



**WAGGA WAGGA
NEW SOUTH WALES
TUESDAY 18TH AND
WEDNESDAY 19TH
FEBRUARY 2020**

GRAINS RESEARCH UPDATE



GRDC
GRAINS RESEARCH
& DEVELOPMENT
CORPORATION

**Joyes Hall,
Charles Sturt University,
Pine Gully Road**



grdc.com.au

Day 1 program

8.15 am registration for a
8.55 am start - 5.30 pm

PLENARY PRESENTATIONS

Is sustainable intensification of cropping systems achievable?

Intensification of cropping has exacerbated the problems of herbicide resistance and N/organic carbon depletion. Growers and advisers are searching for methods of farming that address sustainability while remaining profitable. Tim will set in historical context the challenges we face, validate the achievements of the past and present and introduce integrated, sustainable intensification as the way forward with practical examples. Tim is currently the Professor in Residence at the Dookie Campus of the University of Melbourne. He has worked for over 50 years in agricultural research, development and extension and his current focus is on global food security and the sustainable intensification of agriculture and farming systems.



Tim Reeves,
The University of Melbourne

New herbicides – the best integration to prolong their impact

Several new herbicide actives have been released or are about to hit the market; how do we use these new actives and what are the advantages? What have we learnt from old habits to prolong the life of not only these new chemicals but the others we are currently using? This session will be delivered by Roberto who has over 10 years' experience with AHRI; leading research on how weeds respond to current herbicide uses. He passionately drives programs to assist growers' decisions and boost their confidence in weed control programs.



Roberto Busi,
Australian Herbicide Resistance Initiative (AHRI), University of Western Australia

Predicted climate change impacts on southern farming systems and how should we act?

With recent dry and volatile weather conditions affecting growers across most of the grain growing regions of Australia, the question is; is this the new norm? Growers and advisers have done an excellent job in adapting farming systems and practices to make use of lower rainfall. In this session Peter will discuss what the impact of climate change looks like for Southern grain growing regions and what can be done to further enhance farming systems so that they will prosper alongside climate variability? Peter is the Principal Scientist in Climate Applications with SARDI. He is an agricultural scientist who works on how the grains industry can better use the advances of climate science to increase productivity and reduce risk.



Peter Hayman,
SARDI

CONCURRENT PRESENTATIONS

Seasonal factors that drive Russian Wheat Aphid occurrence

James will present how climatic data is being used to forecast RWA occurrence, enabling growers and advisers to prioritise monitoring **James Maino, *cesar***

Canola roots and water use – big is not always best

Research that is looking at the ongoing effects from deep rooted canola types and the legacy implications
John Kirkegaard, *CSIRO*

Implication of continuing dry conditions on cereal disease management – learnings from the north

Insights into expected implications the extended dry period will have on cereal pathogens and their management
Steven Simpfendorfer, *NSW DPI*

Practical opportunities to leverage existing on- and off-farm data layers to support decision making

GRDC's Future Farm project is revealing the ability of current technology products to support yield forecasting and N decision making **Brett Whelan, *The University of Sydney***

Cover crops and their impacts on the farming system – what does the local data suggest?

Col will provide evidence of how cover crops are impacting the farming system compared to 'tried and tested' management practices **Col McMaster, *NSW DPI***

European earwigs – an appetite for destruction or are they beneficial?

Results of a study on earwigs which indicates beneficial behaviour or minimal crop loss in certain situations
Matt Binns, *CSIRO*

The long-term legacy effects of grain crops versus hay

Research that is providing an understanding of the long-term value of ground cover/stubble compared with its removal through hay **Graeme Sandral, *NSW DPI***

Plant breeding tactics to deal with a drying climate

Presentations from Greg and Richard that examine the potential of new breeding lines with characteristics that infer superior performance in hotter climates **Greg Rebetzke, *CSIRO* and Richard Trethowan, *The University of Sydney***

Pulse adaptation – optimising grain yield of chickpea and lentils

Mark will discuss management practices to optimise grain yield potential of chickpea and lentils and also performance of recently released pulse varieties **Mark Richards, *NSW DPI***

Harvest front systems and their impact on the microclimate of crop stubble

Does harvesting with draper or stripper fronts impact the magnitude of moisture loss from the soil?
John Broster, *Charles Sturt University*

It's not all about lime – management strategies to improve nodulation and N fixation

Helen to present survey results that suggest an explanation for the variability in N supply following a legume crop
Helen Burns, *NSW DPI*

Drivers of yield stability in wheat and barley - picking a winner in variable seasons

What are the drivers of yield stability in barley and wheat as indicated by variety performance across a number of challenging seasons? **Felicity Harris, *NSW DPI***

Emerging research from CSU students

Networking drinks and finger food at the Thirsty Crow courtesy of AGT and Syngenta

Day 2 program

9.00 am to 3.00 pm

PLENARY PRESENTATIONS

Hitting production targets in the UK amidst a highly regulated environment

This presentation contributes to the discussion of how advisers and growers may have to manage if restrictions and regulations around pesticide use follow the UK.

Keith has 35 years of experience in crop production in the UK, France, Germany, Spain, Russia, Ukraine and Zambia. He provides advice on the commercial production of all combinable crops throughout the UK, with diverse range of weed, disease and pest pressures, soil types, climates and yield potential.



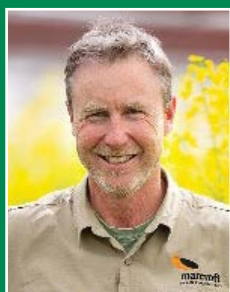
Keith Norman,
*Keith Norman
Consultancy Ltd*

Latest strategies in canola disease control

An update on seed treatment and fungicide options in response to recent changes in canola agronomy and management and the resulting impact on blackleg disease.

Steve is the principal of Marcroft Grains Pathology based in Horsham Victoria.

Steve is leading the new GRDC funded National Canola Pathology Project. Main areas of work are; Blackleg ratings; resistance gene identification; disease management practices; monitoring disease severity and providing advice to industry.



Steve Marcroft,
*Marcroft Grains
Pathology*



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CONCURRENT PRESENTATIONS

Understanding temperature impacts on crop growth drivers

How do different varietal types behave in varying seasonal conditions? Victor to discuss the impact temperature has on crop growth drivers and management implications
Victor Sadras, *SARDI*

High yielding canola agronomy – management for 5t/ha canola

The key management practices to maximise canola production in given situations Rohan Brill, *NSW DPI*

The continuing evolution of HWSC options

Mike will present the latest research findings in this field including the evaluation of HWSC systems, effect of chaff on weed seedling emergence and effect of grazing on chaff lines
Mike Walsh, *The University of Sydney*

Soil amelioration – magnitude of crop productivity improvements on hostile subsoils?

The role of amendments in addressing soil constraints and the resulting plant productivity response Shihab Uddin, *NSW DPI*

Rapid post-event frost damage assessment – can it be achieved?

In-paddock tools to detect and quantify frost damage in wheat to enable better hay cutting decisions
Alexander Clancy and James Nuttall, *Agriculture Victoria*

Nitrogen budgeting and carryover

An update on the research of nitrogen response, recovery in subsequent years and mid-row banding of fertiliser
Graeme Sandral, *NSW DPI*

Doing pest management differently

This session will position the thinking, theory and practical implications of integrated pest management
Melina Miles, *DAF Qld*

Oaten hay's fit in the southern NSW cropping system

Recent research looking at what is required to achieve premium oaten hay quality for the export market and the fit for southern NSW cropping systems Peter Matthews, *NSW DPI*

On the couch

Heard the plenary but still not satisfied? This 'on the couch' informal Q&A session provides opportunity for further in-depth discussion to flesh out the topics.

Use of chemicals and residues arising

Perceptions and requirements of key export markets and the implications for advisers and growers
Richard Holzknecht, *GRDC*

Stem elongation frost damage in cereals in southern NSW

Assessing the strategy of sowing different varieties with differing phenology across multiple sowing dates to minimise the risk of frost Danielle Malcolm, *NSW DPI*

Aphid and insecticide resistance management in oilseed and pulse crops

Research to help manage aphid infestation and minimise their impact on crop performance. Update on resistance issues
Marielle Babineau, *cesar*

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

GRDC Emerging Agros Network

A GRDC Emerging Agros Network event for both established and emerging agronomists will be held onsite immediately following the Update. Separate registration to the Update is needed. Register at www.seedbedmedia.com.au/agronomists

Cancellation

If cancellation of your registration is necessary, please contact ORM Pty Ltd with details. Cancellations prior to **13 February 2020** will receive a full refund. **There will be no refunds for cancellations received on or after 13 February 2020.** Registration is transferable at any time.

Car parking

Free parking is available on Pugsley Place and along Pine Gully Road.

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.

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