

Program DAY 1 – Monday 27 February 2023

8.00 am	REGISTRATION & COFFEE (Sponsored by AGT)				
8.45 am	PLENARY 1 – Grand Ballroom 1				
8.45 am	Welcome — Darrin Lee, GRDC Western Panel Future directions for GRDC investments — John Woods, Chair GRDC				
9.10 am	The Grains Australia pathway to	o value — Richard Simonaitis, Gra	ains Australia		
9.25 am	GRDC 'Seed of Light' Award pro	esentation			
9.45 am	The market outlook for grains	— Michael Whitehead, ANZ			
10.15 am	The sustainability of Australian	grain farming systems — Richard	d Heath, Australian Farm Institute		
11.00 am	MORNING TEA				
11.40 am	SESSION 1 — Agronomy	SESSION 2 — Markets	SESSION 3 — Crop Protection – Diseases	SESSION 4 Crop Protection – Weeds	
	Selecting the right cereal variety for the conditions Felicity Harris, Charles Sturt University	Grain export supply chain challenges Ross Kingwell, AEGIC	Australian Fungicide Resistance Extension Network update Fran Lopez-Ruiz, CCDM	The most expensive herbicide is the one that doesn't work: Hitting the target Bill Campbell, Bill Campbell Consulting	
12.10 pm		5 Min I	Moving		
12.15 pm	Towards an understanding of crop residue effects on wheat yield Michael Ashworth, AHRI	Market requirements and how Australian wheats perform Ken Quail, AEGIC	The impact of new rust resistance genes Melania Figueroa, CSIRO	Glyphosate alternatives for summer and pre-seeding knockdown weed control Harmohinder Dhammu, DPIRD	
12.45 pm	LUNCH				
1.40 pm	SESSION 5 — Agronomy	SESSION 6 — Carbon and GHG	SESSION 7 — Nutrition	SESSION 8 Crop Protection – Weeds	
1.40 pm					
1.40 pm 2.10 pm	 Agronomy Optimal planting times for canola varieties Tamryn Davis, SLR Agriculture 	 Carbon and GHG Nitrous oxide emissions from cropping soils in the WA grainbelt: a 10-year perspective Louise Barton, UWA 	 Nutrition What is driving yield response to phosphorus fertiliser in current cropping systems? 	Crop Protection – Weeds Strategic tillage: how does it impact weed management?	
	 Agronomy Optimal planting times for canola varieties Tamryn Davis, SLR Agriculture 	 Carbon and GHG Nitrous oxide emissions from cropping soils in the WA grainbelt: a 10-year perspective Louise Barton, UWA 	 Nutrition What is driving yield response to phosphorus fertiliser in current cropping systems? Craig Scanlan, DPIRD 	Crop Protection – Weeds Strategic tillage: how does it impact weed management?	
2.10 pm 2.15 pm 2.45 pm	 Agronomy Optimal planting times for canola varieties Tamryn Davis, SLR Agriculture and Matthew Nelson, CSIRO Grower experiences with Super High Oleic safflower in WA Byron Milne, Spencer Beatty and Michael Lamond, SLR Agriculture 	 Carbon and GHG Nitrous oxide emissions from cropping soils in the WA grainbelt: a 10-year perspective Louise Barton, UWA 5 Min Key learnings from benchmarking greenhouse gas emissions from WA growers Stacey Bell-Crookes, Farmanco 5 Min 	 Nutrition What is driving yield response to phosphorus fertiliser in current cropping systems? Craig Scanlan, DPIRD Moving Optimising nutrition for high rainfall zone canola Jeremy Curry, DPIRD Moving 	Crop Protection – Weeds Strategic tillage: how does it impact weed management? Catherine Borger, DPIRD Predicting profitability of summer weed control timing and impact on crop yield potential Yvette Oliver, CSIRO	
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rchupdates

Crown Ballroom 3

2023 GRAINS RESEARCH UPDATE, Perth



Program DAY 1 – Monday 27 February 2023 (continued)

4.00 pm	SESSION 9 — Nutrition	SESSION 10 - Soils	SESSION 11 — Plant Breeding	SESSION 12 — Markets and Post Harvest
	Potassium update – Panel discussion Getting more efficiencies out of potassium (and nitrogen) fertilisers in a high price environment James Easton, CSBP	Long-coleoptile wheats for improved establishment, weed competitiveness and productivity on ameliorated soils Stephen Davies, DPIRD	Targeted crop trait improvement through gene editing	Sustainability or Health? Grain-food product differentiation in key markets
			Yong Han, DPIRD	Chris Carter, AEGIC
			Gene-editing and crop breeding: what can it deliver and what are the implications for international trade? Michael Jones, Murdoch Uni	
		Subsurface acidity management: long term grower case studies to direct future management Alice Butler, DPIRD		
	Comparison of soil analytical methods for estimating plant- available potassium			
4.30 pm	Miaomiao Cheng, SoilsWest	5 Min Moving		5 Min Moving
4.35 pm	K responses on loamy soils: an emerging issue for grain crops Richard Bell, SoilsWest	Re-engineering soil to redefine the water-limited yield potential under changing climate Gaus Azam, DPIRD	50 years of wheat breeding impact in WA Dion Bennett, AGT	From stalk to store: opportunities for WA growers to improve harvesting and postharvest storage Ben White, Kondinin Group
	Canola responses to potassium form, rate and			Ben White, Kondinin Group

5.05 pm NETWORKING SUNDOWNER (Sponsored by CBH Group)

This program may be subject to change.

2023 GRAINS RESEARCH UPDATE, Perth



Program DAY 2 – Tuesday 28 February 2023

7.00 am	GIWA BREAKFAST REGISTRATION (separate ticketing) – Crown Ballroom 3				
	GIWA Breakfast commences – sponsored by the Department of Primary Industries and Regional Development				
8.50 am	GIWA Breakfast concludes				
8.30 am	WELCOME COFFEE (Sponsore	ed by AGT)			
9.00 am	Welcome back				
9.10 am	PLENARY 2 – Grand Ballroom 1				
9.10 am	Plant protein production - value	adding to Australian pulses $-$	Phil McFarlane, Australian Plant Pr	oteins	
9.55 am	SESSION 13 — Soils	SESSION 14 — Canola	SESSION 15 — Crop Protection – Diseases	SESSION 16 — Crop Protection – Insects	
	Molecular level interpretation of Soil Water Repellency for the development of rapid assessment and novel amendments David Henry, Murdoch Uni	New genetics for improved canola establishment Matthew Nelson, CSIRO	Wheat powdery mildew Sam Trengove, Trengove Consulting	Using surveillance and social benchmarking to improve redlegged earth mite insecticide resistance management Lizzy Lowe, Cesar Australia	
10.25 am		5 Min	Moving		
10.30 am	Impact of timing of strategic deep tillage on crop productivity, profitability and agronomic opportunities George Mwenda, DPIRD	Manipulating canola canopies through agronomy and genetics in the high- rainfall zone Jens Berger, CSIRO	Insecticidal control of green peach aphid and turnip yellows virus: resistance threats, limitations and future alternatives Ben Congdon, DPIRD	Lessons learned from native budworm activity in wheat relative to traditional hosts lupins, pulses and canola Dusty Severtson, DPIRD	
11.00 am	MORNING TEA				
11.35 am	SESSION 17 — Soils	SESSION 18 — Digital Agriculture	SESSION 19 — Crop Protection — Diseases	SESSION 20 — Crop Protection – Insects and Weeds	
	Can we get gains in the paddock with different bio-amendment products and management strategies? Grace Williams, DPIRD	Next generation digital technologies for the grains industry Ferdous Sohel, Murdoch Uni	How long do sclerotinia sclerotes survive in WA? Decision support tools to help with on-farm management of blackleg and sclerotinia in canola	Russian wheat aphid thresholds in WA and using biological control for RLEM Svetlana Micic, DPIRD	
	Potential use of on-farm acidic sand and other ameliorants to detoxify subsoil boron while re-engineering the soil profile Kanch Wickramarachchi, DPIRD		Jean Galloway, DPIRD		
12.05 pm	5 Min Moving				
12.10 pm	Options for managing sodic soils David Hall, DPIRD	Digital Agriculture: what does an information intensive agricultural system look like? Roger Lawes, CSIRO	Fungicide mixtures, rotations, timing and decisions for managing Net Form Net Blotch on barley in southern WA	Resistance status of wild radish, brome and barley grass Mechelle Owen, AHRI	
			Kithsiri Jayasena, DPIRD	CoAXium [®] Barley: a new	
			Economical management of Spot Form Net Blotch in low rainfall environments	weed management tool Tristan Coram, AGT	
			lason Bradley DPIRD		
12.40 pm			Jason Bradley, DPIRD		

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Crown Ballroom 2

2023 GRAINS RESEARCH UPDATE, Perth



Program DAY 2 – Tuesday 28 February 2023 (continued)

1.30 pm	FOCUS SESSIONS			
	Focus Session 1	Focus Session 2	Focus Session 3	Focus Session 4
1.30 pm	Canola on Canola: profit maker or system breaker?	Reducing grain farming emissions	Plant breeding research workshop	New researchers' snapshots
	Convenor: Juliet McDonald	Convenor: Ben White This focus session will look at how well WA grain farmers are	Invenor: Ben WhiteUntangling the 'Gordian Knot'is focus sessionis focus sessionlook at how wellis focus farmers aregrain farmers areis focus farmers areeting the grain farmingKar-Chun (KC) Tan, CCDMPangenomes as a technologyto improve Australian Oats andbarley inductorbarley inductor	Insect response to canola with modified sterol metabolism Afroja Rahman, Murdoch Uni
	We have a range of speakers who can help understand critical			A case of mistaken identity? – new knowledge of root lesion nematode pests of grains in south-west WA Rhys Copeland, Murdoch Uni
	components of whether or not to do canola on canola.	emissions and what some of the constraints		
	 Varieties and breeding objectives 	are to achieving further reductions.	Penghao Wang, Murdoch Uni	Investigating herbicide tank mixes to control HPPD-
	 – David Tabah • Disease risks in canola – Steve Marcroft 	 Findings of DPIRD/ CBH/ WOA work Jackie Bucat Lime/fertiliser use and emission trade-offs Chris Gazey Machinery efficiencies to reduce GHG Glen Reithmuller Experience of an on-farm audit Gary Lang Challenges for CBH and growers Royce Taylor Broad findings of farmers undergoing audits Stacey Bell-Crookes 	Heat stress tolerance in a barley germplasm Tefera Angessa, Murdoch Uni	resistant wild radish (<i>Raphanus raphanistrum</i>) Rex Cao, AHRI/Nufarm
	 Optimal nutrition Rohan Brill 		Progress towards the discovery of genes for heat stress tolerance	Investigating electric weed control in Australia
	 Insect problems in canola Dusty Severtson Weeds issues or solutions Harmonhinder Dhammu Grower experience with canola on canola Chad Eva 		in a diverse canola population Sheng Chen, UWA	Miranda Slaven, DPIRD Genome mining in fungi:
			In from the wild: improving chickpea chilling tolerance using the wild relatives Jens Berger, CSIRO Identification of aluminum-	uncovering a treasure trove of herbicidal molecules Hera Nyugen, UWA
				How are heat and drought stresses functionally linked to glyphosate resistance? Arslan Peerzada, DPIRD
			tolerant chickpea genotypes and their potential use in chickpea breeding Yong Jia, Karthika Pradeep, Murdoch Uni An effective strategy for pre-breeding investigations into soil constraints amidst climate change Roopali Bhoite, DPIRD	
				Effectiveness of chickpea rhizobia across Western Australian agro-ecological zones Yvette Hill, Murdoch Uni
				Wheat Blast what is our risk? Zia Hoque, DPIRD
				Revealing better metabolic adaptations in roots of bread wheat lines differing in salt tolerance mechanisms Bhagya Dissanayake, UWA
				Improving farming system profitability, management of greenhouse gas emissions and climate resilience in the low and medium rainfall zones of WA: Grower perspectives Dayna Hutchison, DPIRD
				Farm strategy and tactics matter Michael Young, UWA
3.30 pm			15 Min Moving	
3.45 pm	PLENARY 3 – Grand Ballroo	m 1		
3.45 pm	Grain crop residues to hyd	rogen and ammonia — Lou	ise Brown, Hydgene Renewables, an	d Greg Perkins, Wildfire Energy
4.35 pm	GRDC closing comments	— Peter Bird, GRDC		
4.45 pm	Sponsors and speakers' Su	ndowner (Sponsored by CSI	3P)	
This progra	m may be subject to change.			