



WAGGA WAGGA
NEW SOUTH WALES
TUESDAY 19TH AND
WEDNESDAY 20TH FEBRUARY 2019

GRAINS RESEARCH UPDATE

BOOSTING PROFITABILITY – RESILIENT SOLUTIONS



GRDC
GRAINS RESEARCH
& DEVELOPMENT
CORPORATION

Joyes Hall,
Charles Sturt University,
Pine Gully Road



Day 1 program

8.30 am registration for a
8.55 am start - 5.30 pm

PLENARY PRESENTATIONS

The 'National Paddock Survey' – what have we learned?

What are the main opportunities to bridge the yield gap? What can realistically be done about it while balancing risk and financial implications? This session will give an insight into how advisers and growers can use the results of the National Paddock Survey to determine the yield gap and develop practices to improve water limited yield. Harm is a partner in Crop Facts Pty Ltd, an agricultural consulting firm he has operated for over 25 years. He is currently the National Co-ordinator for the GRDC 'National Paddock Survey' and the 'Soil and plant testing to inform better nutrient management' programs.



Harm van Rees,
Crop Facts Pty Ltd

Nitrogen and soil organic matter decline - what is needed to fix it?

Jeff will provide a current 'state of play' in our understanding of the capability of our cropping systems to supply sufficient nitrogen to crops. Can the supply from soil organic matter through mineralisation combined with N fertiliser be sufficient to feed crops into the future? What are the factors influencing soil N supply capacity? What is the net N balance outcome and what are the agronomic and economic considerations? What needs to change for our farming systems to cope? Jeff is a research scientist working in the Soil Carbon and Nutrient Cycling group of CSIRO Agriculture and Food. He has also worked with the Australian government in developing soil carbon accounting systems.



Jeff Baldock,
CSIRO

Pesticides and regulatory impacts - the road ahead

Gordon will address some key questions regarding chemical regulation in Australia including: what pesticides are currently under review with APVMA, which ones are likely to come under scrutiny in the future, and what's likely to replace them, and at what cost? He will also discuss what's happening in Europe and Canada that could influence chemical availability and use in Australia. Gordon is currently the GRDC Manager of Chemical Regulations. He brings to the role over 25 years' experience in research, development and project delivery. His previous roles have been with Pulse Australia, FMC Chemicals and Crop Care Australasia.



Gordon Cumming,
GRDC

CONCURRENT PRESENTATIONS

Crown rot - what is the threat coming out of a dry year?

Conditions are expected to suit a high prevalence of crown rot during 2019. What are the latest research findings on management and control of crown rot relevant to southern NSW? *Steven Simpfendorfer, NSW DPI*

Ameliorating subsoil constraints - new info on testing and diagnosing sodic soils

Research findings from the ameliorating subsoil project and how soil tests can be interpreted correctly to diagnose dispersive, sodic soils. *Ehsan Tavakkoli, NSW DPI*

Managing crop nutrient supply after a long dry period

A heads up on expected nutrient management differences coming off a dry year and particularly where crops were cut for hay. *Graeme Sandral, NSW DPI*

The pros and cons of grid sampling to manage variability and generate useful information

Understanding variability in the field and setting the base line. Current soil sampling options – how useful is the information? What are we missing? How do we better spend our sampling dollar? *Jason Condon, CSU*

Protecting the longevity of new fungicide products

Product stewardship and usage to prolong efficacy of new products and their performance under high disease pressure. *Nick Poole, FAR Australia*

Post drought pasture management

Measures and benchmarks to assess pasture viability and trigger points to re-sow and renovate for ongoing healthy pastures. *Jeff McCormick, CSU*

Biology and control options for wild radish, prickly lettuce and sow thistle

Latest research findings – long term control options, what herbicides/mixes are effective and at what growth stage is application most effective. *Hanwen Wu, NSW DPI*

Canola agronomy forum

The key learnings from five years of research. Phenology of new varieties. Optimum management lessons from the low rainfall year. Effect of heat stress and frost on canola development. Root growth of fast versus slow maturing spring canola. *Rohan Brill, NSW DPI Wayne Pitt, CSU Rajneet Uppal, NSW DPI*

Fixing more N - improving the performance of inoculants in suboptimal conditions

Update on new findings around opportunities to improve the nodulation, N-fixation and yield of pulse crops, including the selection of improved rhizobia for bean and lentils, the performance of inoculants under hostile establishment conditions and the contribution of fixed N by different pulse cultivars. *Ross Ballard, SARDI*

Phenology drivers in barley - how is RGT Planet[®] shaping up?

It is anticipated that barley will be a popular choice in the region during 2019. Best fit varieties and their management to achieve optimum productivity will be discussed. Also, the information gems from current research. *Felicity Harris, NSW DPI*

Black leg - latest on upper canopy infection management including tolerance of populations to old and new chemistry

The latest knowledge on this important topic including recent trial results looking at evidence for yield response to the application of foliar fungicide and timing. When can an economic response be expected? *Susie Sprague, CSIRO*

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. *Jeff Baldock, CSIRO Harm van Rees, Crop Facts Pty Ltd*

Emerging research from CSU students

Javier Atayde and Han Hoang Nguyen

Networking drinks at the Thirsty Crow

Day 2 program

9.00 am to 3.00 pm

PLENARY PRESENTATIONS

Social licence – preventing ‘truth decay’ and building trust in agricultural science in the community

This presentation contributes to the discussion of how we build trust in agriculture and gain social licence and confidence in farming? Where do we go from here? What should be our response and strategy as a grains industry?

It's important to understand that we each have a role to play in telling agriculture's story and earning our collective social licence to operate.

Heather is a Lecturer in Science Communication at the University of Western Australia. Her research investigates community attitudes to the use of science and technology in food production, especially the use of biotechnology in agriculture and farm animal welfare.



Heather Bray,
The University of Western Australia

Herbicide residues in soil - what is the scale and significance?

Two seasons of residue survey data matched up with available phytotoxic thresholds - what are the learnings to date about injury thresholds in crops? How do we best interpret soil herbicide residue test results? How do extended dry spells impact?

Mick is a project officer at NSW DPI, Wollongbar and is researching how herbicides might affect soil biology and grain production. He will share recent research findings that hope to address some of the queries raised.



Mick Rose,
NSW DPI

Applying R & D to help drive farm business profitability

Jordan and Jennifer Lindgren are the 2018 Saskatchewan Outstanding Young Farmers award winners. They operate Lindgren Farms, a 11,500 acre grain and oilseed farm at Norquay, Saskatchewan. Jordan and Jennifer pride themselves on the use of on-farm field scale trial results to meet and exceed their production goals. Jordan will discuss the factors critical to their success, including business management strategies, products, genetics and agronomic practices that work best on their farm.



Jordan and Jennifer Lindgren

CONCURRENT PRESENTATIONS

Emerging management tips for early sown winter wheats

Felicity will discuss the best new early sown winter wheat cultivars and management practices to maximise their performance. Plus, an update on the latest research findings for spring wheats.

Felicity Harris, *NSW DPI*

Phosphorus stratification – effects on utilisation and access

Understanding the implications of soil phosphorus stratification above the root zone. Graeme Sandral, *NSW DPI*

Pest patrol – Russian Wheat Aphid under the spotlight

A fresh look at RWA including numbers, symptoms and yield loss in relation to aphid numbers and plant symptoms. New research on seed treatments, insecticide sprays and threshold information. How important are risk factors such as over summer host plants, climatic conditions, land usage and presence of beneficial invertebrates.

Jessica Lye, *cesar*

Companion cropping - why would you consider it?

This session will position the thinking, theory and practical implications of companion cropping in the southern NSW region.

John Kirkegaard, *CSIRO* Greg Condon, *Grassroots Agronomy, AHRI*

Sustaining our herbicides into the future

The latest herbicide resistance research and options for sustaining herbicide use. Chris Preston, *The University of Adelaide*

Utilising precision agriculture for better agronomic decisions

Quenten will describe how he has put PA to work as an agronomic advisory tool proving that it is more than ‘just a toy’. He will describe how PA technology is providing a cost-effective way of supporting agronomic decisions.

Quenten Knight, *Agronomy Focus, Esperance, WA*

Super high oleic oil safflower - a future crop option for southern NSW

An old crop is new again. David will outline why you would grow this new specialist safflower type and how it can benefit the existing cropping systems of southern NSW. David Hudson, *Go Resources*

Integrated weed management round up forum

This forum will be in an extended format. Firstly, Greg will provide an overview of the current adoption of HWSC and other IWM tactics in southern NSW including the successes, challenges and lessons learned? John will follow and provide results from research on the impact of stripper fronts and chaff lining on weed seed management. Mike will close with a summary of several IWM technology-based solutions being researched including weed recognition and targeted tillage systems.

Greg Condon, *Grassroots Agronomy, AHRI* Mike Walsh, *The University of Sydney* John Broster, *CSU*

Assessing key pulse crops including lentils and chick peas

The agronomy project results that were obtained during the dry year including; understanding phenology and yield impacts across southern NSW environments. Mark Richards, *NSW DPI*

Canola establishment - learnings around precision planting, sowing depth and density

Recent research revisited canola establishment fundamentals - plant density and spatial arrangement. Col will discuss the key outcomes of this research. Col McMaster, *NSW DPI*

EVENT DETAILS



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IMPORTANT INFORMATION

Registration options

Cost: **\$200** one-day inc. GST | **\$300** two-days inc. GST
Student: **\$80** student one-day inc. GST | **\$150** student two-days inc. GST
Extra proceedings: **\$60** for pick up inc. GST | **\$80** posted inc. GST

Click here to register and pay online

Early bird registration

Early bird registration closes **18 January 2019**. Register early to go into the draw to win a free registration for the 2020 GRDC Grains Research Update in southern New South Wales.

Cancellation

If cancellation of your registration is necessary, please contact ORM with details. Cancellations prior to **14 February 2019** will receive a full refund. **There will be no refunds for cancellations received on or after 14 February 2019.** Registration is transferable at any time.

Car parking

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

Catering

Food and beverages are provided throughout the day.

Accommodation

A link to 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.

Contact details

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