check your junk if it's not in your inbox.



Wet soil conditions, cotton N management, what can you do?

For Nitrogen management in cotton, this year will be like no other. Based on recent events, N management by old 'rules of thumb' could be high risk.

This webinar presents the insights of leading independent specialists, and measurements of soil nitrogen from the last 2 weeks.

If you have any cotton nutrition questions that you want answered on the webinar, please send them through to me.

Questions I have received to date include:

- *Specific questions I would have revolve around spreading of urea on soil surface and the risk of significant N loss to volatilisation.*
 - *With regards to spreading of urea on the soil surface and the risk of significant N loss to volatilisation: How much are we risking by surface spreading on our soils in summer. How can we minimise the risk. What's stupid to do?*
- *How do you know you have lost N to denitrification (waterlogging). Do you soil test low areas vs high areas in a paddock?*
- *Poor prep and compaction especially in back-to-back but also some fallows – means it is likely we will have poorer root growth in the subsoil, what impact will this have on NUE?*
 - *How can this be managed? Besides stretching water where possible especially in the early stages to try to crack the profile a bit, be interested to see what the thoughts are on how we may address it in-crop.*
- *When should you test the soil? At sowing/other times?*
- *What constitutes high risk vs low risk of denitrification? Soil type, length of wet, amount of N applied, type of N applied, when applied, crop rotation, and what else contributes to loss risk or retain risk?*
- *How do we reduce the risk of nitrogen loss?*
- *How are the coated urea and anhydrous nitrification inhibitors going and what impact have they had commercially?*
- *When and how best to apply N to meet crop demand?*

Farms of the future

What's the connectivity like at your place? Do you wish you had multiple rain gauges across your farm, a channel sensor in your main supply, a soil moisture probe in your dryland country?

There is a good opportunity here to start, or otherwise progress your Agtech journey and learn about what's out there and what might help your own farm management. Don't want anyone to miss out, and there are grants available next year!

If you have a farm in the Moree Plains Shire Council there is an opportunity for training and funding ([Farms of the future](#)) for improving connectivity and a range of Agtech devices.

I encourage you to have a look at these two videos just to see some examples of devices that these 2 farmers adopted on their places. Food for thought!

Video one: Mixed Farming https://youtu.be/zr_7749-CA

Video two: Irrigation/mixed cropping <https://youtu.be/AZnKNeFlxzo>

There will be an application for funding if you go down that line and training is a necessary first step for this to be available. You have to register with TOCAL for the training and print off a farm map before a training workshop on November 9th. All simple and plenty of help from Will Winter who is coordinating the Farms of the Future Program. You'll learn more about this at the face-to-face training on Nov 9 in Moree and with continued support from Will.

Register Today

Contact Will Winter, Development Officer on 0483 286 862 if you have any questions.

Gwydir Area Wide Management Meeting – Magnet® Update

Gwydir CGA invite you to our 1st Area Wide Management Meeting for the 2022/23 season.

This meeting is in collaboration with AgBitech and Bayer to bring you latest information on Magnet. Caitlin Langley from AgBitech will provide an update and Q&A session on the use of Magnet RMP as an alternative to cultivation for pupae busting.

Date: Thursday 10th November

Time: 7:15 for 7:30 am sharp start

Venue: Town & Country Club Moree

Breakfast provided

RSVP to Caitlin Langley M. 0401406399 or Janelle Montgomery M. 0428640990

Unfortunately, this season is shaping up to be late like last year and as such Magnet might be a fit to ensure growers comply with the Bollgard® 3 Resistance Management Plan (RMP).

If it's unlikely that you will defoliate before 31st March 2023, Magnet could be an option.

Management considerations for the use of Magnet:

1. APVMA approved as an alternative to physical pupae destruction
2. Assists growers fulfil RMP commitments in areas where rainfall can delay mechanical pupae control
3. Allows for direct drilling of rotation crops immediately after harvest
4. No cultivation/soil disturbance

Look forward to seeing you.

All welcome.

Bug Checker Workshop

Date: Thursday 1st December

Time: 10am – 1pm

Venue: ACRI, Narrabri

RSVP Janelle Montgomery M. 0428640990 E. janelle.montgomery@cottoninfo.net.au

Refreshments provided.

Join Sandra Williams and Simone Heimoana, CSIRO and Linda Drynan, NSW DPI

Content:

- ID of pests and beneficials
- Insect sampling techniques & record keeping
- Basic crop physiology
- Integrated Pest Management
- Disease identification with Duy Le (NSW DPI)
- Tour of the Insectary with Linda Drynan (NSW DPI)

Regards

Janelle

Janelle Montgomery

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