

Articles in this edition, with a quick overview.

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## A WORLD WITHOUT PROBLEMS WOULD BE A WORLD WITHOUT PROGRESS

**Rob Houghton Chairman IREC Irrigator, Gogeldrie**

### QUICK TAKE

- Farming is all about managing the major challenges that we are faced with year in, year out.
- While the big challenges are out of our control, we have many tools to help deal with challenging scenarios.
- The dry time at the moment is the time to formulate strategies for getting crop in the ground on time regardless of how wet it is.
- IREC, inspired and driven by irrigators, provides a range of opportunities and demonstrations to help irrigators learn and give them tools to deal with ongoing major challenges



## INCREASING OPTIONS AND TOOLS FOR GROWERS

**Iva Quarisa Executive Officer, IREC**

### QUICK TAKE

- IREC has successfully gained funding for a number of new projects, looking at better pulse management and better use of data generated by precision agriculture devices.
- On-going research at the IREC Field Station at Whitton continues to investigate and demonstrate issues and technology for the benefit of irrigated farm systems and businesses.
- IREC builds its program based on the suggestions of members through forums such as the IREC Breakfast Meetings. Casual feedback is also welcome throughout the year.



## MAPPING RICE FOR BETTER CROPS AND PRODUCT

**Rob Walsh Grower Services Digital Officer SunRice**

### QUICK TAKE

- MapRice GIS is a geographic information system (GIS) operated by SunRice Grower Services for the benefit of growers and the industry.
- The information gathered and provided by MapRice GIS is instrumental for analysis, planning and accountability of rice production by SunRice, and for providing location-specific information and services to rice growers.
- SunRice Grower Services is continually working to improve the functionality and services of MapRice GIS with a number of new developments expected over the next 12 to 18 months.

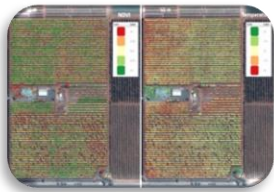
## GETTING THE MOST OUT OF AG DATA

**Anthony Rudd I-Ag Pty Ltd, Leeton**

### QUICK TAKE

- Irrigators are keen to collect on-farm data and use precision agriculture but a range of issues has limited adoption to date.
- A new project has conducted a case study of eight irrigators to identify the factors limiting adoption. The growers named many factors but there were some common themes across the responses.
- The understanding gained from the case study will be used to develop a tailored process to facilitate the adoption of precision agriculture.





## DRONES AT THE SERVICE OF AGRICULTURE

*Carlos Ballester and John Hornbuckle Centre for Regional and Rural Futures Deakin University, Griffith, NSW*

### QUICK TAKE

- Drones are handy and valuable tools, especially for precision agriculture.
- The development of new sensors opens the doors to new applications of drones in agriculture.
- Australia's safety rules must be followed when operating drones—even on your own land.



## IDENTIFYING 'HARD' SOIL PROBLEMS IN THE RIVERINA

*Sam North and Alex Schultz NSW Department of Primary Industries, Deniliquin*

### QUICK TAKE

- This study highlights the prevalence of hard sub-soils in all soil types commonly found under irrigated systems in the Riverina.
- Just over 85% of sites investigated had soils that would inhibit root growth at a water potential of only -35 kPa, well short of the recommended irrigation trigger point of -60 kPa.
- To investigate the impact of hard soil on productivity, its cause and possible solutions, GRDC is funding research through active learning groups.
- Locally-based grower groups will provide an opportunity to, among a range of issues, identify better ameliorating techniques tailored to local soils.



## NEW GROWER GROUPS TO LIFT PULSE PRODUCTION

*Phil Bowden Industry Development Manager, Southern Region Pulse Australia Limited*

### QUICK TAKE

- A GRDC-funded project looks to improve the knowledge and capacity of growers and advisors to grow a range of pulse crops.
- A situation analysis will be conducted early in the project to provide information about current pulse production, and to inform GRDC and IREC about gaps in knowledge or capacity, to guide extra funding for research or greater marketing support.
- Participant-guided activities will enable growers and advisors to increase their knowledge and capacity to grow a range of pulse crops. These activities may include talks by experts, field demonstrations and trials, and benchmarking workshops.



## RICE BREEDING IN AUSTRALIA – CHALLENGES AND OPPORTUNITIES

*Bert Collard & Peter Snell NSW Department of Primary Industries Yanco Agricultural Institute*

### QUICK TAKE

- There will always be a need to improve rice varieties to achieve high yield and premium quality, as well as addressing other traits such as seedling vigour, lodging resistance and growth duration.
- Plant breeding, including rice, requires a broad range of knowledge (including genetics, physiology, cereal chemistry, pathology, agronomy and statistics) and a multi-disciplinary team effort.
- The challenge for current breeders is to use, to the advantage of growers and the industry, the recent deluge of new genomics information and implement efficient new molecular breeding strategies.