## 2022 GRAINS RESEARCH UPDATE, Perth



## Program DAY 1 — Monday 21, February

### Plenary presentations

9.00 am	Welcome and 'Seed of Light' presentation – Darrin Lee, Chairman GRDC Western Panel
9.15 am	Opening and future directions of GRDC – John Woods, Chairman GRDC
9.40 am	Greenhouse gas emissions of Australian grain production – Maartje Sevenster, CSIRO
10.05 am	Q&A with John Woods, GRDC and Maartje Sevenster, CSIRO
10.15 am	BREAK
10.30 am	Carbon neutral grain farming by 2050 – an example in calculating net emissions for a broadacre farm and strategies to reduce net emissions – Mandy Curnow, DPIRD
11.00 am	Market Outlook for the WA grains industry in 2022 and the longer term – challenges and opportunities  – PANEL DISCUSSION WITH: Nathan Cattle, Clear Grain Exchange; Jason Craig, CBH; Cheryl Kalisch-Gordon, Rabobank; John Orr, Premium Grain Handlers; and Richard Simonaitis, AEGIC
40	PDEAK
12 noon	BREAK
12 noon 12.30 pm	Australian soft wheat for Asian markets – Ken Quail, AEGIC
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12.30 pm 1.00 pm 1.30 pm	Australian soft wheat for Asian markets – Ken Quail, AEGIC  Wheat agronomy management – managing risk versus potential – Dion Nicol, DPIRD  Blackleg control in the upper canopy of canola crops – Steve Marcroft, Marcroft Grains Pathology
12.30 pm 1.00 pm 1.30 pm 2.00 pm	Australian soft wheat for Asian markets – Ken Quail, AEGIC  Wheat agronomy management – managing risk versus potential – Dion Nicol, DPIRD  Blackleg control in the upper canopy of canola crops – Steve Marcroft, Marcroft Grains Pathology  BREAK  Forewarned is Forearmed – new BoM tools for weather forecasting and climate services for agriculture

This program may be subject to change.

### DAY 2 — Tuesday 22, February

### Plenary presentations

9.00 am	Gene editing: Building breeding 4.0 for growers and the grains industry – Catherine Feuillet, Chief Scientific Officer, INARI, USA
9.40 am	The interaction between wheat establishment timing and pre-emergent herbicides choice on annual ryegrass seed production – Mike Ashworth, AHRI, UWA
10.10 am	The fit of long coleoptile wheats in WA grain farming systems – observations from the 2021 growing season – Michael Lamond, SLR Agriculture
10.40 am	BREAK
11.00 am	Optimising fertiliser application – what level of precision can we achieve? – Craig Scanlan, DPIRD
11.30 am	Fertiliser strategies in response to higher prices – PANEL DISCUSSION WITH: David Cameron, Farmanco Management Consultants; Peter McEwen, Agri-Access; James Easton, CSBP; Elizabeth Petersen, UWA; and Craig Scanlan, DPIRD
12.30 pm	BREAK
12.30 pm 1.00 pm	BREAK  Tips for canola establishment – Jackie Bucat, DPIRD and Matt Nelson, CSIRO
1.00 pm	Tips for canola establishment – Jackie Bucat, DPIRD and Matt Nelson, CSIRO
1.00 pm 1.30 pm	Tips for canola establishment – Jackie Bucat, DPIRD and Matt Nelson, CSIRO  Oat varieties for 2022 and the new national oat breeding program – Allan Rattey, InterGrain
1.00 pm 1.30 pm 2.00 pm	Tips for canola establishment – Jackie Bucat, DPIRD and Matt Nelson, CSIRO  Oat varieties for 2022 and the new national oat breeding program – Allan Rattey, InterGrain  BREAK
1.00 pm 1.30 pm 2.00 pm 2.15 pm	Tips for canola establishment – Jackie Bucat, DPIRD and Matt Nelson, CSIRO  Oat varieties for 2022 and the new national oat breeding program – Allan Rattey, InterGrain  BREAK  Mice control – Steve Henry, CSIRO  Why bother with artificial intelligence in agriculture? Because it can improve fertiliser management

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## 2022 GRAINS RESEARCH UPDATE, Perth



## Program DAY 3 — Tuesday 1, March

NUTRITION	
9.00 am	Carbon farming in WA – Richard Eckard, University of Melbourne
9.30 am	Potassium rundown in the Western grains region – where, why and what does it mean for crop yields – Richard Bell, Murdoch University
10.00 am	Does optimum wheat phosphorus requirement change with sowing time and conditions in WA?  – Mark Gherardi, Summit Fertilizers
10.30 am	NEW RESEARCHER SNAPSHOT: The power of flux towers for measuring crop productivity and water use — Caitlin Moore, UWA
10.45 am	Session concludes

NITROGEN FROM LEGUMES	
11.00 am	Cereals after pasture legumes have higher grain protein levels – Robert Harrison, CSIRO
11.25 am	Profitability, costs and risks associated with establishing annual pasture legumes in cropping rotations – Dean Thomas, CSIRO
11.50 am	Optimising nitrogen fixation in legumes through improved rhizobia strains – Ron Yates, DPIRD
12.15 pm	<b>NEW RESEARCHER SNAPSHOT: Soil moisture mapping in agricultural fields using electrical conductivity sensing</b> – Hira Shaukat, UWA
12.35 pm	Day 3 concludes

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#### DAY 4 — Thursday 3, March

CROP PROTECTION	
9.00 am	Ice nucleating bacteria and frost — Amanuel Bekuma, DPIRD
9.25 am	How well does assessment of outer florets of wheat heads following frost(s) relate to grain yield at the end of the season? – Brenton Leske, DPIRD
9.50 am	AHRI herbicide resistance update 2021 – most significant results from the field to the lab – Roberto Busi, AHRI UWA
10.15 am	NEW RESEARCHER SNAPSHOT: Electric weed control in Australia – Miranda Slaven, DPIRD
10.35 am	BREAK
11.00 am	Advances in controlling brome and barley grass – Gurjeet Gill, University of Adelaide
11.25 am	Maximising crops and minimising weeds with smart phase farming – Yaseen Khalil, Kalyx Australia
11.50 am	Yes, no, maybe – getting value from herbicide resistance testing – Fiona Dempster, AHRI, UWA
12.15 pm	Determining yield loss in canola following sclerotinia stem rot infection – Sarita Bennett, CCDM, Curtin University
12.40 pm	NEW RESEARCHER SNAPSHOT: Spraying for yellow leaf spot in wheat – will you lose money? – Anna Hepworth, DPIRD
1.00 pm	Day 4 concludes

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## 2022 GRAINS RESEARCH UPDATE, Perth



# Program DAY 5 - Tuesday 8, March

CANOLA	
9.00 am	Effect of seed singulation and seeding rates of canola on yield and competition against ryegrass  – Glenn McDonald, University of Adelaide and Glen Riethmuller, DPIRD
9.30 am	Canola pre-breeding for heat tolerance – Sheng Chen, UWA
10.00 am	Spring versus winter canola phenology across Australia – new insights for WA growers – Jeremy Whish, CSIRO
10.30 am	Session concludes
CEDEAL	S - wheat gate and harley
	5 - wheat, oats and barley
CEREALS	Understanding the fit of winter wheats for WA environment — Brenda Shackley, DPIRD
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11.00 am	Understanding the fit of winter wheats for WA environment – Brenda Shackley, DPIRD
11.00 am 11.25 am	Understanding the fit of winter wheats for WA environment — Brenda Shackley, DPIRD  Pre-harvest sprouting management begins at seeding — Jeremy Curry, DPIRD

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#### DAY 6 — Thursday 10, March

SOILS	
9.00 am	New Soil Water Repellence reference book — SoilsWest
9.15 am	The combined influence of micro-water harvesting, deep ripping and gypsum on yield of barley in sodic soils  – Wayne Parker, DPIRD
9.40 am	Sand and gravel mulches for sodic soils – David Hall, DPIRD
10.05 am	<b>NEW RESEARCHER SNAPSHOT:</b> Improving the understanding of soil water behaviour in re-engineered soil profiles  – Kanch Wickramarachchi, DPIRD
10.20 am	NEW RESEARCHER SNAPSHOT: Efficacy of pre-emergent herbicides on renovated soil – Bowen Zhang, DPIRD
10.35 am	On farm experimentation – developing robust analysis for paddock scale trials – Julia Easton, Curtin University, Luke Dawson, CSBP and Nathan Eaton, NGIS Australia
11.00 am	Session concludes

PULSES	
11.00 am	Faba bean agronomy – Mark Seymour, DPIRD
11.25 am	<b>Double break crop sequences with high value legumes – awesome when it rains!</b> – Nathan Craig, West Midlands Group
11.50 am	Understanding and managing sclerotinia in lupins – Ciara Beard, DPIRD and Pippa Michael, CCDM, Curtin University
12.15 pm	Recent and impending changes to chemical MRL's in markets – Gerard McMullen, National Working Party on Grain Protection
12.40 pm	Day 6 concludes

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