

GOONDIWINDI
QUEENSLAND
TUESDAY 5TH AND
WEDNESDAY 6TH
MARCH 2019

GRAINS RESEARCH UPDATE

DRIVING PROFIT THROUGH RESEARCH



GRDC[™]

GRAINS RESEARCH
& DEVELOPMENT
CORPORATION

Goondiwindi Community Cultural Centre
Cnr Russell and Short Streets, Goondiwindi

grdc.com.au

GRAINS RESEARCH UPDATE

DRIVING PROFIT THROUGH RESEARCH



DAY 1 PROGRAM – TUESDAY 5 MARCH 2019

Time	Topic	Speaker (s)
10:00 AM	Welcome	GRDC
10:15 AM	Climate change impact on northern farming systems. How much change has already occurred? What is forecast? How will farming systems change?	Steven Crimp (ANU)
10:50 AM	New frontiers in cereal breeding for a changing climate. Long coleoptile wheat, crop competitive varieties, new wheat types for late sowing windows & high temperature stress during grain fill	Greg Rebetzke (CSIRO)
11:20 AM	Infield spectrometer or NIR on your phone! Real-time in-paddock measurement of grain moisture & protein, soil water & nitrogen, leaf nitrogen, micronutrients, types of starch/sugars & more!	William Palmer (Rapid Phenotyping) & Matt Gardner (AMPS Research)
12:00 PM	Lunch	
1:00 PM	Concurrent session 1 (See concurrent sessions for details)	
2:45 PM	Afternoon tea	
3:15 PM	Concurrent session 2 (See concurrent sessions for details)	
5:00 PM	Close	
6.40 PM	Networking dinner and drinks at the Royal Hotel, 48 Marshall Street (Supported by Nufarm)	

DAY 2 PROGRAM – WEDNESDAY 6 MARCH 2019

Time	Topic	Speaker (s)
7:30 AM	Early risers panel session: Nutritional implications of the drought & assessing nutritional needs for 2019. (Main auditorium) Mike Bell (QAAFI), Richard Daniel (NGA), Bede O'Mara (Incitec Pivot) Paul Gardoll (MCA). Facilitator: Tony Cox (NSW DPI)	
8:30 AM	Concurrent session 3 (See concurrent sessions for details)	
10:15 AM	Morning tea	
10:45 AM	Concurrent session 4 (See concurrent sessions for details)	
12:30 PM	Lunch	
1:30 PM	The Helicoverpa resistance management strategy – why, what it looks like, how is it working? Plus: - Products to take pressure off Altacor® & Steward® - Preliminary data on NPV use in winter pulses	Melina Miles (DAF Qld)
2:00 PM	Why does 1% matter so much? How small changes in management affecting price, yield, production cost or quality, result in large impacts on profit	Ross Kingwell (AEGIC)
2:30 PM	How large is the gap between actual & potential yield & what can we do about it? A 4 year survey of 200 fields	Harm van Rees (Crop Facts)
3:00 PM	Close	

LOCATION & TIMING OF CONCURRENT SESSIONS

	Main auditorium	River room	Training & Technology Centre
Day 1 Sessions 1 & 2	Chickpeas	Weeds	Cereal agronomy & disease
Day 2 Sessions 3 & 4	Soil constraints & root health	New technology	Farming systems

CONCURRENT SESSIONS

Chickpeas (Day 1, sessions 1 & 2)

Time session 1	Time session 2	Topic and Speaker (s)
1:00 PM	3:15 PM	Fungicide spray timing relative to inoculation. How long do fungicides protect chickpea from Ascochyta & is there usable kickback? Kevin Moore (NSW DPI)
1:30 PM	3:45 PM	Chickpea harvest & desiccation timing impacts Richard Daniel (NGA)
2:00 PM	4:15 PM	The physiology & genetics of cold temperatures in chickpeas Neroli Graham & Annie Warren (NSW DPI)
2:30 PM	4:45 PM	What causes & how can we manage grain quality defects in chickpea? Jenny Wood (NSW DPI)

Weeds (Day 1, sessions 1 & 2)

1:00 PM	3:15 PM	Green on green camera spraying - a game changer on our doorstep? Guillaume Jourdain (CEO Bilberry France)
1:30 PM	3:45 PM	Chaff lining & chaff tramlining weed seeds. Research & grower experience with northern weeds Annie Rutledge (DAF Qld) & Peter Bach (Grower)
2:00 PM	4:15 PM	Residual herbicides & sow(milk) thistle - length of residual & efficacy Michael Widderick (DAF Qld)
2:30 PM	4:45 PM	Targeted tillage - a commercial reality for fallow weed control Michael Walsh (U. Syd)

Cereal agronomy & disease (Day 1, sessions 1 & 2)

1:00 PM	3:15 PM	Barley agronomy: New varieties, their potential for early sowing & limitations. Do really long season varieties fit in the north? Rick Graham (NSW DPI)
1:30 PM	3:45 PM	New virulences in Net Form of Net Blotch (NFNB) in barley; high level fungicide resistance in net blotch; & barley stem rust on the Downs in 2018. Lislé Snyman (DAF Qld)
2:00 PM	4:15 PM	Crown-rot update: - N interactions - New varieties & resistance - Using Predicta® B as an in-crop diagnostic - Root system health Steven Simpfendorfer (NSW DPI)
2:30 PM	4:45 PM	The secret life of crown rot: what happens after harvest? Toni Petronaitis (NSW DPI)

Soil constraints & root health (Day 2, sessions 3 & 4)

Time session 3	Time session 4	Topic and Speaker (s)
8:30 AM	10:45 AM	Root health - a key factor for cereal crop productivity Gupta Vadakattu (CSIRO)
9:00 AM	11:15 AM	Subsoil constraints - the whys & wherefores of sodium, chlorides & magnesium. Why & how do they impact soil? Neal Menzies (UQ)
9:30 AM	11:45 AM	Wheat varietal tolerance to sodicity - current varieties plus breeding lines Yash Dang (UQ)
9:40 AM	11:55 AM	PhD SESSION - The physiology of improved wheat growth on dispersive sodic soils Monia Anzouman (UQ)
9:50 AM	12:05 PM	Using EM38 at the crop lower limit to identify subsoil constraints for site-specific soil & nutrient management Yash Dang (UQ)

New technology (Day 2, sessions 3 & 4)

8:30 AM	10:45 AM	Data sources to manage variability that won't break the bank - what's out there? Brett Whelan (Uni. Syd.)
9:00 AM	11:15 AM	Future farming technologies leading to automated application systems and variable rate control Craig Baillie (USQ)
9:30 AM	11:45 AM	Aqua-Till - ultra high pressure liquid coulters for slicing surface residue ahead of tine or disc seeders Greg Butler (SANTFA)
9:55 AM	12:10 PM	On the go protein sensors - it's standard on some new headers. Using protein data for more profitable cropping decisions Brett Whelan (Uni. Syd.)

Farming systems (Day 2, sessions 3 & 4)

8:30 AM	10:45 AM	Cover crop research to increase water infiltration & reduce evaporation David Lawrence (DAF Qld)
8:55 AM	11:10 AM	Farming systems - GM & \$ return/mm water Lindsay Bell (CSIRO)
9:15 AM	11:30 AM	Multiple season nutrient balance. P N & K export rates across crop sequence & strategies Jon Baird (NSW DPI) / Jayne Gentry (DAF Qld)
9:35 AM	11:50 AM	Tactical decisions on crop sequencing - opt in/ opt out decisions based on PAW triggers Jeremy Whish (CSIRO)
9:55 AM	12:10 PM	Impact of crop sequence on soil water Lindsay Bell (CSIRO) / Andrew Erbacher (DAF Qld)

Update dinner is always a highlight at the Goondiwindi Update. This year we are trying something different with networking drinks and dinner in a stand-up format. Still the great food you expect from the Goondiwindi Update dinner, but better chance to network.

Agenda is subject to change

Further information
Contact John Cameron or Erica McKay
on 02 9482 4930 or
northernupdates@icanrural.com.au
Or register on-line at <http://www.icanrural.com.au>

