

ADELAIDE
SOUTH AUSTRALIA
TUESDAY 9TH AND
WEDNESDAY 10TH
FEBRUARY 2021

GRAINS RESEARCH UPDATE



GRDC[™]
GRAINS RESEARCH
& DEVELOPMENT
CORPORATION

Adelaide Convention
Centre, North Terrace

grdc.com.au

Day 1 program

8.15 am registration for a
8.55 am start - 5.30 pm

PLENARY PRESENTATIONS

Extending the impact

New GRDC Managing Director Anthony Williams will open the Update program by sharing his vision for GRDC. By increasing the connection between GRDC's investments in discovery, application, communication and extension, and on the ground impact, and ensuring that GRDC best assists Australian grain growers to grow, compete and differentiate, while increasing productivity and profitability.



Anthony Williams,
GRDC

Grains Australia Ltd – consolidating grains industry services and functions

Grains Australia Ltd was recently established with widespread support from industry and will combine a multitude of industry good functions under one organisation. CEO Jonathan Wilson will outline the purpose and core functions of Grains Australia and how it can enhance the value of Australian grain.



Jonathan Wilson,
Grains Australia Ltd

AEGIC's role in understanding current market drivers

Research led by AEGIC's team provides Australian grain growers with insight into emerging high value market opportunities both domestically and internationally. As CEO of AEGIC, Richard Simonaitis has a strong understanding of grain growers, the Australian grains industry and the markets Australian grain is sold into. He will present on current market drivers and where opportunities lie for Australian grain in the near future.



Richard Simonaitis,
AEGIC

GrainInnovate – innovation through disruption

The \$50 million GrainInnovate Fund was established as a partnership between the GRDC and Artesian Venture Partners. The fund invests in ag-tech start-ups developing innovative solutions to Australia's grain growers' constraints. This session will provide an opportunity to hear from the executive of GrainInnovate and leaders of three of the agri-tech start-ups in the fund's portfolio:

SwarmFarm Robotics – commercial deployment of autonomous agricultural robots in the broadacre grains industry.

TeleSense Australia – industrial IoT monitoring solutions for post-harvest commodity storage and transport, elimination of human error, and improving efficiency and profitability.

FluroSat – application of latest in remote sensing, agriculture science, machine learning and AI to create efficient agronomic workflow.



Fernando Felquer,
GRDC;
Rob Williams,
Artesian;
Andrew Bate,
SwarmFarm;
Marcus Kennedy,
TeleSense Aust &
Marie Marion,
FluroSat.

CONCURRENT PRESENTATIONS

The rise of glyphosate resistance

We can't just keep doing the same old things – this session will look at ways of improving efficacy to ensure we're doing our utmost to minimise the increase in resistance to this critical important chemistry.

Peter Boutsalis, *The University of Adelaide, Plant Science Consulting*

Targeted soil amelioration in sandy soils to maximise crop water use

Assessing where soil amelioration will most likely provide a return on investment is made easier by utilising a newly established framework based on the soil constraint and depth at which it occurs.

Lynne Macdonald, *CSIRO*

The drivers of insect pressure and new management tools for troublesome insects

Learn about the underlying drivers of the unusually high insect levels experienced in 2020 and some of the new tools available for pest monitoring and management.

Rebecca Hamdorf, *SARDI*

Improving lentil performance on sandy soils

Sam will summarise results from recent trial work investigating the impact on lentil performance of variety selection, soil amelioration, nutrition and herbicide safety and weed control.

Sam Trengove, *Trengove Consulting*

Blackleg infection of canola – latest developments and yield impacts from foliar fungicide use

An update on the latest management tactics for blackleg infection of canola and whether spraying in 2020 was worthwhile.

Steve Marcroft, *Marcroft Grains Pathology*

Revised critical soil test values for key nutrients across different soil and break crop types

Get up to speed on these revised critical values to help improve test interpretation and inform better fertiliser decisions.

Nigel Wilhelm, *SARDI*

Enhancing the effectiveness of mice control methods

Steve will reveal new insights about mice in Australian broadacre cropping including information on mouse biology, ecology and bait efficacy.

Steve Henry, *CSIRO*

The agronomic value of precision planting technologies

The performance of precision planter technology will be compared to the baseline achieved by air seeders. Uniformity of establishment, plant density and sowing rates are key factors examined.

Glenn McDonald, *The University of Adelaide*

Measuring the impact of inoculation with a new rhizobia testing tool

Information on the new rhizobia test integrated with PREDICTA®B and how the results can assist with management decisions.

Ross Ballard, *SARDI*

Wins and tribulations of chaff lining as a weed reduction tool

Chris will draw on his extensive experience with growers to highlight what works and what doesn't when utilising chaff lining as a weed seed reduction tool.

Chris Davey, *WeedSmart*

Insecticide resistance – lessons to be learnt

Paul will discuss the increasing development of insecticide resistance using the red legged earth mite story to highlight the role of management.

Paul Umuna, *cesar*

Maximising benefits from vetch in our farming systems

A summary of research regarding best practice management to achieve optimal agronomic performance from vetch.

Stuart Nagel, *SARDI*

Frost mapping – a future management tool

How information from paddock temperature data loggers and the resulting models can help deal with the impact of frost.

Uday Nidumolu, *CSIRO*

Know the new 'lingo' from the National Phenology Initiative

Making your job easier; the release of a new classification system for cereal development and a new scoring method for grain-filling.

Corinne Celestina, *La Trobe University*

Latest knowledge on treatment of soil acidification

Progress towards 'getting it right' with methods of assessment and treatment. The impact of lime type, rate, manures, mapping and incorporation.

Brian Hughes, *PIRSA*

Networking drinks and food in trade display area courtesy of AGT

Day 2 program

8.15 am to 3.00 pm

EARLY RISERS – 8.15 am start

Emerging Technologies

Tom will provide an overview of some of GRDC's investments in the Enabling Technologies space. With Brett discussing specific examples of research utilising machine learning to predict soil constraints and plant available water.

**Tom Giles, GRDC and
Brett Whelan, University of Sydney**

PLENARY PRESENTATIONS

Keeping the glyphosate option – the state of play

Katie will provide an update on the status of glyphosate litigation and restrictions globally and then discuss the evidence-based safety and regulation framework around glyphosate use in Australia. She will also provide guidance as to how we are best to respond and behave in light of negative commentary surrounding glyphosate use. Katie joined CropLife in 2017 bringing with her extensive knowledge of the agricultural chemical regulatory system in Australia. She is responsible for CropLife's suite of stewardship initiatives and programs for agricultural chemical products, including resistance management strategies.



Katie Asplin,
CropLife Australia

Experiences fitting the new chemistries into the farming system

Chris will be joined by a panel of leading agronomists representing South Australian cropping regions to discuss what's happening in the paddock with the new herbicides and improved management practices to optimise efficacy. As an experienced member of the weed research team at The University of Adelaide, Chris's insight combined with the agronomists' experience will fine-tune agronomic practices to achieve better results



Chris Preston,
The University of Adelaide;
George Pedler,
George Pedler AG;
Jeff Braun,
The Agronomist P/L and
Scott Hutchings,
Cox Rural Keith

CONCURRENT PRESENTATIONS

Achieving the big yields

World record wheat yields – Eric will shed light on how it's done while still making money. Nick will join Eric in this discussion and will ground-truth Eric's experiences to Australian conditions. Nick will also discuss what's being addressed at the new Hyper Yielding Centres throughout Australia.

Eric Watson, Ashburton, NZ wheat grower, and Nick Poole, FAR Australia

The health report – pulse disease update

An update on management of the most concerning root and foliar pulse diseases showing up from 2020.

Sara Blake and Blake Gontar, SARDI

Phosphorus application recommendations based on soil characterised zones and testing – does it pay

Sean will present the outcomes of a study comparing the gross margin of two different phosphorus replacement strategies; yield from previous season versus soil type characteristics.

Sean Mason, Agronomy Solutions

Latest management tactics for snail control

Progress towards achieving the 'sweet spot' with methods of snail control via baiting, grower practices and biological control.

Kym Perry, SARDI

Integration of non-chemical tactics to improve brome grass management

Gurjeet will focus on benefits of integrating proven non-chemical tactics with herbicides to improve brome grass management in wheat, barley, canola and faba beans.

Gurjeet Gill, The University of Adelaide

Reducing input costs without compromising pulse production potential

How can we tweak pulse agronomic management strategies; including disease, nutrition and weed control without compromising production potential. **Sarah Day, SARDI**

Nitrogen fertiliser use efficiency rules of thumb put to the test

¹⁵N tracing has provided an accurate assessment of N fertiliser dynamics in the soil enabling ground-truthing of N estimates for fertiliser recommendations. **Roger Armstrong, Agriculture Victoria**

To spray or not to spray – what does the Russian Wheat Aphid threshold calculator indicate?

Maarten will provide an update on RWA management with a focus on the performance capability of the RWA threshold calculator in determining cost-effective treatment. **Maarten van Helden, SARDI**

GM technology – farming system learnings from WA

Geoff will share his extensive experience on advising WA growers on how best to integrate GM canola into the rotation and the associated management adjustments.

Geoff Fosbery, Farm Focus Consultants

Cereal disease wrap up

Update on management of the most concerning diseases to emerge from 2020 including powdery mildew.

Tara Garrard, SARDI and Sam Trengove, Trengove Consulting

Use of chemicals and residues arising – impact, understanding and potential trade issues

Update on MRLs in export markets that are an issue for industry including lost chemistry due to regulatory changes and how advisers can manage the impact chemical use has on market access.

Gerard McMullen, National Working Party on Grain Protection

Novel agronomy strategies for improving yield

This session will present some 'outside the box' agronomy strategies being investigated to improve cereal yields and highlight any promising results. **Kenton Porker, SARDI**

Barista coffee cart courtesy of Adama

EVENT DETAILS



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IMPORTANT INFORMATION

Registration options

Cost:	\$130 one-day inc. GST		\$200 two-days inc. GST
Student:	\$75 student one-day inc. GST		\$120 student two-days inc. GST
Extra proceedings:	\$60 for pick up inc. GST		\$80 posted inc. GST

Click here to register and pay online

As of mid-December, registration numbers at the ACC are capped at 350 due to social distancing requirements and the COVID-19 safety measures in place. All attendees are expected to adhere to the enforced restrictions at the time of the event. If capped numbers are reached, a livestream registration option will become available for a reduced selection of presentations. Check the GRDC website for current registration status. If the Update is cancelled due to government restrictions, registrations will be fully refunded.

Cancellation

If individuals wish to cancel their own registration due to personal reasons, please contact ORM Pty Ltd with details. Cancellations prior to **4 February 2021** will receive a full refund. **There will be no refunds for cancellations received on or after 4 February 2021.** Registration is transferable at any time.

Car parking

Parking is available at the North Terrace and Riverbank car parks.

Catering

Food and beverages are provided throughout the day.

Accommodation

A list of accommodation options is available via the www.orm.com.au website.

Program

Topics and speakers are subject to change.

The final program will be provided to registered attendees and made available via the GRDC website in January 2021.

Industry supporters

Opportunities for industry supporters are available.
For details contact ORM Pty Ltd.

Contact details

For enquiries, contact ORM Pty Ltd on **03 5441 6176** or email admin@orm.com.au