



The BIG Qs: how much N and when?

With growers now making decisions about how much nitrogen to apply and when, it's worthwhile considering the findings of the CottonInfo N trials: lower up-front N application may help improve NFUE.

Last season, CottonInfo's regional development officers (RDOs) conducted trials across all the cotton growing valleys looking at Nitrogen Fertiliser Use Efficiency (an industry-developed measure that indicates the efficiency of N use in the production of lint by dividing lint yield by N applied).

Our trials found that **74% of sites were below the optimum NFUE**, meaning that a reduced amount of lint was produced for the amount of N applied. One of the key findings from our trials is that **NFUE can be improved through lower up-front N application rates, with subsequent in-season N application, without a risk to yield**. You can read about our trials in detail in the Winter edition of CRDC's [Spotlight magazine](#) (see pages 24-26).

So, how do you decide how much N to apply?

The best way to determine how much N your crop needs is to follow these steps:

- **Undertake soil testing** now to assess N levels and fertiliser requirements.
- Calculate the **expected crop nutrient requirements** (consider expected yield, crop history, crop system, nutrient losses, crop use efficiencies, plant nutrition recovery and uptake, soil condition and characteristics).
- Develop a **fertiliser plan** that suits your farming systems and minimises losses.
- Monitor crop through **petiole and leaf analysis** to determine if the crop has

sufficient nutrient levels.

- Develop a **long term plan** to maintain or improve soil health.

For more, visit [myBMP](#), read the Nutrient chapter of the [CottonInfo 2015 Cotton Production Manual](#), or contact your local CottonInfo [regional development officer](#).

Event alert! CottonInfo webinar series: nutrition

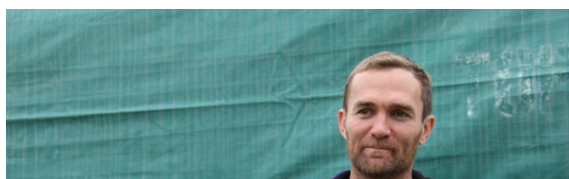
From tomorrow, CottonInfo will be hosting a three part webinar series on cotton nutrition and the Emissions Reduction Fund.

- **Webinar #1** - 12 noon, Tuesday 23 June - Dr Chris Dowling: Cotton crop nutrition overview
- **Webinar #2** - 12 noon, Wednesday 24 June - Dr Chris Dowling: Factors affecting yield and nitrogen use efficiency
- **Webinar #3** - 12 noon, Thursday 25 June - Jon Welsh: Opportunities for cotton growers to participate in the Emissions Reduction Fund.

[Register now by clicking here](#). After registering, you will receive a confirmation email containing information about joining the webinar. For more, contact CottonInfo technical specialist, [Jon Welsh](#).

What are other growers doing about their N?

Our CottonInfo RDOs spoke to growers about their pre-season N decision making.



Peter Watson, Boggabri:

"The most important decision I make about N is how much to apply, and when. I make the decision re how much N to apply pre-season based on a historical rate: research from Rocky and what has worked on-farm over the years. I have reduced my rates over the last two seasons based on trial results, and will reduce them again this year."



Ray Fox and Toby Seccombe, Moree:

"Placement and timing of N are the most important considerations. We do soil tests pre-season, and consider field history (back-to-back vs in fallow) as we go through the season, along with petiole tests. We aim to have about 150 units of N under the crop before it starts. We

used to put the gas in the watered rows but swapped to the non-watered rows to reduce losses. After doing the indirect emissions trial last year though, this doesn't seem to make a difference."



Cleave Rogan, St George:

"I soil test every year in fields I expect to plant cotton in, and apply 70 percent of my N up front. Over time, I've changed the way I manage my pre-season N. The main change has been varying the N application rate for evenness of crop in furrow irrigation, accounting for the leaching from the head ditch to the tail drain. Once the rig is calibrated it is very accurate in its application giving me confidence in knowing the fertiliser is in an efficient location within the paddock."



Share



Tweet



Forward

Copyright © 2015 CottonInfo, All rights reserved.

[unsubscribe from this list](#) [update subscription preferences](#)

Brought to you by the cotton industry's joint extension program, CottonInfo.



is a joint initiative of



Best Practice

