GRDC NORTHERN PULSE CHECK

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Speaking from experience ... a pulse grower case study

Chris Jackson is relatively new to pulse growing on his Murrami property, but opted for mungbeans with a focus on their low water usage. He slotted them into his cropping rotation and followed with cotton, which he believes benefitted from the ability of the mungbeans to condition the soil.

What types of pulse crops have you grown/have experience with?

Growing irrigated mungbeans and harvesting chick peas.

What are the benefits you have seen with a pulse crop in the rotation for your farming system?

The main benefit was that they used very little water (3.5ML/ha in 3 irrigations). The other great benefit was the soil conditioning of soil for following crop. I planted mungbeans on December 15, harvested in April, left the paddock fallow over winter then grew a 16 bale cotton crop the following summer. The cotton field next door averaged 14 bales/ha, had the same water use and all spraying and fertiliser was the same for both fields.

How about challenges with growing these pulse crops?

It was a steep learning curve in growing something we had never grown before. I have friends in Southern Queensland who have experience - I had them on speed dial! They provided great advice. Our hot dry summers means mildew is not so prevalent, but they insisted keeping on top of mildew was very important. Growers also need to keep

on top of things like bug checking. The crop was "lazy to nodulate". I inoculated with peat inoculum, then planted with precision planter. There was 50units of residual N in the soils and so had to top-up with urea mid-season. This top-up was 50units of N water run on last irrigation with another. In future would go to 2m beds with 4 plant lines/bed, to help with lodging. They yielded 2.5t/ha (possibly one of the highest irrigated yields in Australia), which led to the need to adapt a 40ft front to pick up the lodged crop. Happy with the price of $1100/t on farm.

Did the pulse crops fit well with other crops in the rotation?

They have their place. With limited water they are a better fit. There is

GROWER

Chris Jackson

LOCATION

Murrami

FARM

650 hectares irrigation, cotton, mung beans, moved from rice, Durham wheat and barley. On 1 metre hills.

Chris shared his pulse growing experience with Iva Quarisa of the Irrgation Research Extension Committee

Irrigation Research & Extension Committee

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The GRDC Northern Pulse Check project seeks to support and develop strong profitable pulse production systems across the GRDC Northern Region. It seeks to engage with grower, researcher, and industry stakeholders to encourage greater sharing of information, through a range of pulse related extension and communications activities.

some issues with harbouring soil diseases (eg black root rot) of other crops. They are in rotation with Durham wheat, as mungbeans planted on December 15 means there was plenty of time to harvest the Durham.

What is your experience marketing pulses?

Working on just a little experience Chris found information was a bit limited, but found the Mungbean Growers Association useful. “Once you do your homework on them, you find there quite a few people who take them. Ended up selling in Victoria.

What advice would you have for new or inexperienced mungbean growers?

They are worth growing, especially the small amount of water they use – it’s a good start. My advice, stretch out the irrigations - don’t over irrigate. It’s better to let them stress.
Chris does use soil moisture monitoring gear, but did not use them with the mungbeans. He preferred to use plant and visual to make irrigation decisions. Chris was advised by his Queensland friends to let them stress “they were starting to turn blue and I was told to leave them another week before irrigating. This was great advice, as I could have used twice the amount of water and got the same or even less yield”.

What extra support do you need to keep pulses in your farming system?

Need better marketing strategies. Try and lock in a yield or area contract.

Harvesting a very high yielding 2.5t/ha irrigated mungbeans crop. Photo: Chris Jackson

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