



Information when you need it

the cotton thread

Border Rivers, St George and Dirranbandi

November 2022

Soil Health and Nutrition events in the Balonne



Fig 1 & 2: Soil health and nutrition workshop held at Farm 158 on Tuesday 22.

The Balonne hosted two events recently that focused on soil health and aspects of cotton crop nutrition. These drew on the experience and expertise of several presenters including CottonInfo technical leads Jon Baird (nutrition) and Oliver Knox (soil health), Chris Dowling (soil and nutrition technical specialist from Back Paddock) and Cameron Leckie (Regional soil coordinator, SQNNSW Innovation hub).

The first event held at the Australian Hotel on the night of Monday the 21st covered updates from key fertiliser suppliers and went into aspects of nitrogen fertiliser supply and low carbon footprint



is a joint initiative of



Best Practice

nitrogen fertiliser (green ammonia). Bede O'Mara from Incitec Pivot PL provided an update on their phase out of anhydrous ammonia supply from their Gibson Island facility and the plans for a potential hydrogen production and storage plant at the site. Hydrogen can be used as a fuel source and as an input into ammonia production, offering the potential for a future nitrogen fertiliser source should it prove viable.

Angus Hammond from Orica Australia provided an update on their Precision™ Ammonia (anhydrous ammonia) supply and logistics along with expected safe-transfer upgrades and their other nitrogen product Precision™ UAN (urea ammonium nitrate), a liquid nitrogen fertiliser.

Jon Baird, CottonInfo technical lead for nutrition and NSW DPI researcher, provided an overview of green ammonia, a nitrogen fertiliser manufactured with low carbon emission input (ie hydrogen as opposed to coal fired or natural gas power). Discussion covered losses of nitrogen and the potential for the use of inhibitors which can help to reduce the loss, via certain pathways, of applied nitrogen fertilisers. Both Incitec Pivot and Orica have or are progressing work on commercial inhibitor products.

The other event was an on-farm workshop held on Sno Harm's property Farm 158 in the St George Irrigation area. Presentations and discussions covered the influence of irrigation and water on nitrogen in soils, N cycling and losses, N management and monitoring plus a soil assessment via a soil pit and a demonstration of a visual soil assessment (the current internationally accepted method for determining soil health). The pit provided the opportunity to observe the impact of compaction from recent field operations (picking, bed destruction and cross tillage) which all occurred under wetter than ideal circumstances due to the wet season and how this might be managed.

For those who missed the recent Nutrition Webinar featuring several of the experts mentioned above, a recording can be accessed [here](#).

Bug Checker Training Workshop

CottonInfo is holding a training course for new bug checkers on the morning of 8th December at the Morella Ag shed, Lowes road, Goondiwindi. This will be presented by the CottonInfo Technical lead for IPM and QLD DAF entomologist, Paul Grundy.

Contact Andrew McKay (details at end of newsletter) for further information or to express interest in the workshop.



Seasonal Outlook

The CottonInfo Moisture manager for November has the 3 month outlook models for Southern Qld split between normal and above normal rainfall, and temperatures remaining cooler than normal. The [BoM temperature outlook](#) suggests the Balonne and MacIntyre will experience warmer temperatures for early December then will drop to cooler than normal through to February.

Source	Temp Forecast	Precipitation outlook				
		Emerald	Sth Q'ld	N-NSW	C-NSW	S-NSW
ACCESS-S 	Cold	Above normal DJF	Normal DJF	Normal DJF	Above normal DJF	Above normal DJF
UK Met 	Cold	Above normal DJF	Normal DJF	Normal DJF	Above normal DJF	Above normal DJF
IRI NMME 	Cooler	Above normal DJF	Normal DJF	Normal DJF	Normal DJF	Normal DJF
ECMWF 	Cold	Above normal DJF	Above normal DJF	Normal DJF	Normal DJF	Above normal DJF
CMCC 	Cooler	Normal DJF	Above normal DJF	Normal DJF	Normal DJF	Above normal DJF
JMA 	Cold	Above normal DJF	Above normal DJF	Normal DJF	Normal DJF	Above normal DJF

Fig 3: Seasonal models survey for summer from the November issue of the [CottonInfo Moisture Manager](#)

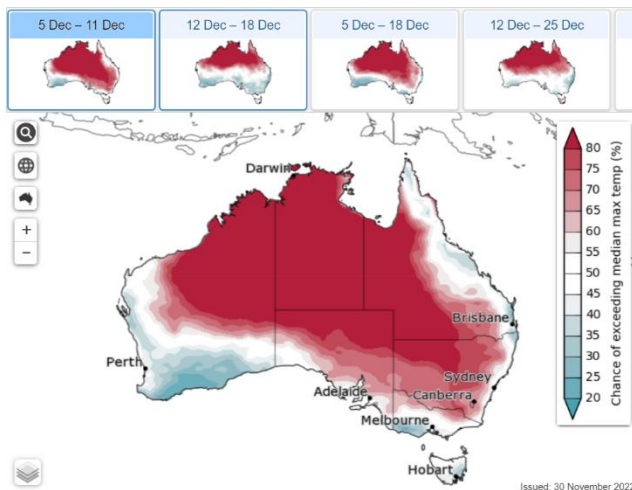


Fig 4: BoM Max temperature outlook Dec 5-11

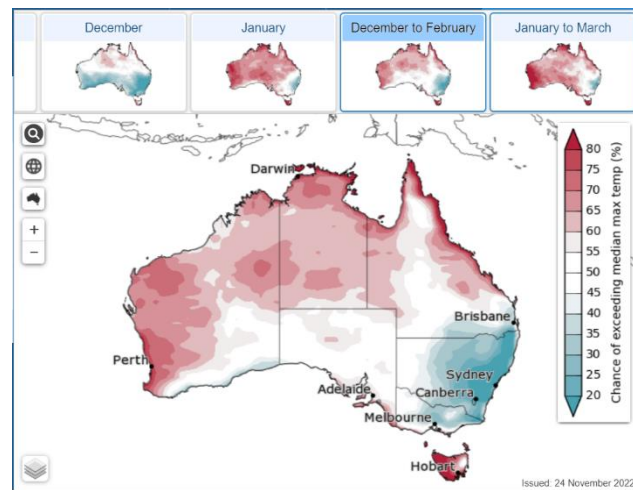


Fig 5: BoM Max temperature outlook Dec-Feb

Satacrop and Inversion Tower network (WAND)

As cotton crops progress and weed control in these, fallow and winter crop country occurs, the risk of spray drift incidents are more likely. A couple of helpful tools in managing this risk is awareness of the location of sensitive crops and the presence of hazardous spray conditions.

The [Satacrop website](#) provides the ability for growers to register the location of their crops and provides a site for spray operators to check for proximity of sensitive crops to spray jobs. The below screenshot from the website suggests the MacIntyre region has a good portion of crops registered however the Balonne has a few gaps. Growers and their consultants or resellers are encouraged to get crops loaded and use the site before conducting spray operations.

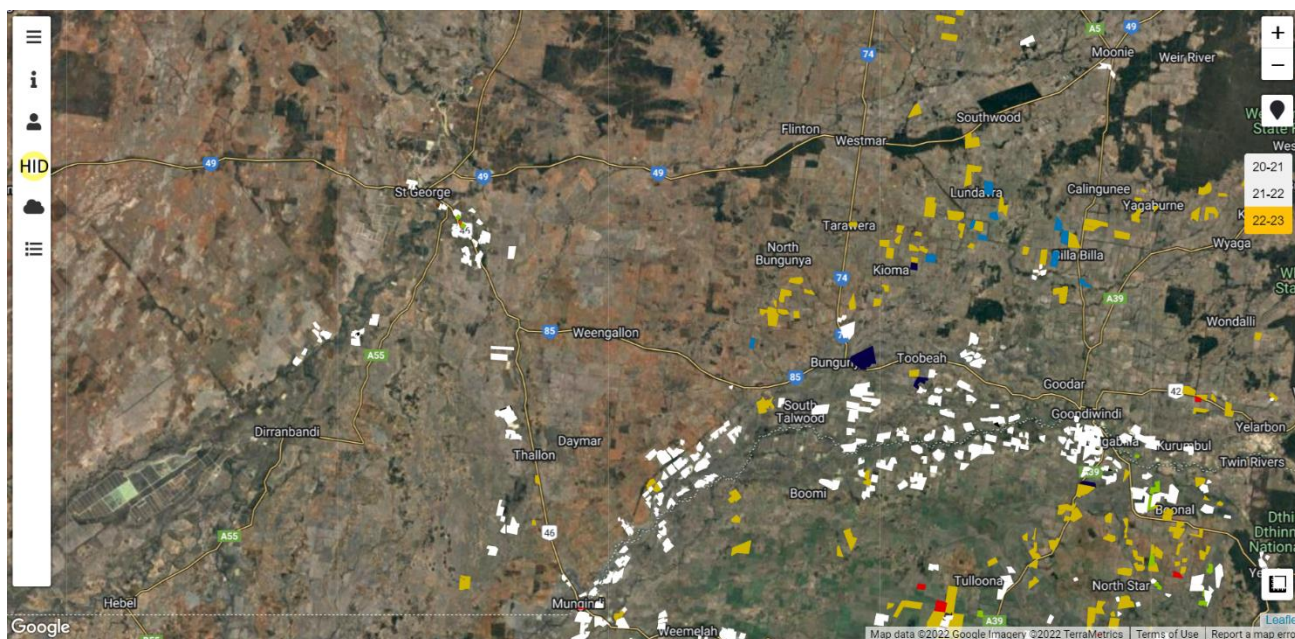


Fig 6: Screen shot from the Satacrop website

The [inversion tower network](#) called WAND (Weather And Networked Data) hosted by Goanna Ag is operational in a test mode for central and southwest Qld for registered people. To register, people need to visit the website link provided above and complete the required details. The network currently generates weather condition reports at 10 minute intervals for the selected tower. The report indicates the presence or absence of hazardous inversion conditions and provides a spray/don't spray indicator. The predictive component of the system is not yet functional.

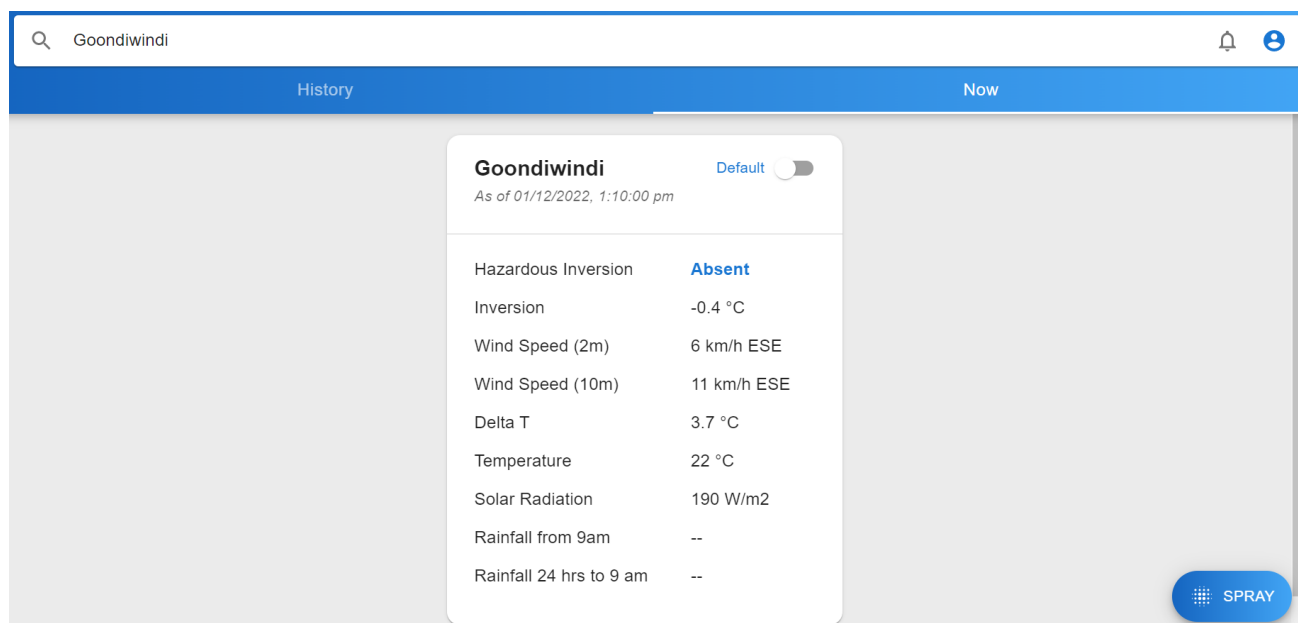


Fig 7: Screenshot from the Inversion Tower Network (WAND)

CSD news

The CSD Cotton Yarns for November looks at rain grown cotton systems. To access this edition and other Cotton yarns, click [this link](#). You will need to be a [CSD member](#) to listen to these.

Improving cotton's capability for on-farm experimentation

– CSD in conjunction with CRDC recently ran a workshop, co-organised by CSD's Commercial Research Manager Dr Michael Bange and CRDC's R&D Manager Dr Merry Conaty, to inform the industry on how to increase skills and capacity in these areas.



Dryland/ Rain Grown Cotton

CRDC news

CSD & CRDC partner on Disease and Water Research

Cotton Seed Distributors (CSD) and the Cotton Research and Development Corporation (CRDC) are partnering to support the delivery of integral research to benefit growers.

Two substantial initiatives were developed in response to feedback from growers through the cotton industry's extension network, including the CSD team and CottonInfo: a partnership of CRDC, CSD and Cotton Australia.



Image: Allan Williams, Ian Taylor and Peter Graham

Read more here:

[CSD / News and Media / CSD and CRDC partner on disease and water research](#)

Other news included:

- Research priorities feedback - CRDC Directors on farm in Chinchilla
- Applications for CRDC-supported Horizon scholarship now open
- National Agriculture Day

For more details on these, click [here](#).

Cotton Australia News

- Cotton exports break records and become third most valuable export commodity
- [Australian Cotton Christmas wish list released](#)

For more information on these, click [here](#).

What's On:

8 December: Bug Checker Training workshop, Morella Ag Shed, Lowes road Goondiwindi. 8:30am

15 December: Cotton Catch up, Goondiwindi. Details TBA.

Andrew McKay

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