THE OTHER SIDE OF THE COIN -**SEASON 2022**

One of the refreshing things about working in an industry that relies on water and other essential inputs is that nothing stays the same! Farmers are getting better at reducing their exposure to large swings in the availability and price of these inputs.

SCIENCE and technology also are helping and at the IREC Field Station at Whitton we continue to test and demonstrate tools and technology that are vital for the top performance of our farming systems.

Making the most of water

Irrigation automation, in-field sensing and more accurate predictive tools are vital in getting the biggest bang for our buck, for dollars spent, not only on irrigation water but all other crop inputs. Adapting to a wet season as we are experiencing this year requires a totally different approach to servicing our crops compared to a rainless hot summer with little variation in soil moisture, surface water and surface temperatures.

Ahead of a cold snap, we need as much notice as possible and quick filling rice bays to protect the crop at the critical early pollen microspore stage of growth. This reactive action is enabled by automated structures and high flow irrigation layouts. It may not be required in all fields depending on planting dates and crop stage. Compared with filling all fields with 25 to 30 mm of water from Christmas until the end of February, the new technologies allow huge savings in water and reduce the risk of overwhelming banks and drainage capacity in the event of an 'unexpected' 50 mm rain over night.

Automation of pump stations, doors and level sensing at critical points around the irrigation system enable a prompt response without having to jump in the ute.

There are many more scenarios where this technology would assist in providing moisture to plant with minimal saturation in adverse conditions.

Rob Houghton

Chair, IREC Irrigator, Gogeldrie



Rice at the IREC Field Station at Whitton, approximately one week from draining - harvest not far off! PHOTO: Hayden Petty

Nitrogen – how much is enough?

A big hike in fertiliser prices has really challenged our standard practices. Nitrogen use in cotton is a great example. It has long been thought that late applications of nitrogen when cut-out rates of pix are being applied is counterproductive. An experiment at the IREC Field Station with huge variation in up-front nitrogen and no in-crop applications is showing up some interesting early observations in terms of crop response this season.

Cotton crop response to different rates of total available nitrogen, IREC Field Station, 2021-22 season

	Total available N (kg N/ha)	Bolls/metre	Nodes to mature (4-Mar-22)	Crop height (cm)
Block B	144	105	8	90
Block C	160	136	8	95
Block D	453	103	9	105

We look forward to sharing yield and quality results when we have them. Tune into our weekly tweets and Facebook updates to follow the progress of this crop.

A busy autumn ahead

As summer crops come up to harvest, we also turn our minds to what's in store for the winter cropping season. With a full profile of moisture and very reasonable prices for winter commodities, we could be in for a full winter cropping program for the third consecutive year.

Both canola and wheat offer good returns if done right. Viand rice going in after canola as a double crop option is showing real promise and the traditional cereal following cotton can offer solid returns using residual moisture and nutrients, while providing competition against herbicide resistant weeds. Having irrigation water to finish these crops enables irrigators to lock into some good early pricing for a portion of the crop.

I truly hope that this autumn provides a good finish to our summer crops and an early start to a big winter cropping program. Happy farming!

Contact the Chair

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Irrigators of the Murrumbidgee Valley took the opportunity to inspect new technologies and irrigation systems at the annual field day at the IREC Field Station, Whitton, in January 2022. PHOTO: Rachel Diversi