

Industry Update

Vol.1 No.5



12
Current
projects



\$0
Invested
in RD&E
July - Sept
2019



\$3,775,677
RD&E
investment
committed
from 1
October 2019

Rice Program Advisory Panel

- Drew Braithwaite (Chair)
- Michele Groat (Deputy Chair)
- Dr Vito Butardo
- Brian Dunn
- Russell Ford
- Laura Kaylock
- Dr Laurie Lewin
- Dr Ben Ovenden
- Antony Vagg
- Lucinda Staley (AgriFutures Australia)

Advisory Panels

AgriFutures Australia is committed to working with industry to deliver the research and development outcomes that meet rural Australia's needs. We work closely with Advisory Panels to decide on research priorities and to make investment decisions each year.

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Members of AgriFutures Australia's Advisory Panels are selected following an open call process which involves a competitive skills-based assessment and/or consultation with key industry bodies and stakeholders.

AgriFutures Australia is dedicated to embracing and promoting cultural, age and gender diversity on all of our Advisory Panels. To learn more about the AgriFutures Australia Advisory Panels visit agrifutures.com.au/advisory-panels

Researcher spotlight: Ester Callcott

With funding from AgriFutures™ Rice Program, Charles Sturt University and Australian Research Council (ARC) Industrial Transformation Training Centre for Functional Grains PhD student Ester Callcott is working with Functional Grains Centre Director Professor Chris Blanchard and her peers to investigate "Next Generation Healthy Rice". As part of this project, Esther's PhD has identified the potential for using Australian-grown coloured or pigmented rice as a functional food to combat some of the health risk factors associated with lifestyle diseases such as obesity, heart disease and type 2 diabetes. Esther is the recipient of an ARC Industrial Transformation Centre Scholarship.

AgriFutures Australia sat down with Esther to learn more about her research project and some findings to date.

Describe your research in three sentences: Pigmented rice is rich in bioactive compounds called polyphenols. Polyphenols are micronutrients obtained through some plant-based foods and have been shown to have antioxidant and anti-inflammatory potential. My study investigated if the polyphenols from coloured or pigmented rice can reduce obesity-related free radical (unstable atoms produced in the body that damage cells) damage and inflammation and increase antioxidant activity to prevent the development of lifestyle diseases associated with obesity, such as heart disease and type 2 diabetes.

What has your research shown? The research profiled the polyphenol content and antioxidant activity in Australian grown rice varieties. I also tested the anti-inflammatory and antioxidant properties in cell cultures and in clinical trials involving

healthy weight and obese people.

Why is this research project important?

This research will provide consumers with scientific evidence that the consumption of coloured rice can help reduce risk factors associated with obesity and the development of lifestyle diseases allowing consumers to make healthier diet choices. It's hoped that this may lead to a rise in consumer demand paving the way for increased production and the cultivation of coloured rice varieties rich in bioactive compounds that can be sold at a premium — delivering better financial return to the farmer.

Why did you get involved in the project?

As a Medical Biochemist my passion has always been medical science and I have a great love for all things food! However, being a farmer's daughter, I have a lot of respect and admiration for Australian farmers and understand the tough job they have in feeding the country. This project combines all three areas of science, food and agriculture into a PhD at the Functional Grains Centre. It was an opportunity that I was not going to miss.

What's the best piece of professional/career advice you've ever been given?

The best piece of advice I got was "have a path BUT be flexible". If I stuck to the medical science "genre", I would have never encountered the opportunities I have experienced. By being flexible, I have had the opportunity to encompass, medical science, agriculture and food into my research and contribute to the Australian rice industry, which is made up of the most wonderful, welcoming people I have ever met.

Learn more about Esther at agrifutures.com.au/esther-callcott

New partnership to tackle community trust challenge

The Community Trust in Rural Industries Program is a collaborative partnership involving ten Rural Research and Development Corporations (RDCs)*, the National Farmers' Federation (NFF) and the NSW Department of Primary Industries. This timely capacity building initiative is designed to drive impactful, cohesive and consistent responses to the cross-sector community trust challenge.

Community trust relates to the nature of the relationship between industries and the social context in which they operate. Decreasing trust can lead to reduced industry productivity, profitability, and sustainability resulting from increased regulation, limited market access, and disincentives to invest in infrastructure, among other consequences.

Fisheries Research and Development Corporation Managing Director, Dr Patrick Hone, said the days of thinking we just need to better communicate with the community about what we do and how we do it are gone.

"Research shows we need to actively demonstrate that we share the community's values when it comes to topics they care about most. This Program aims to build a common language and collective national narrative across industry sectors around the community trust challenge. It will build on our understanding of best practice approaches to effectively engage with the community about their

concerns. We must be proactive in understanding what influences and drives decisions around values and how industries can respond," said Dr Hone.

Over an initial three-year period, community research will be undertaken to provide insights on cross-sector issues and best practice approaches – the first round of results will be delivered in late 2019. Ongoing engagement will be conducted to make research outputs available as an input to food and fibre industries developing their own strategies.

NFF Chief Executive Officer Tony Mahar said industry must work together on the challenge of community trust if progress is to be achieved.

"One industry's response to trust impacts another and therefore having a consistent approach and baseline of information is key to achieving step-change in the way the community perceives rural industries. Whilst there are challenges, our food and fibre industries are well-respected. The Community Trust in Rural Industries Program is about ensuring this continues by listening to and understanding community sentiment, how trust can be maintained, built and rebuilt," said Mr Mahar.

For more information visit agrifutures.com.au/community-trust/

Current projects (Rice)

Project ID	Project Name	Finish	Principal Investigator	Research Organisation
PRJ-010188	Rice Pest and Disease Biosecurity II	30/09/2019	Stevens, Mark	NSW DPI
PRJ-011226	Australian Rural Leadership Program 2018 - Course 25 - Troy Mauger	15/11/2019	Kruger, Graeme	RGA
PRJ-010705	Post Graduate 'top-up' Scholarship - C Rixon	16/01/2020	Rixon, Charissa	Central Queensland University
PRJ-010712	Post Graduate 'top-up' Scholarship - M Van Leeuwen	1/02/2020	Van Leeuwen, Matthew	University of Western Sydney
PRJ-009790	Rice variety nitrogen & agronomic management	15/05/2020	Dunn, Brian	NSW DPI
PRJ-009950	Australian Rice Partnership 2	30/05/2020	Slinger, Deb	NSW DPI
PRJ-010696	Extension for improved efficiency and sustainability in the rice industry	30/07/2020	Mauger, Troy	RGA
PRJ-010758	Post Graduate 'top-up' Scholarship - J Opena	31/07/2020	Opena, Jhoana	Charles Sturt University
PRJ-011075	Rice Industry Leadership Program	15/08/2020	Massina, Ainsley	RGA
PRJ-011058	Improving mid-season nitrogen management of rice	1/06/2021	Dunn, Brian	NSW DPI
PRJ-011136	Rice Weed Management in Australia	30/05/2022	Taylor, Malcolm	Agropraisals Pty Ltd
PRJ-011067	Traits of importance for aerobic 'DryRice' varieties for the Riverina region	10/06/2022	Mitchell, Jaquie	The University of Queensland