Objective 1

Identifying low pH tolerance and effective rhizobia for		
wild Cicer to improve adaptation to acid sandy soils	Murdoch University	\$19,311.00
	Department of Primary	
Innovative approaches to managing subsoil acidity in the Western Region	Industries and Regional Development	\$108,669.00
Developing farming systems for the LRZ of Western	Development	\$108,009.00
Australia°	CSIRO	\$162,335.00
Pulse Breeding Australia: Faba Bean Breeding	The University of Adelaide	\$1,298,903.00
	Description of John Description	
Understanding the amelioration processes of the subsoil application of amendments in the Southern Region	and Regions	\$387,970.00
Increasing production on sandy soils in low and medium	una Regions	\$367,970.00
rainfall areas of the Sou°	CSIRO	\$737,877.00
Soil Constraints-West Steering Committee	Mark Pearce	\$5,000.00
Soil Constraints-West Steering Committee	Agrarian Management	\$6,400.00
Compaction Mitigation options for growers in the Albany		, , , , , , , , , , , , , , , , , , , ,
and Kwinana West port zones	AgVivo pty Ltd	\$14,640.00
Improved Resistance to oat pathogens and abiotic		
stress management	The University of Adelaide	\$176,080.50
Maintenance of grain plumpness and transfer of heat	Manual and a Unit country.	4400 000 00
tolerance into Australian barley germplasm	Murdoch University	\$136,008.00
National Soybean Breeding Program 2017 - 2021	CSIRO	\$424,376.00
Optimising whole-farm water use efficiency and risk using whole farm bioeconomics - Postdoctoral Fellow		
aligned to Northern farming Systems projects	CSIRO	\$35,793.00
	Queensland Department of	, , , , , , , , , , , , , , , , , , ,
National Mung Bean Improvement Program	Agriculture and Fisheries	\$241,250.00
NSW DPI Bilateral Agreement - Winter Agronomy	Department of Regional NSW	\$2,267,009.00
NSW DPI Bilateral Agreement - Winter Pathology	Department of Regional NSW	\$2,345,168.00
NSW DPI Bilateral Agreement - Infrastructure	Department of Regional NSW	\$1,346,623.00
A genetic diversity toolkit to maximise harvest index by		
controlling the duration of developmental phase: IWYP	00/00	
CSIRO	CSIRO	\$22,605.00
Capacity building to understand plant energy efficiency in harsh environments	University of Western Australia	\$25,000.00
Economics of ameliorating soil constraints in the	University of Southern	\$25,000.00
northern region: Economics of adoption	Queensland	\$45,000.00
Economics of ameliorating soil constraints in the		
northern region: Spatial soil constraint diagnoses	The University of Queensland	\$156,955.02
Economics of ameliorating soil constrains in the northern		
region: Program co-ordination - communication, extension and evaluation	The University of Queensland	¢00,000,00
Economics of ameliorating soil constraints in the	The Oniversity of Queensiand	\$90,000.00
northern region: Soil constraint management and	University of Southern	
amelioration	Queensland	\$647,555.42
Seeding systems to improve cereal crop establishment	CORRIGIN Farm Improvement	
on heavy textured soils	Group	\$18,080.00
Demonstrating the benefits of soil amelioration and		
controlled traffic practices across a broad range of soil	Wost Midlands Group	¢40,000,00
types in Western Australia.	West Midlands Group	\$40,000.00
Ripper Gauge Demonstration sites Albany port zone Optimising plant establishment, density and spacings to	Stirlings to Coast Farmers	\$10,000.00
maximise crop yield and profit in the southern and		
western regions	The University of Adelaide	\$424,849.00

2021-22 Research Development	t and Extension i roject	Listing
Summer Cropping Demonstrations in the Esperance Port Zone	SEPWA	\$47,000.00
Ripper Gauge Demonstration sites - Esperance Port Zone	SEPWA	\$10,000.00
Optimising mungbean yield in the northern region - Mungbean Physiology	The University of Queensland	\$282,308.00
Optimising mungbean yield in the northern region - Mungbean Agronomy	Queensland Department of Agriculture and Fisheries	\$214,880.80
Adapted barley germplasm with waterlogging tolerance for the Southern and Western regions	University of Tasmania	\$304,174.00
Canola pre-breeding investment to continue some activities conducted under DAN00208	Department of Regional NSW	\$31,500.00
Licence and Support Contract – NVT Online Website Support and Maintenance	Kobe Creations	\$22,905.00
Optimising sorghum yield through agronomic management	The University of Queensland	\$767,414.00
Soil Constraints - West Steering Committee	Agronomy Focus Pty Ltd	\$5,800.00
National Phenology Initiative	The University of Melbourne	\$479,413.00
	•	
NVT-SAGI Services Agreement Pulse Check - local extension and communication for	University of Wollongong	\$263,500.00
profitable pulse production in Coast & Tablelands	Soy Australia Ltd Eurofins Agroscience Services	\$30,000.00
NVT Sorghum (Eurofins)	Pty Ltd	-\$18,348.00
Pulse Check – local extension and communication for profitable pulse production in Eastern Downs QLD Rooty: A root ideotype toolbox to support improved	PulseAg Consulting	-\$10,000.00
wheat yields	The University of Queensland	\$32,250.00
Optimising Canola Production in Diverse Australian Growing Environments	CSIRO	\$225,954.00
Warm and cool season mixed cover cropping for sustainable farming systems in south eastern Australia	Ag Excellence Alliance Inc	\$10,000.00
A holistic approach to seep management for preventing land degradation in the landscape	Mallee Sustainable Farming Inc	\$20,000.00
Building the resilience and profitability of cropping and grazing farmers in the high rainfall zone of Southern Australia	Southern Farming Systems (SFS)	\$50,000.00
Next generation plant breeding: integrating genomic selection and high throughput phenotyping to enhance		
genetic gain in sorghum and mungbeans Optimising profitability of high rainfall zone farming systems-survey, farmer-scale demonstration trials and	The University of Queensland	\$51,425.00
field days	Stirlings to Coast Farmers Department of Primary	\$53,292.80
Re-engineering soils to improve the access of crop root systems to water and nutrients stored in the subsoil.	Industries and Regional Development	\$2,128,366.00
High Value Pulses - Raising awareness, optimising yield and expanding the area of lentil, chickpea and faba	Department of Primary Industries and Regional	
bean in Western Australia	Development Department of Primary	\$316,000.00
Increasing farming system profitability and longevity of benefits following soil amelioration Increased grower profitability on soils with sodicity and	Industries and Regional Development Department of Primary	\$1,534,880.00
transient salinity in the eastern grain belt of the Western Region.	Industries and Regional Development	\$578,865.00

Capturing global diversity and international genetic		
gains of wheat and barley	University of Sydney	\$224,317.00
	Department of Primary	
Optimising high rainfall zone cropping for profit in the	Industries and Regional	
Western Region	Development	\$576,706.00
Post-doctoral Fellowship - Understanding sorghum root	The University of Overendered	# F7.000.00
growth and function in cold soils	The University of Queensland	\$57,998.00
Post-doctoral Fellowship - Enhancing Genomic Prediction for Sorghum to deal with genotype-by-		
environment interactions for yield	The University of Queensland	\$150,000.00
Non-wetting management options for growers in the	c c. aacciiciana	\$130,000.00
Albany port zone	Southern Dirt	\$26,944.00
NVT Research Platform Development and Support	Storyboard Multimedia Australia	
Storyboard	Pty Ltd	\$350,677.93
Multi-species DNA chip platform - A resource for pulse	Department of Jobs, Precincts	
genetic improvement	and Regions	\$250,000.00
New knowledge and practices to address topsoil and		
subsurface acidity under minimum tillage cropping	The life of Adeletic	*
systems of South Australia	The University of Adelaide	\$474,000.00
Investment in WA-focused Linseed Agronomy	Southern Dirt	\$19,000.00
NVT Pathology Program	Multiple partners	\$2,547,441.07
Frost SENSE: An integrated modelling framework to		
rapidly map the extent of stem and reproductive frost	CSIRO	¢226.020.00
damage in wheat and barley Improving canola heat tolerance - a coordinated	CSIRO	\$226,838.00
multidisciplinary approach	University of Western Australia	\$600,000.00
Increasing return on investment from canola seed	oniversity of Western Australia	\$000,000.00
through improved establishment - Program 1	CSIRO	\$800,000.00
Improving production of grower retained open		, ,
pollinated canola seed using agronomic management to)	
increase establishment in the MRZ and LRZ of the GRDC		
Northern Region.	Department of Regional NSW	\$132,500.00
LID7 - Litala vialdinas na dvoda a t	Bunge Agribusiness Australia	445.000.00
HRZ - High yielding red wheat	Pty Ltd	\$15,000.00
Post-doctoral Fellowship: Integrating yield optimisation in mungbean	La Trobe University	\$95,145.00
Using long season wheats for increases in profits and	La Trobe Offiversity	\$95,145.00
grazing opportunities	Southern Dirt	\$60,166.00
Optimising the profitability of high rainfall zone farming		φοσ,1σσ.σσ
systems - survey, farmer-scale demonstration trials and		
field days	SEPWA	\$50,000.00
Maintain the longevity of soils constraints investments		
and increase grower adoption through extension -	The Trustee for PLUSKE FAMILY	
western region	TRUST	\$110,000.00
Machinery Investment Options in the Australian	Karakata lafa maka Garatan	45 574 05 4 04
Cropping Regions	Kondinin Information Services	\$5,571,254.64
Regional Harvester Set-Up Workshops for the Economic Optimisation of Harvest Losses, Efficiency and Grain		
Quality	Primary Sales Australia Pty Ltd	\$491,217.00
Leveraging Existing International Germplasm to Deliver		Ψ131,217.00
Improved Acid Soil Tolerance Chickpea for Australian		
Growers (GRDC/USA/Ethiopia Initiative)	UC Davis	\$700,000.00
Manipulation of stomata to increase yield potential in		
wheat (IWYP collaboration)	The University of Adelaide	\$345,000.00
Demonstrating the effects of reduced lupin seed	T. 11.1.0	4
integrity on crop establishment	The Liebe Group Incorporated	\$29,956.00

2021-22 Research Development	i and Extension Projec	i Listing
National Variety Trials Program 2020-2023	Multiple delivery partners	\$7,289,241.72
Design, layout, printing: NVT Sowing Guides	Coretext	\$81,739.35
Rapid Analysis of on-farm lime sources	GHD	\$30,054.00
Utilising novel genetic diversity to increase Barley yields nationally	The University of Adelaide	¢240, 20.4, 0.0
-	Department of Regional NSW	\$319,294.00
Chickpea Breeding Australia 2020-2025 Queensland winter crop sowing guide 2020, 2021 and	Department of Regional NSW	\$4,000,000.00
2022	Albatross Rural Consulting	\$25,000.00
	Department of Jobs, Precincts	Ψ23,000.00
NVT Victorian crop sowing guides 2020-2022	and Regions	\$35,000.00
Matching adapted pulse genotypes with soil and climate		
to maximise yield and profit, with manageable risk in		
Australian cropping systems.	CSIRO	\$577,329.00
Optimal nutrition packages for renovated cemented lateritic gravels to increase farm profitability	Cropportunity Pty Ltd ATF The Window of Opportunity Trust	¢20,000,00
Understanding return on investment of sub-surface	Willdow of Opportunity Trust	\$20,800.00
water management options for waterlogged areas in the		
Western Region (Albany Port Zone)	Stirlings to Coast Farmers	\$56,000.00
Understanding return on investment of sub-surface		
water management options for waterlogged areas in the		
Western Region	Management Inc.	\$30,000.00
Barley Agronomic Strategies For The Geraldton Port Zone	Kalyx Australia Pty Ltd	\$119,000.00
Zone	Field Applied Research	\$119,000.00
Hyper Yielding Crops	Australia Ltd	\$2,249,951.00
		, , ,
Increasing the profitability of the double break rotation		
in the medium rainfall zone of WA Wheatbelt through		
incorporation of an early sown high value pulse	West Midlands Group	\$57,000.00
Incorporation of organic soil ameliorants to boost productivity of sandy soils in the medium to high rainfall	CORRIGIN Farm Improvement	
zones of the Wheatbelt of Western Australia.	Group	\$40,000.00
Agronomic management of weeds, crop nutrition and	·	* ,
farming practices in central west NSW to maximise crop		
profitability	Grain Orana Alliance Inc	\$419,000.00
Oat gapamic resources for broaders and pro broaders	Murdoch University	¢200,000,00
Oat genomic resources for breeders and pre-breeders Maintaining Profitable Farming Systems with Retained	Murdocir Offiversity	\$200,000.00
Stubble	WANTFA	\$20,000.00
		4 =0,000.00
Optimising genetic control of oat phenology for Australia	CSIRO	\$363,956.00
Improving Crop Germination and Establishment of all Grains, Especially canola, when dealing with non wetting		
soils, stubble loads and different stubble types	Trialco Pty Ltd	\$24,610.00
Leveraging International Germplasm to Deliver		Ψ24,010.00
Improved Chickpea Chilling Tolerance for Australian		
Growers	CSIRO	\$1,069,338.00
Future Peanut Breeding	Peanut Company of Australia	\$350,000.00
	Queensland Department of	
Sorghum Midge Testing Scheme (QDAF)	Agriculture and Fisheries	\$18,918.18
Northern Farming Systems - Integrating research solutions for improving profitability in summer	Queensland Department of	
dominated rainfall systems	Agriculture and Fisheries	\$1,414,363.00
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Applying current knowledge to inform grower decision making to mitigate the impact of frost, now and in the		g
future - southern region	Mallee Sustainable Farming Inc The Trustee for PLUSKE FAMILY	\$100,000.00
Chairman of the GRDC Soil Constraints West Committee Applying current knowledge to inform grower decision	TRUST	\$43,996.84
making to mitigate the impact of frost, now and in the future	Grower Group Alliance	\$170,000.00
More profitable crops on highly calcareous soils by improving early vigour and overcoming soil constraints	CRC for High Performance Soils SA Research and Development	\$500,000.00
NVT PREDICTA B Service Agreement 2020 -2023	Institute	\$35,500.00
Soil Constraints-West Steering Committee	Genocanna AG	\$5,200.00
Soil Constraints-West Steering Committee	Bob Nixon	\$5,000.00
Soil Constraints - West Steering Committee 2020 and 2021 NVT Hybrid Sorghum Performance	J & D Even & Sons	\$2,434.00
Report 2020 and 2021 NVT Hybrid Sorghum Performance	Coretext	\$12,950.00
Report Integrated Farming systems in the medium rainfall zone	Albatross Rural Consulting	\$14,000.00
of Southern Australia Transition Investment to secure critical outputs from	The University of Adelaide	\$65,752.00
current UQ00070 and previous Sorghum core pre- breeding investments	The University of Queensland	\$95,463.00
An analysis of 3D soil constraint diagnosis and options for on the go management of variable soil types Agronomic management of weeds, crop nutrition and	Colere Group	\$26,850.00
farming practices in Northern NSW & Southern QLD to maximise crop profitability	Northern Grower Alliance Incorporated	\$830,400.00
CSIRO - UNDERSTANDING CONSTRAINTS TO CROP PROFITS ON HIGHLY CALCAREOUS SOIL	CSIRO	\$250,000.00
Practical tactics to improve ground cover and ensure soi preservation following successive low rainfall seasons Impact of stripper header fronts and straw length on soil	Mallee Sustainable Farming Inc	\$60,000.00
evaporation and fallow efficiency	FarmLink Research Limited	\$102,650.00
Sorghum National Variety Trials 2021-2024 Better understanding farming system and/or agronomic	Multiple delivery partners	\$311,067.60
changes to maximise profitability of the long coleoptile trait in wheat - CQLD & SWQLD Development and extension to close the economic yield	Queensland Department of Agriculture and Fisheries	\$93,622.85
gap and maximise farming systems benefits from grain legume production in Victoria	Department of Jobs, Precincts and Regions	\$568,688.48
Managing soils post-amelioration in the Upper South East SA	MacKillop Farm Management Group	\$96,923.00
Investigating the value of companion cropping systems of chickpea and cereals for improved crop and fallow water use efficiency.	Queensland Department of Agriculture and Fisheries	\$115,000.00
Development and extension to close the economic yield gap and maximise farming systems benefits from grain		
legume production in New South Wales	Brill Ag Southern Australia Durum	\$362,600.00
Durum extension and development - SADGA	Growers Association Inc	\$20,000.00

Best practice liming demonstration to address subsoil		oot Elothig
acidity in North Eastern Victoria	Riverine Plains Inc	\$30,000.00
Farming Systems & Agronomic Changes For Integration of Long Coleoptile Wheat in the West Region Development and extension to close the economic yield	SLR P/L	\$196,880.00
gap and maximise farming systems benefits from grain legume production in South Australia. Victorian Grains Innovation Partnership (VGIP) Value and	The University of Adelaide	\$618,643.00
Impact Assessment	Marsden Jacob Associates	\$129,674.54
National Milling Oats Breeding Program Validation and extension of farming system sequences	InterGrain Pty Ltd	\$800,000.00
to maximize WUE in low rainfall sandy soils of South West NSW	Grain Orana Alliance Inc	\$24,375.00
Improving assessments of yield gaps to inform		
opportunities for increased productivity and profitability	CSIRO	\$71,648.00
National Vetch Breeding Program	The University of Adelaide Department of Jobs, Precincts	\$575,000.00
National Lentil Breeding Program	and Regions	\$2,000,000.00
Durable resistance to Oat crown rust [CSIRO].	CSIRO	\$9,026.00
N	Department of Jobs, Precincts	
National Field Pea Breeding Program	and Regions	\$542,700.00
Improving farming systems efficiency in southern NSW	CSIRO	\$1,059,526.00
Accelerated integration of physiology-based wheat traits within a commercial breeding programme Increasing wheat yield and yield stability through	Pty Ltd	\$220,000.00
improved heat tolerance during grain filling.	University of Sydney Queensland Department of	\$205,960.00
National Mungbean Improvement Program 2022-2026 Reducing lodging risk in sorghum to increase grower	Agriculture and Fisheries	\$461,753.00
confidence and profitability	The University of Queensland	\$214,682.00
Southern Region Audit	Rob Wheeler	\$12,900.00
Closing the Economic Yield Gap for Grain Legumes in Western Australia	Grower Group Alliance	\$400,000.00
Frost Learning Centre for Farmers, Advisers &	The South Australian Grain	Ψ-100,000.00
Researchers	Industry Fund	\$114,650.00
The WA Stubble Story: Investigating alternative stubble		
systems for cropping systems in the Western Region Improving yield potential of lentils on acid soils in	The Liebe Group Incorporated Department of Jobs, Precincts	\$107,000.00
Australia Locally relevant spring and/or summer sown cropping	and Regions	\$212,986.50
opportunities for grain growers following excessive winter waterlogging - South-Western Australia Review of National Lentil Breeding Program with BPAT	Stirlings to Coast Farmers	\$125,000.00
Tool - Consultant: UQ	The University of Queensland	\$10,000.00
Review of National Lentil Breeding Program with BPAT Tool - Consultant: QAAFI Strategies for waterlogged crops in the High Rainfall	The University of Queensland Southern Farming Systems	\$10,000.00
Zone of the Southern Region	(SFS)	\$118,000.00
Measuring harvest losses in Western Australia	Grower Group Alliance	\$172,000.00

Consultancy: Technical Advice in relation to Leveraging International Germplasm to Deliver Improved Chickpea		
Chilling Tolerance for Australian Grower Agronomic practices to maximise Peanut kernel quality	Rudy Dolferus Queensland Department of	\$13,581.40
and yield.	Agriculture and Fisheries	\$80,000.00
Large stubble loads and the impact of stripper/disc systems in the High Rainfall Zone of Southern Australia	Southern Farming Systems (SFS)	\$100,000.00
Consultancy in relation to assisting GRDC management assess the value proposition of a Strategic Partnership		
with the University of Queensland	ST Strategic Services Pty Ltd	\$15,000.00
NVT audit program Proof-of-concept validation of chickpea heat tolerance	Multiple delivery partners	\$40,610.60
within ARC LSA Hub germplasm	University of Sydney	\$100,000.00
2021 and 2022 NVT Regional Harvest Reports	SE Knights Consulting	\$47,787.52
Winter wheat agronomy for grain growers in the Western	Cropportunity Pty Ltd ATF The	, ,
Region	Window of Opportunity Trust	\$20,000.00
NGN Optimising soil amelioration costs in typical Mallee		
soils	Mallee Sustainable Farming Inc	\$60,000.00
Validation of commercially valuable summer chickpea germplasm within ARC LSA-Hub	University of Sydney	\$110,985.00
Consultancy to review the impact of soil strength on root	Oniversity of Sydney	\$110,985.00
growth of various crops	Murray John Unkovich	\$29,500.00
Canola establishment in the low rainfall zones of the		
Western Region	Living Farm Pty Ltd	\$15,000.00
International Field Pea Pan-Genome Initiative -	B (11 B	
Leveraging Global Resources and Tools for Field Pea	Department of Jobs, Precincts	¢420 042 00
Improvement	and Regions	\$130,012.00
Precision ag analytics for frost and heat management Improving the yield stability of lentil under elevated	University of Sydney Department of Jobs, Precincts	\$209,973.00
temperatures	and Regions	\$293,328.89
Action learning on crop response to acid subsoil	3	Ψ233,323.33
stratification and amelioration benefits.	Charles Sturt University	\$50,000.00
Durable resistance to Oat crown rust	CSIRO	\$200,000.00
Mapping yield gap and yield variability in commercial		
pulse crops	University of Sydney	\$60,862.00
Assisting growers with decision making for falling numbers	Mingonow Invin Croup Inc	¢co
Identifying potassium responsive soils and best practice	Mingenew-Irwin Group Inc	\$69,542.70
application of K in the MRZ and HRZ of the Southern		
Region	The University of Adelaide	\$41,000.00
Using data analysis to increase attainable canola yield		
across Australia	CSIRO	\$310,000.00
Soil water modelling of stripper and draper header front		
stubbles to identify possible differences in water capture and storage for early sowing opportunities.	CSIRO	¢EE 464.00
Increasing canola yield potential on acidic soils		\$55,461.00
Weed control in high standing residue systems in the	Department of Regional NSW	\$125,000.00
Northern Ag Region of WA	Crop Circle Consulting	\$107,182.00
Frost and Heat Management Analytics	CSIRO	\$647,075.00
The development of a grower technical manual for soil		, , , , , , , , , , ,
amelioration of sodic soils in the Northern Region	Soil Management Designs	\$60,000.00

2021-22 Research Development	_	Listing
NGN Tactics to minimise frost damage on the Eyre	Agricultural Innovation &	4 500000
Peninsula	Research Eyre Peninsula Inc	\$53,000.00
Carryover of nitrogen after crop failure - Western Region case studies	Laconik	\$139,718.00
Enhancing frost tolerance and/or avoidance in wheat,		
barley and canola crops through in-season agronomic	Field Applied Research	
manipulation	Australia Ltd	\$668,822.00
Licence and Support - NVT Online Website Support and Maintenance - See original contract 9176639 KOB1712-		
0010PX	Kobe Creations	\$28,305.00
Proof of concept assessment of wheat genetic		Ψ20,303.00
modifications and their impact on yield potential	The University of Adelaide	\$40,500.00
Design, layout printing NVT Harvest Reports	Coretext	\$73,400.00
Understanding trends in falling numbers in the medium		
to high rainfall zones of WA	Stirlings to Coast Farmers	\$40,000.00
Storm Recovery Workshops	AgCommunicators Pty Ltd	\$27,724.42
Increasing the effectiveness of claying in the Albany Port Zone	Stirlings to Coast Farmers	¢44.000.00
Identifying biodegradable mulches (BDM) for use in	Stillings to Coast Familiers	\$44,000.00
Australian broadacre crop production.	Colere Group	\$87,090.00
Fallow Management and the economic costs	Laconik	\$105,000.00
Bench marking chickpea yield genetic gain	Department of Regional NSW	\$123,000.00
Bench marking faba bean yield genetic gain	The University of Adelaide	\$145,000.00
Farming after Fire - soil and herbicide management post	CORRIGIN Farm Improvement	
fire, pre-seeding	Group	\$22,000.00
Decree of the control of the	Elders Rural Services Australia	*
Beans nutrition omissions trial Stubble residue management for optimising canola	Ltd Department of John Brosinets	\$100,000.00
establishment in the Wimmera	Department of Jobs, Precincts and Regions	\$80,000.00
Risk and rewards of very early sown canola	The Liebe Group Incorporated	\$35,000.00
N banking strategies to manage variable and	i i i i i i i i i i i i i i i i i i i	φου,σου.σο
unpredictable nitrogen demand in the MRZ of the		
Southern Region	Birchip Cropping Group	\$100,000.00
N banking strategies to manage variable and unpredictable nitrogen demand in the LRZ of the		
Southern Region	Birchip Cropping Group	\$100,000.00
2022 and 2023 Sorghum Harvest Reports	Coretext	\$13,500.00
2022 and 2020 congitation relations (reports)	Department of Primary	Ψ13,300.00
Improved field phenotyping, validation and development	· ·	
of chilling tolerance in chickpea	Development	\$120,000.00
NVT Content for 2022 and 2023 Sorghum Harvest	All alone Book Consulting	
Reports	Albatross Rural Consulting	\$24,500.00
NVT Queensland winter crop sowing guide 2023 NGN Barley management options to close the yield gap	Albatross Rural Consulting Field Applied Research	\$10,000.00
and reduce pre-harvest losses	Australia Ltd	\$60,000.00
	Department of Primary	φου,σου.σο
Accelerating the development of chickpea with	Industries and Regional	
enhanced acid soil tolerance	Development	\$147,000.00
Improving WUE of Super High Oleic Safflower (SHOS)	Direkin Cropping Crove	# 40.000.00
crops across Victoria Improving WUE of Super High Oleic Safflower (SHOS)	Birchip Cropping Group Agrilink Agricultural Consultants	\$42,000.00
crops across South Australia	(Australia) Pty Ltd	\$42,000.00
NGN Safflower Agronomy and Extension: WA	Crop Circle Consulting	\$112,000.00
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NGN Validating the use of plant growth regulator to	and Extension Project	Listing
manage excessive growth in barley in Northern Region warm growing environments.	AMPS Research	\$27,000.00
NGN Comparison of nitrogen based demand and banking strategies to aid N decision making in SE NSW	FarmLink Research Limited	\$50,000.00
Soil extension to help growers/advisers understand their soils, constraints and management - Co Investment Building knowledge and capacity in growers/ advisers to	Riverine Plains Inc	\$40,000.00
diagnose sandy soil constraints to ensure successful amelioration of sands	Mallee Sustainable Farming Inc	\$50,000.00
NLP Soil Extension Sub-soil amelioration extension program in Victoria's Medium and High Rainfall Zones NGN Lime response on acid, low rainfall, sandy soils of	Department of Jobs, Precincts and Regions Ag Grow Agronomy Research	\$116,320.00
southwestern NSW NGN Maximising the benefit of early sowing barley and	Pty Ltd	\$50,000.00
wheat cultivars in low rainfall & high temperature environments.	Field Applied Research Australia Ltd	\$50,000.00
Improving WUE of Super High Oleic Safflower (SHOS) crops across southern New South Wales Improved drought resilience through optimal	Delta Agribusiness	\$43,000.00
management of soils and available water National Phenology Initiative - Phase 2 -Next Gen	Charles Sturt University	\$95,000.00
Flowering Calculators	CSIRO	\$412,500.00
NGN Comparing barley yield gap and pre-harvest losses under water limiting and non-water limiting conditions Drought Fund Drought: Resilient Soils and Landscapes Program -Building drought resilience by scaling out	Field Applied Research Australia Ltd	\$50,000.00
farming practices that will enhance the productive capacity of sandy soil landscapes. NGN Validation of organic fertiliser sources for crop	Agricultural Innovation & Research Eyre Peninsula Inc	\$20,000.00
nutrition in NE Victoria	Riverine Plains Inc	\$50,000.00
Agronomy strategies for frost management in pulse crops	The South Australian Grain Industry Fund	\$31,089.50
Ex-post analysis of GRDC investment in sodic soils	University of Western Australia	\$11,000.00
SUBTOTAL		\$70,341,663.27
Objective 2 Genetic approaches to reduce the nitrogen dilution effect and increase nitrogen-use efficiency (NUE) in		
wheat	Murdoch University SA Research and Development	\$40,625.00
IP Sub-Licence and Materials Supply Agreement	Institute	\$50,000.00
Expanding options for sorghum- Food and Distilling	Charles Sturt University Australian Export Grains	\$70,000.00
Australian Export Grain Innovation Centre (AEGIC)	Innovation Centre	\$3,000,000.00
Better sorghum: larger grain with more protein	The University of Queensland	\$117,326.00
Research and Development	Barley Australia	\$110,000.00

Development and validation of soil amelioration and agronomic practices to realise the genetic potential of grain crops grown under a high yield potential, irrigated environment in the northern and southern regions. Facilitated action learning groups to support profitable irrigated farming systems in the northern and southern	Field Applied Research Australia Ltd	\$410,000.00
regions.	Irrigated Cropping Council Inc Northern Australia Crop	\$250,000.00
Northern Australia Agronomy	Research Alliance PTY LTD CRC For Developing Northern	\$134,300.00
GRDC/ CRCNA Co-Funding Agreement Improving The Adaptation And Profitability Of High Value Pulses (Chickpea And Lentil) Across Australian	Australia Ltd	\$29,834.00
Agroecological Zones	University of Tasmania	\$750,000.00
LMA Project C - An improved model of Late Maturity alpha-Amylase (LMA) field risk in Australian wheat. The development of an accurate, high throughput,	The University of Queensland	\$467,851.00
affordable and relevant screen for LMA risk for the Australian wheat industry	The University of Adelaide	\$443,860.00
LMA Project B - A novel high-throughput, low-cost test to determine cause of starch damage in wheat grain	Department of Jobs, Precincts and Regions	\$408,415.00
How does behaviour impact the technical choices that are made to grow better quality wheat	Farmanco Management Consultants Pty Ltd Cotton Research and	\$57,500.00
Smarter Irrigation for Profit - Phase 2	Development Corporation	\$90,000.00
Technical and data management support for NCR1907- 001RTX	The University of Queensland	\$10,000.00
Phosphorus Response Curves for Pulses in the Esperance and Albany Port Zones	Kalyx Australia Pty Ltd	\$45,000.00
Expansion of Soybeans in high rainfall zones in Coastal QLD.	Queensland Department of Agriculture and Fisheries	\$270,526.56
Expansion of Soybean in high rainfall zones in Northern NSW	Department of Regional NSW	\$163,927.00
Facilitation of the Pigeonpea in Australian Farming		
Systems - Stakeholder Workshop	Colere Group	-\$1,060.78
Operations Funding of Grains Australia and its industry good activities and services associated with its objects Pulse landscape review/analysis for plant-based	Grains Australia Limited	\$0.00
proteins	Bridge2Food	\$130,000.00
Proficiency evaluation for durum quality testing Market analysis to identify current and future	Department of Regional NSW	\$17,335.00
opportunities for pulses Optimisation and validation of rapid screening method	Grains Australia Limited	\$0.00
to quantify anti-nutritional factors (vicine and convicince) for faba beans	Department of Jobs, Precincts and Regions	\$50,000.00
Pathways to deliver "Clean, Healthy, Ethical, Sustainable and Safe" grain-food.	Innovation Centre	\$49,630.00
Determining the level of genetic variation for protein content in diverse pulse crops	Department of Jobs, Precincts and Regions	\$100,000.00
Developing a new high value noodle market for South	The South Australian Grain	Ψ100,000.00
Australian growers	Industry Fund	\$68,750.00
SUBTOTAL		\$7,333,818.78

Regional soil testing guidelines for the northern grains	t and Extension 110je	ot Elothig
region	The University of Queensland	\$50,000.00
Genetically improving wheat's ability to outcompete	•	, ,
weeds	CSIRO	\$52,544.00
Assessing collections of wild chickpea relatives for	University of Southern	
resistance to root-lesion nematodes	Queensland	\$50,000.00
Updated nutrient response curves in the northern and	The Heller well of O consideration	*
southern regions°	The University of Queensland	\$126,597.00
Genetic solution to crown rot in barley	CSIRO	\$67,119.00
Cultural management for weed control and maintenance of crop yield	The University of Adelaide	\$497,747.00
Herbicide Innovation Partnership	Bayer CropScience Pty Ltd	\$4,500,000.00
Regional Agronomy SA - Improving disease	Bayer Cropscience I ty Ltd	\$4,500,000.00
management through improved agronomic practices	The University of Adelaide	-\$76,780.00
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Regional Agronomy SA - Improving weed management		
in high break crop intensity farming systems	The University of Adelaide	-\$87,148.75
Centre for Crop and Disease management	Curtin University	\$11,000,000.00
Innovative crop weed control for northern region		
cropping systems	University of Sydney	\$64,043.56
Snail biocontrol revisited - Phase 2	CSIRO	\$45,000.00
Research and Development	The University of Melbourne	\$166,614.50
Australian Cereal Rust Control Program - Continued		
monitoring of cereal rust pathogens in Australia	University of Sydney	\$599,141.89
Applied (Manyburgs - Priority Llag - Payer	Payor CranSciance Dty Ltd	¢44.004.00
Aphids/Mealybugs - Priority Use -Bayer Agvet #050 Grant Agreement -Maize/popcorn -	Bayer CropScience Pty Ltd	-\$11,991.00
Northern blight - Priority Use	BASF AUSTRALIA LIMITED	-\$45,270.00
Agvet #049 Grant Agreement -Chickpeas-Botrytis-		Ψ13,270.00
Priority Use	BASF AUSTRALIA LIMITED	-\$31,080.50
Agvet #048 Grant Agreement -Soybeans -		
Rust/Sclerotinia - Priority Use	Bayer CropScience Pty Ltd	-\$8,702.00
Agvet #047 Grant Agreement - Sunflowers - Powdery		
mildew - Priority Use	Bayer CropScience Pty Ltd	-\$5,466.00
Increasing profit from N. D. and V. fortilizer inputs into the		
Increasing profit from N, P and K fertiliser inputs into the evolving cropping sequences in the Western Region	Murdoch University	\$300,927.75
everying cropping sequences in the vrestern region	Department of Primary	Ψ300,327.73
Nutrient re-distribution and availability in ameliorated	Industries and Regional	
and cultivated soils in the Western Region	Development	\$79,279.26
Research and Development	Grasslanz Technology Limited	\$490,000.00
Australian Cereal Rust Control Program -Wheat and		
barley breeding support	University of Sydney	\$174,817.96
Boosting profit and reducing risk on mixed farms in low		
and medium rainfall areas with newly discovered	CA Decease and Development	
legume pastures enabled by innovative management methods - southern region.	SA Research and Development Institute	\$992,867.00
Australian Cereal Rust Control Program - Novel sources	motitute	\$992,807.00
of stem rust resistance from uncultivated wild relatives		
of wheat	The University of Adelaide	\$234,961.00
Australian Cereal Rust Control Program (ACRCP) -		
CSIRO: Delivering genetic tools and knowledge required	1	
to breed wheat and barley with resistance to leaf rust,	CCIDO	40.450.55
stripe rust and stem rust	CSIRO	\$2,459,371.00

Boosting profit and reducing risk on mixed farms in low and medium rainfall areas with newly discovered legume pastures enabled by innovative management methods - Western region (Dryland pasture legume systems).	Murdoch University	\$702,842.00
Australian Cereal Rust Control Program (ACRCP) - University of Sydney: Delivering genetic tools and knowledge required to breed wheat and barley with		Ψ702,042.00
resistance to leaf rust, stripe rust and stem rust Improved surveillance and management options for	University of Sydney	\$1,439,297.81
mice in crops Determining the effectiveness of zinc phosphide rodenticide bait in the presence of alternative food	CSIRO	\$265,899.62
supply	CSIRO	\$72,176.62
Commonwealth Grant - Improving Plant Pest Management Through Cross Industry Deployment of Smart Sensor, Diagnostics and Forecasting Future Farm Phase 2: Improving farmer confidence in	Horticulture Innovation Australia Limited	\$275,000.00
targeted N management through automated sensing and decision support	CSIRO	\$838,609.00
Increasing the effectiveness of nitrogen fixation in pulse crops through development of improved rhizobial strains, inoculation and crop management practices Using soil and plant testing data to better inform nutrient	The University of Adelaide	\$1,237,020.50
management and optimise fertiliser investments for grain growers in the southern region Post-doctoral Fellowship - Interfacing crop improvement	Agronomy Solutions Pty Ltd	\$46,769.00
and agronomy/ nutrition programs Post-doctoral Fellowship - An integrative approach	The University of Queensland	\$200,000.00
towards sustainable management of sorghum stalk rot in the GRDC northern region Understanding mouse biology and ecology in zero- and	University of Southern Queensland	\$74,407.00
no-till cropping systems to inform best practice crop production and mouse management practices	CSIRO Department of Primary	\$646,785.00
Disease epidemiology and management tools for Australian grain growers	Industries and Regional Development	\$292,891.00
Herbicide behaviour workshops for the Australian Grains		
Industry Preserving Australia's Rhizobial Collections to Benefit	LIMITED(ICAN Pty Ltd)	\$62,000.00
the Australian Grain Industry Increasing the effectiveness of nitrogen fixation in	Murdoch University	\$292,812.70
pulses through improved rhizobial strains in the GRDC Northern region Extent of RLN throughout the grain growing regions of	Department of Regional NSW Farmanco Management	\$230,000.00
WA and options to address Demonstrating and validating the implementation of	Consultants Pty Ltd	\$20,000.00
integrated weed management strategies to control barley grass in the low rainfall zone farming systems Increasing the effectiveness of nitrogen fixation in	The University of Adelaide	\$230,507.00
pulses through improved rhizobial strains in the GRDC Western Region	Murdoch University	\$555,426.00

2021-22 Research Developmen	t and Extension i roje	ct Listing
Identification, surveillance and advisory platform for management of grains pests	CESAR Pty. Ltd	\$483,118.70
Upskilling Tasmanian growers and advisors to manage annual ryegrass through exposure to external knowledge and peer-to-peer learning	Southern Farming Systems (SFS)	\$13,000.00
Survey Of The Summer/Autumn Brassica Refuges For Diamondback Moth In The Western Region To Predict Early Season Risk Of Infestation	Department of Primary Industries and Regional Development	\$280,100.00
Australian Fungicide Resistance Extension Network (AFREN): fungicide resistance management targeted at regional level	Curtin University	\$263,543.00
Program 2 - Towards Effective Control of Blackleg of Canola: Coordinating international blackleg research and development	The University of Melbourne	\$170,000.00
Optimising farm scale returns from irrigated grains: maximising dollar return per megalitre of water	University of Tasmania	\$209,163.00
Towards Effective Control of Blackleg of Canola Program 1: Disease Epidemiology And Management Program 4 - Towards Effective Control of Blackleg of	The University of Melbourne	\$400,000.00
Canola: Phenotyping for Adult Plant Resistance (APR - Quantitative Resistance) in canola Program 3: Towards Effective Control of Blackleg of	CSIRO	\$395,000.00
Canola: Identification of novel sources of blackleg resistance genes Novel suppression and resistance management of	University of Western Australia	\$300,000.00
invertebrate pests Program 5 - Towards Effective Control of Blackleg of	The University of Melbourne Department of Jobs, Precincts	\$1,699,997.00
Canola : Canola infrastructure and FFS SoilWaterNow: Soil water nowcasting for the grains	and Regions	\$100,000.00
industry Post-doctoral Fellowship: Understanding P dynamics	University of Sydney	\$918,052.00
and bioavailability in alkaline clay soils Virtual fencing for better crop integrated weed	The University of Queensland	\$25,000.00
management CropPhen: Remote mapping of grain crop type and	CSIRO	\$201,823.25
phenology	The University of Queensland	\$999,879.00
Validation and demonstration of decision-making tools for managing blackleg in Canola in the Western Region Soilborne Pathogens of Winter Cereals: Extension of	Farmanco Management Consultants Pty Ltd	-\$13,000.00
Identification and Management Strategies Facilitating adoption of integrated weed management	FarmLink Research Limited	\$337,600.00
strategies for feathertop Rhodes grass in the Northern Region, Prg 2. (southern NSW)	Department of Regional NSW	\$240,000.00
Facilitating adoption of integrated weed management strategies for Feathertop Rhodes grass in the Northern Region, Prg1. (northern NSW & Qld.)	INDEPENDENT CONSULTANTS AUSTRALIA NETWORK PTY. LIMITED(ICAN Pty Ltd)	\$71,212.00
Machinery Investment Options in the Australian Cropping Regions	Kondinin Information Services	\$6,000.00
Development of 'Nowcasting' ability for hazardous and non-hazardous atmospheric conditions for agricultural spraying Insecticide resistance in the green peach aphid: national	Cambridge Environmental Research Consultants	\$8,800.00
surveillance, preparedness and implications for virus management	CESAR Pty. Ltd	\$500,000.00

2021-22 Research Development and Extension Project Listing Department of Primary

	Department of Primary	
	Industries and Regional	
Distribution of ramularia across the Australian grain belt	Development	\$7,495.00
Determination of Fipronil residues in Soybean after an in	_	
furrow treatment at planting.	Pty Ltd	\$800.00
Synchrotron Postdoctoral Fellow no. 1: Soil - root		
interactions using intact field soil cores.	The University of Queensland	\$80,000.00
Maximising The Uptake Of Phosphorus By Crops To		
Optimise Profit In Central And Southern NSW, Victoria		
And South Australia	Department of Regional NSW	\$712,138.00
Synchrotron Postdoctoral Fellow no. 2: Soil - nutrient		
availability mapping under field conditions using intact		
soil cores	University of South Australia	\$155,333.00
Synchrotron Postdoctoral Fellow no. 3: Soil - organic		
matter fractionation using intact soil cores	The University of Queensland	\$151,509.00
Synchrotron Postdoctoral Fellow no. 4: Plants - Novel		
foliar fertilisers and nutrition trait diversity of grains	Murdoch University	\$256,569.00
Determination of clothianidin residues in mungbeans		
and navy beans following the application of SHIELD	Eurofins Agroscience Services	
SYSTEMIC INSECTICIDE	Pty Ltd	\$3,777.20
Sprayer calibration / application workshops to increase		
spray efficiency and efficacy	Bill Campbell Consulting Pty Ltd	\$53,015.00
	SPAA - Society of Precision	
Hands-on Precision Agriculture Training for Growers	Agriculture Australia	\$60,000.00
Area Wide Management for cropping systems weeds:		
investigating the weed management, social and		
economic opportunity	CSIRO	\$489,759.50
Program 3: Screening of diverse barley germplasm for		
rapid discovery and utilisation of novel disease		
resistance in barley novel using R-HapSelect: A		
haplotype-based toolkit.	The University of Queensland	\$264,000.00
Program 1: Minimising the impact of major barley foliar		
pathogens on yield and profit: Development of	Department of Jobs, Precincts	
international host differential sets.	and Regions	\$273,000.00
Program 2: Minimising the impact of major barley foliar		
pathogens on yield and profit: Surveillance and		
monitoring of pathogen populations - SARDI	The University of Adelaide	\$367,000.00
Program 4: Minimising the impact of major barley foliar		
pathogens on yield and profit: Screening of elite breeder		
material transitioning to a fee for service model.	Agriculture and Fisheries	\$408,000.00
Prevention and preparedness for fall armyworm		
(Spodoptera frugiperda) - Output 2	CSIRO	\$50,000.00
Program 3: Towards effective genetic and sustainable		
management of Ascochyta blight of Chickpea -		
Identification and characterisation of novel sources of		
AB resistance in elite cultivars and wild relatives of	The University of Adelaide	* 4 4 7 0 0 4 0 0
chickpea	The University of Adelaide	\$447,804.00
Australian Herbicide Resistance Initiative - Phase 6	University of Western Australia	\$1,042,635.00
Additional relations resistance initiative. That o	Offiversity of Western Australia	\$1,042,035.00
WeedSmart 2020-2023	University of Western Australia	\$400,000.00
Developing strategies to mitigate and manage	-	, ,
resistance to key herbicides	The University of Adelaide	\$437,615.00
Program 5: IDM package for Ascochyta Blight in		
chickpeas	CSIRO	\$225,000.00

2021-22 Research Development	i and Extension Projec	Listing
Pathways to Registration - Minor Use (2019-2022) Paddock level herbicide resistance management for	AKC Consulting Pty Ltd	\$120,677.00
Western growers and advisers	University of Western Australia	\$90,000.00
Program 1: Towards effective genetic and sustainable management of Ascochyta blight of chickpea - Ascochyta blight pathogen biology, population dynamics and epidemiology.	Griffith University	\$300,000.00
Program 4: Towards effective genetic and sustainable management of Ascochyta blight of Chickpea - Accurate, effective, cheaper and rapid high-throughput method for qualitative and quantitative evaluation for AB		
genetic resistance. Program 2 - Towards effective genetic and sustainable	and Regions International Centre for Agriculture Research in Dry	\$280,000.00
management of Ascochyta blight of Chickpea Program 1: Identification of novel sources of resistance to Septoria Leaf Blotch and understanding of evolution	Areas (ICARDA)	\$363,587.00
and virulence of the pathogen Determining the incidence of herbicide resistance in	The University of Adelaide	\$250,000.00
Australian grain cropping	Charles Sturt University	\$692,357.00
Rural R&D for Profit - Underpinning agricultural productivity and biosecurity by weed biological control	AgriFutures Australia (RIRDC)	\$180,000.00
Effective use of diquat for late season weed set control of annual ryegrass (Lolium rigidum) in barley Introducing a new major effect gene for crown rot	Synergy Consulting	\$81,000.00
resistance into Australian wheat	CSIRO	\$226,758.00
Crown rot resistance and tolerance evaluation for genetic improvement	Australian Grain Technologies Pty Ltd	\$286,623.00
ARC Research Hub for Sustainable Crop Protection Future options for the control of RLEM in Australian grain	The University of Queensland	\$150,000.00
crops Improved management of Rutherglen bug in the	CESAR Pty. Ltd	\$580,000.00
Northern Region	CSIRO	\$238,000.00
Establish Australian economic management thresholds for fall armyworm in maize for (rainfed and irrigated) and sorghum.	Queensland Department of Agriculture and Fisheries	\$250,000.00
Deployment of spray drift hazard alert and warning system for eastern Australia	Goanna Ag	\$2,400,000.00
Herbicide Innovation Partnership - phase 2 Epidemiology of Septoria Tritici Blotch in the low and	Bayer CropScience AG	\$5,250,000.00
medium rainfall zones of the Southern region to inform IDM strategies.	Department of Jobs, Precincts and Regions	\$236,466.00
Upgrading APSIM nitrogen cycling and loss routines with data from the National Australian Nitrous Oxide Research Program (NANORP)	Queensland University of Technology Department of Primary	\$46,000.00
Sclerotinia management for narrow leaf lupin crops in Western Australian farming systems	Industries and Regional Development	\$182,566.00
Disease surveillance and related diagnostics for the Australian grains industry (within the Northern region) Disease surveillance and related diagnostics for the	Queensland Department of Agriculture and Fisheries	\$121,652.00
Australian grains industry (within the Southern region - Victoria)	Department of Jobs, Precincts and Regions	\$140,667.00

2021-22 Research Development and Extension Project Listing Department of Primary

	Department of Primary	
Management of spot form of net blotch in the low rainfall		
zones of Western Australia	Development	\$192,800.00
	Department of Primary	
Disease surveillance and related diagnostics for the	Industries and Regional	
Australian grains industry (Western region)	Development	\$144,090.00
Disease surveillance and related diagnostics for the		
Australian grains industry (within the Southern region -		
South Australia)	The University of Adelaide	\$139,384.00
Grain Receivals Data Services	Kynetec Australia Pty Ltd	\$87,500.00
Overcoming constraints to the profitability of cropping		
systems on ironstone gravel soils within the Southern		
cropping region of Australia Phase 2	Murdoch University	\$350,000.00
Current and potential costs of diseases and		
invertebrate pests in Australian grains	ACIL Allen Consulting Pty Ltd	\$317,732.10
Determining the economic impact of Native Budworm	Department of Primary	
(Helicoverpa punctigera) in cereal crops in the Western	Industries and Regional	
Region	Development	\$100,000.00
	INDEPENDENT CONSULTANTS	
Expanding grain production in Coastal NSW through	AUSTRALIA NETWORK PTY.	
improved weed management	LIMITED(ICAN Pty Ltd)	\$48,250.00
Quantifying the yield risk of planting CMV infected lentil	Department of Jobs, Precincts	
seed in the Southern region.	and Regions	\$128,181.90
WeedOmics - next generation molecular diagnostic of	T	
herbicide resistance	The University of Melbourne	\$85,000.00
Determination of residues of metribuzin residues in	Function Association Committee	
Metribuzin Tolerant Red Lentils following a single	Eurofins Agroscience Services	¢20,000,00
application of Mentor WG Herbicide	Pty Ltd	\$36,608.00
Crop safety and yield of Mentor WG Herbicide in		
metribuzin tolerant red lentils following a single application at $3-6$ nodes above the ground (BBCH $13-$	Eurofins Agroscience Services	
16)	Pty Ltd	\$15,054.00
10)	Department of Primary	\$15,054.00
Disease epidemiology, modelling and delivery of	Industries and Regional	
management decision support tools	Development	\$675,000.00
Consultancy to review R&D investments into	Development	\$075,000.00
improvements of rhizobial strains, nitrogen fixation and		
inoculation practices for pulse crops	David Herridge	\$13,000.00
Quantifying the diversity and abundance of pest and		Ψ10,000.00
beneficial invertebrates associated with harvest weed-		
seed controlled systems in southern Australia	The University of Adelaide	\$145,000.00
Review of pest & disease surveillance, diagnostics &	·	
extension	ST Strategic Services Pty Ltd	\$84,600.00
Management of Rosinweed and Star of Bethlehem in		
Victoria's Mallee and Wimmera	Birchip Cropping Group	\$60,000.00
Weather essentials for Pesticide Application technical	Micrometeorology Research &	
content review and update	Education Services (MR&ES)	\$30,074.50
	INDEPENDENT CONSULTANTS	
CDDC Northorn Dogica Industry Course Developed	AUSTRALIA NETWORK PTY.	d40 477 00
GRDC Northern Region Industry Spray Day Initiative	LIMITED(ICAN Pty Ltd)	\$19,475.00
Increasing capacity and capability for mouse surveillance and management in the Western Australian	Farmanco Management	
grains industry	Consultants Pty Ltd	\$24,400.00
granio irradoti y	Consultanto i ty Eta	ΨΖ4,400.00

ZOZI-ZZ Research Development	i and Extension i Toject i	
Do seed treatments have a role in Fusarium management in mungbean?	The University of Queensland	\$50,000.00
IPMforGrains, delivered by the National Pest Information Network	CESAR Pty. Ltd	\$191,829.00
AgVet R6#001-Maize - Fall Armyworm & Helicoverpa -		
Chlorantraniliprole	FMC Australasia Pty Ltd	\$100,000.00
Assessment of organic phosphorus sources	The University of Queensland	\$60,000.00
Ag Vet R6#002 - Linseed - Fall Armyworm &	FMC Assaulania Dhallad	# F0 000 00
Helicoverpa Chlorantraniliprole Ag Vet R6#003 - Sorghum - Fall Armyworm &	FMC Australasia Pty Ltd	\$50,000.00
Helicoverpa - Chlorantraniliprole	FMC Australasia Pty Ltd	\$100,000.00
Quantifying nitrogen losses and the effect on crop productivity and greenhouse gas emissions from the application of lime and sulphate of ammonia fertiliser	Time / tableatasta F ty Eta	\$100,000.00
under Western Australian farming systems.	University of Western Australia	\$86,071.88
Macrophomina Industry Workshop Consultation	Colere Group	\$17,959.36
Biological approaches to manage diseases of grain	The state of the s	Ψ17,500.00
crops in Australian farming systems-a gap analysis	The University of Queensland	\$48,000.00
Farming Water - a technical manual to increase grower		
and adviser use of plant available water dynamics in		
agronomic decision making.	AgCommunicators Pty Ltd	\$48,438.00
Investing in Fertiliser storage infrastructure in the GRDC Northern Region	Cussons Media Pty Ltd	¢72.000.00
Better summer weed management decisions in southern	Cussons Media i ty Ltu	\$72,000.00
and western Australia	CSIRO	\$115,000.00
	SPAA - Society of Precision	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Precision fertiliser decisions in a tight economic climate	Agriculture Australia	\$50,000.00
	JG Virtue Biosecurity Services	
AWM Weeds Steering Committee Attendance	Pty Ltd	\$1,625.00
Consultancy agreeement	IP Active	\$32,000.00
Improving Powdery Mildew Management in Mungbean	University of Southern	¢00 000 00
Mouse pathogen profiling – the role of disease in	Queensland	\$90,000.00
regulating population dynamics	CSIRO	\$200,000.00
Validation and extension of management strategies for		4 _00,000.00
wheat powdery mildew	Trengove Consulting Trust	\$60,000.00
Preparedness for loss of access to significant herbicide use patterns or chemistry: implications and planning	University of Western Australia	\$103,933.00
Predicting nitrogen cycling and losses in Australian		
cropping systems - augmenting measurements to	The Helican Comments of	
enhance modelling	The University of Queensland	\$990,000.00
Managing sclerotinia in oilseed and pulse crops in Northern and Southern farming systems Communication and extension of slug management in	Department of Regional NSW	\$150,000.00
the Southern region	Michael A Nash	\$40,000.00
and dodanem region	Department of Primary	ψ+0,000.00
Epidemiology and management of Rhizoctonia in low	Industries and Regional	
and medium rainfall zones	Development	\$200,000.00
More effective control of pest snails in Australian grain		
crops	The University of Adelaide	\$300,000.00
Impact of root diseases on pulse crops in Northern and Southern regions	The University of Adelaide	\$1EO 000 00
Accelerating the development of tools using satellite	The Oniversity of Adelaide	\$150,000.00
imagery and environmental data to identify optimum		
canola windrow timing	Department of Regional NSW	\$84,000.00

		\$1,875,102.67
To critically review the two draft CSIRO reports relating to assessment of the GHG emissions from the Australian Grains Industry and possible mitigation strategies	Brian Keating Trading as Tatiara Farms	\$3,000.00
for Australian Agriculture.	Agricultural Innovation Australia	\$25,000.00
An economic analysis of Australia's main containerised grain supply chains A Common Approach to Sector-Level GHG Accounting	Australian Export Grains Innovation Centre	\$100,000.00
Agricultural Innovation Australia Ltd	Agricultural Innovation Australia	\$500,000.00
On-farm grain storage - development and extension to support best practice management	Primary Business	\$754,125.00
Australian Participation in the European Union Product Environmental Footprint Technical Advisory Board Grains Sector GHG Baseline and Mitigation Project	Australian Wool Innovation CSIRO	\$65,372.67 \$49,666.00
Research contract	Bio-Gene Technology Limited	\$20,000.00
Research contract	DAVREN Global Pty Ltd	\$20,000.00
grain Joint-RDC Community Trust Program	Agriculture and Fisheries AgriFutures Australia (RIRDC)	\$297,939.00 \$40,000.00
Objective 4 National resistance monitoring for insect pests of stored	Queensland Department of	\$01,032,320.01
SUBTOTAL	SmartSat CNC Eta	\$61,652,326.61
SmartSat CRC and CSIRO scoping study on next-gen satellite systems	SmartSat CRC Ltd	\$60,000.00
Monitoring and Evaluation for Area Wide Management for cropping systems weeds, investigating the weed management, social and economic opportunity	Colere Group	\$4,500.00
Crop Safety Field Studies - Isoxaben Winter Pulses	Eurofins Agroscience Services Pty Ltd	\$32,160.80
Residue Field Studies - Clopyralid Herbicide Tolerant (CT) Lentil	Eurofins Agroscience Services Pty Ltd	\$54,796.00
Tolerant (MT) Lentil Crop Safety Field Studies - Clopyralid Herbicide Tolerant (CT) Lentil	Pty Ltd Eurofins Agroscience Services Pty Ltd	\$8,922.90 \$13,466.60
(MT) Lentil Crop Safety Field Studies - Metribuzin Herbicide	Pty Ltd Eurofins Agroscience Services	\$27,360.20
(CT) Field pea Residue Field Studies - Metribuzin Herbicide Tolerant	Pty Ltd Eurofins Agroscience Services	\$53,378.50
Tolerant (IT) Chickpea Residue Field Studies - Clopyralid Herbicide Tolerant	Eurofins Agroscience Services Pty Ltd Eurofins Agroscience Services	\$57,452.50
Crop Safety Field Studies - Imidazolinone Herbicide Tolerant (IT) Chickpea Residue Field Studies - Imidazolinone Herbicide	Eurofins Agroscience Services Pty Ltd	\$19,433.40
Residue Field Studies - Prosulfocarb Oats	Eurofins Agroscience Services Pty Ltd	\$43,089.20
Residue Field Studies - Propyzamide Safflower	Eurofins Agroscience Services Pty Ltd	\$29,223.60
Crop Safety Field Studies - Prosulfocarb Oats	Eurofins Agroscience Services Pty Ltd	\$13,750.10
Revegetation for enhanced biocontrol of pest conical snails	The South Australian Grain Industry Fund	\$19,660.50

Rural R&D for Profit-16-13-007 Forewarned is forearmed:		
managing the impacts of extreme climate events Farm Business Management Workshops for the Western	Limited	\$50,000.00
Region	Rural Edge Australia	\$5,000.00
GRDC Farm Business Update series	ORM Pty Ltd	\$1,013,115.00
AgScore: An agricultural approach to assessing the skill of seasonal climate forecasting systems and their value		
for aiding on-farm decision making	CSIRO	\$356,175.00
Increasing grower and advisor capacity and confidence	Department of Jobs, Precincts	
in seasonal forecasting - Southern region and SNSW	and Regions	\$202,655.00
RURAL SAFETY AND HEALTH ALLIANCE	A: [t	404444.00
COLLABORATION AND FUNDING AGREEMENT Engagement of the AgSkilled 2.0 Project Officer	AgriFutures Australia (RIRDC) Cotton Australia Ltd	\$31,111.00
Engagement of the Agskilled 2.0 Project Officer	Department of Primary	\$90,000.00
	Industries and Regional	
Western Australian Farming Systems	Development	\$1,500,000.00
Agri-Climate Outlooks	Agricultural Innovation Australia	\$779,931.00
Subtotal		\$4,027,987.00
Biosecurity framework		_
	Biosecurity Tasmania, Department of Primary	
	Industries, Parks Water and	
Boosting Diagnostics for Plant Production Industries	Environment	\$56,835.00
Development of identification resources and enhancing		
diagnostics capacity for High Priority Plant Pests	CESAR Pty. Ltd	\$110,000.00
Nematode diagnostics across industries through		
capability succession, enhancement of collections and protocol development	CSIRO	\$66,000.00
p	Department of Primary	Ψ00,000.00
	Industries and Regional	
Nanopore Diagnostics for Plant Pathology	Development Northern Territory Department	\$41,800.00
Boosting Diagnostics for Plant Production Industries	of Industry, Tourism and Trade	\$97,779.00
Determining the geographical origin of priority insect		, ,
pest detections: anthropogenic stable isotope		
signatures to improve resolution of high risk environments	Lincoln University	\$14,195.00
Boosting diagnostic capacity for plant production	-	, ,
industries - Using Xanthomonas as a model organism for		#40.005.00
increasing bacterial capacity National Diagnosticians Biosecurity Blitz Workshop	Department of Regional NSW Plant Health Australia	\$48,695.00 \$10,749.00
Boosting diagnostic capacity for plant production	Tidit Fediti Adstraid	\$10,749.00
industries - Using Xanthomonas as a model genus for	The New Zealand Institute for	
increasing bacterial diagnostic capacity Diagnostic development and surveillance for biosecurity	Plant & Food Research Limited	\$85,000.00
threats to Australian grains, horticulture, cotton and	Queensland Department of	
forestry industries.	Agriculture and Fisheries	\$233,492.00
Building diagnostic and high throughput surveillance		
capabilities for high priority pests - Developing pre- and post-entry high throughput surveillance and supporting		
insect and nematode diagnostic capabilities for national	SA Research and Development	
/ high priority plant pests	Institute	\$215,104.00

Advancion to the investigation as is a five llaw assessment	t and Extension rioje	ot Listing
Advancing techniques for diagnosis of yellow canopy syndrome Boosting diagnostics for plant production industries	Sugar Research Australia	\$57,000.00
(extension component)	AusVeg Limited Department of Jobs, Precincts	\$49,750.00
Boosting diagnostics for plant production industries PBRI - Plant Biosecurity Research Initiative Collaboration	and Regions	\$377,069.00
and Funding Agreement Phase II Updating exotic priority threat tables and the Grains	Limited	\$50,000.00
Industry Biosecurity Plan	Plant Health Australia	\$26,281.60
Subtotal		\$1,539,749.60
Capacity and ability framework		
Building research capacity in the northern grains region		
NSW	Department of Regional NSW	-\$5,000.00
Building research capacity in the northern grains region		400 770 50
Queensland	Agriculture and Fisheries Australian Rural Leadership	\$82,778.50
Australian Rural Leadership Program (ARLP)	Foundation Ltd	\$50,000.00
F. graminearum cell wall	La Trobe University	\$17,334.00
Investigating the potential for improving grain yield	La Trobe Offiversity	\$17,334.00
through enhanced stress recovery	Australian National University	\$22,429.00
·	SA Research and Development	, ,
Australian Pastures Genebank	Institute	\$186,000.00
GRS: Understanding Invasiveness of Wild Oat in - Wheat Production under Drought and Heat Stress in		
Conservation Agriculture	The University of Queensland	\$8,750.00
GRS: Optimising crop predicted and produced yield		
through an intuitive and cost effective decision support	Hair consists of Conductor	* 0==4=00
tool	University of Sydney	\$35,545.00
Australian Grains Genebank 2017-2022	Department of Jobs, Precincts and Regions	\$787,381.50
Innovation Generation	GrainGrowers Limited	-\$6,250.00
Post-Doctoral Fellowship - Understanding mechanisms	GrainGrowers Elimited	-\$0,250.00
of subsoil amelioration	La Trobe University	\$5,000.00
VFF Grains Conference	Victorian Farmers Federation	\$11,250.00
DAFF Hermitage Research Facility Schools Plant	Queensland Department of	4, 200.00
Science Competition	Agriculture and Fisheries	\$1,250.00
Post Doctoral Fellowship -Maximising crops and		
minimising weeds with smart phase farming	University of Western Australia	\$75,500.00
GRS:Identification and Characterisation of Barley (1,3;1,4)		¢42.700.00
β-Glucan Mutants GRS: Development of herbicide cocktails with a novel	The University of Adelaide	\$13,798.00
mode of action for circumventing resistance		
mechanisms.	La Trobe University	\$13,798.00
GRS: The bioactivity and functionality of the molecular	·	, ,, , , , , , , , , , , , , , , , , , ,
and microbial components of snail mucus	University of the Sunshine Coast	\$35,697.00
GRS - Valorisation of sorghum biomass into sustainable,		
high-performance nanomaterials	The University of Queensland	\$23,798.00
GRS: The application of FTIR to predict dough making	University of Western Australia	¢22.700.00
properties of wheat flour Post-Doctoral Fellowship: Unravelling the relationships	University of Western Australia	\$23,798.00
between soil mixing uniformity by spading and crop		
response	University of South Australia	\$21,000.00
	•	, = .,

Post-doctoral Fellowship: Alternative phenotyping for reproductive stage frost tolerance using metabolite markers and identification of frost tolerance QTL in		3
wheat -	CSIRO	\$29,116.00
Post-doctoral Fellowship: A Model for Predicting Chickpea Ascochyta Blight Risk	University of Southern Queensland	\$48,267.00
Post-doctoral Fellowship: Understanding gene flow in mouse populations to improve management outcomes	CSIRO	\$170,554.00
Post-Doctoral Fellowship: Exploiting the Potential of a Novel Fungal Biofertiliser	University of Western Australia	\$121,498.67
Post-doctoral Fellowship: Designing roots to enhance durum wheat yield	The University of Queensland	\$126,997.00
Post-Doctoral Fellowship: Photosynthetic acclimation to high temperature in wheat aligned with US00080 Post-Doctoral Fellowship: Minimising the impact of high	University of Sydney	\$18,079.00
temperature at flowering on spikelet fertility aligned to Project UMU00049 Post-Doctoral Fellowship: High-throughput quantitative	Murdoch University	\$20,167.00
analysis of flowering dynamics and canopy structure in Canola germplasm using image analysis and deep		
learning methods	CSIRO	\$125,704.00
International Conference on Quantiative Genetics Boosting the capability and capacity of graduate	The University of Queensland	\$1,250.00
agronomists - GRDC Northern Region	Seedbed Media Pty Ltd	\$75,901.00
GRS: Improving variety prediction using environment information	The University of Queensland	\$36,069.00
GRS: Chemical cues used by natural enemies of the green peach aphid to find their prey in canola fields GRS: Molecular and phenotypic characterisation of	Murdoch University	\$36,069.00
synthetic auxin herbicide tolerant pulse germplasm	The University of Adelaide	\$36,069.00
GRS: Assessing a sterol pathway component as a novel target for herbicides	University of Western Australia	\$12,290.00
Population structure and virulence of barley Spot Form of Net Blotch isolates in Western Australia	Curtin University	\$36,870.00
GRS: Developing an ecotoxicologically based index for fertiliser toxicity	The University of Adelaide	\$7,767.25
GRS: Determining the spatial distribution of P. quasitereoides/P. curvicauda in the WA wheatbelt, and understanding how these nematodes find host roots as		
means to developing new methods of control	Murdoch University	\$36,870.00
GRS: Identifying novel sources of disease resistance genes in wild Brassicaceae for canola crop improvement	University of Western Australia	\$36,069.00
GRDC sponsorship of the Horizon Scholarship Program	AgriFutures Australia (RIRDC)	\$90,000.00
New insight and tools to increase yield potential and reliability in mungbean Role of transposable elements in the blackleg fungus in	The University of Queensland	\$31,448.00
its ability to overcome canola cultivar resistance and to develop fungicide resistance Characterising the mechanism of the CAPE1 induced	The University of Melbourne	\$31,448.00
immunity	Australian National University	\$11,448.00

Cross-compatibility and genetic stability of rhizobia to	t and Extension i Tojec	it Listing
maximise nitrogen fixation in new and existing		
inoculants	Murdoch University	\$31,448.00
A golden future for enhancing yield potential in canola GRS: 100-day Wheats for Adapting to a Changing	Australian National University	\$31,448.00
Climate Science and Innovation Awards for Young People in	Charles Sturt University Department of Agriculture,	\$31,448.00
Agriculture	Water and the Environment Nuffield Australia Farming	\$3,895.27
2021 Nuffield Australia Farming Scholarship Program CSIRO Agriculture & Food Vacation Scholarship	Scholars	\$13,000.00
Program	CSIRO	\$33,750.00
GRDC Recognising and Rewarding Excellence 2021	CSIRO	\$18,750.00
	Agforce Queensland Farmers	
AgForce Sponsorship 2021	Ltd	\$10,000.00
	Australian Agronomy	
2021 Australian Agronomy Conference	Conference	-\$909.09
Growing SA 2021 Conference	Grain Producers SA Limited	\$7,500.00
Growers as Innovators - Year 3	Farmers2Founders	\$420,000.00
GRS: Physiology of yield determination in faba bean		
genotypes with differing phenological and		
morphological traits.	The University of Adelaide	\$17,500.00
GRDC Membership of the Primary Industries Education Foundation of Australia	Primary Industries Education Foundation Australia	#76 F00 00
	Foundation Australia	\$76,500.00
Diversity, distribution and epidemiology of yellow dwarf viruses in Victoria	The University of Melbourne	\$12,500.00
GRS: Advancing crop growth simulation capabilities for	The Oniversity of Melbourne	\$12,500.00
optimising crop grain yield Improving phosphorus acquisition in grain crops using	The University of Queensland	\$12,500.00
organic amendments	Southern Cross University	\$10,416.00
Measuring protein storage efficiency during wheat grain development to optimize decision making in late		. ,
nitrogen fertiliser applications in the field Accelerator Program – Cicada Innovations Sponsored	University of Western Australia	\$15,000.00
Incubation.	Cicada Innovations	\$137,332.00
Accelerator Program – Agristart Sponsored Incubation. What triggers house mouse outbreaks in Australian cropping systems: Understanding the role of social structures on population regulation to better inform	AgriStart Pty Ltd	\$90,000.00
mouse management. GRS: Systemic RNA biopesticides for controlling fungal	Macquarie University	\$12,500.00
pathogens in grain crops GRS: Using ameliorants and crop traits to overcome	The University of Queensland	\$15,000.00
multiple physiochemical constraints to grain crops	The University of Melbourne	\$12,500.00
Adoption Readiness Framework Capturing global diversity and international genetic	Impact Innovation Group Pty Ltd	\$34,625.00
gains of wheat and barley: CAIGE 2022-2026	University of Sydney Australia Society of Plant	\$224,369.00
Australian Society of Plant Scientists Conference 2021	Scientists Inc	\$2,000.00
Accelerator Program - SparkLabs Cultiv8 (year 2)	Sparklabs Cultiv8 Pty Ltd	\$60,000.00
,	WoTL Ltd, formerly Partners in	,
Conference Sponsorship: Thriving Women 2022	Grain SA	\$3,750.00

Conference Sponsorship: Riverine Plains Innovation	t and Extension riojec	Listing
Expo 2022	Riverine Plains Inc	\$9,000.00
Capacity and Ability Framework review: people	Howard Partners YP AGRICULTURAL SERVICES	\$80,100.00
YP AG Study Tour to WeedSmart Week, Mildura, 2022	PTY LTD	\$11,250.00
MARTIO V	Merredin and District Farm Improvement Group(MADFIG)	
MADFIG Kununurra 2022 Trip	Inc McWhirter Ayliffe Trading As Summit Ag Agricultural	\$6,750.00
Tasmania Hyper yielding Crop Tour	Constulting Australian Seed Federation	\$7,500.00
Seed Business Convention 2022	Limited Australian Wheat Breeding	\$2,625.00
Wheat Breeding Society of Australia Inc. Assembly	Society Inc Soil Science Australia (WA	\$15,000.00
Soil Water Repellence Symposium	Branch)	\$3,750.00
Australian Sorghum Research Group Meeting	The University of Queensland	\$11,250.00
2022 11th Australasian Soilborne Disease Symposium	Kam Events Pty Ltd NSW Government Schools -	\$3,409.09
	Farrer Memorial Agricultural	
2022 Tamworth Agriculture Careers Expo	High School	\$2,000.00
Nitrogen 2023, The 4th International Symposium on the	Tight Concor	Ψ2,000.00
Nitrogen Nutrition of Plants	University of Sydney	\$11,250.00
2022 'Native Foods' DAF Hermitage Schools Plant	Queensland Department of	, ,
Science Competition 2022 CWFS 'Rural and Regional Women & Youth	Agriculture and Fisheries	\$5,000.00
Conference - Resilient, Resourceful & Remarkable' 2022 Ag Excellence Alliance Annual Grower Group	Central West Farming Systems	\$15,000.00
Forum	Ag Excellence Alliance Inc	\$5,250.00
The 72nd Australasian Grain Science Conference;	Australasian Grain Science	
Grains: Many Opportunities	Association Inc.	\$11,250.00
2022 Australian Grains Industry Conference (AGIC)	Grain Trade Australia Ltd	\$15,000.00
2022 NFF National Conference	National Farmers' Federation	\$25,000.00
Recognising and Rewarding Excellence Awards 2021- Harm van Rees	Crop Facts Pty Ltd	\$10,000.00
Recognising and Rewarding Excellence Awards 2022 -		
Allan Mayfield	Allan Mayfield Consulting	\$12,000.00
Nominee Director - Erin Gorter	Erin Gorter Enterprises	\$45,999.98
Accelerator Program - AgTech and Logistics Hub Australian Grains Genebank Strategic Partnership 2022-	Agrifood Connect Limited Department of Jobs, Precincts	\$64,460.00
2027	and Regions	\$6,000,000.00
BCG Hartstrings Tour 2022	Birchip Cropping Group	\$3,631.00
BCG Weedsmart Conference 2022 Soil, Cereals and Sheep in the West; Mallee Growers	Birchip Cropping Group	\$3,161.00
Study Tour 2022	JG & ZK Warne Pty Ltd	\$7,500.00
Delta Wagga West Australian Grower Study Tour 2022	Delta Agribusiness	\$22,500.00
East Loddon P12 Year 12 Ag Students - Study Tour 2022		\$2,180.00
Nutrien Ag Tumby Bay - Study Tour 2022	Nutrien Ag Solutions	\$1,500.00
SEPWA Youth in Ag Yorke Peninsula tour 2022	SEPWA	\$11,655.00
Southern Farming Systems Tour - Tasmania to South West Victoria 2022	Southern Farming Systems (SFS)	\$9,750.00

WA Grower Frost Study Tour to SA-VIC Mallee 2022	Grower Group Alliance	¢17.071.00
	•	\$17,871.00
WA Vetch Hay Study Tour of Victoria and NSW 2022	Alan Peggs Rural Pty Ltd	\$3,750.00
TropAg Conference 2022	The University of Queensland	\$11,250.00
25th Australasian Precision Agriculture Technology Symposium	SPAA - Society of Precision Agriculture Australia	\$18,750.00
Subtotal	Agriculture Australia	\$10,366,972.17
		\$10,300,972.17
Data management and analytics framework Statistics for the Australian Grains Industry (SAGI):		*
Western Node	Curtin University	\$958,589.00
Statistics for the Australian Grains Industry - Northern Node	Queensland Department of Agriculture and Fisheries	\$1,218,490.00
Node Agreement Bioinformatics and Biometrics for the	Agriculture and Fisheries	\$1,210,490.00
Australian Grains Industry	University of Wollongong	\$1,338,220.00
Southern regional node of Statistics for the Australian	, 3 3	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Grains Industry (SAGI)	The University of Adelaide	\$1,184,845.00
Cryosite Storage Agreement	Cryosite Limited	\$8,820.00
Improved Genetic Gain through GRDC Participation in		
Barley Pan-genome Consortium	Murdoch University	\$250,000.00
Machine learning to extract maximum value from soil	The Hairman to a find a later	44004040
and crop variability	The University of Adelaide Australian Grain Technologies	\$436,181.00
Applying machine learning to improve genetic gain delivered from genomic selection in plant breeding	Pty Ltd	\$254,060.00
Using machine learning to increase genetic gain in	r ty Ltd	\$254,000.00
canola blackleg resistance breeding	University of Western Australia	\$77,381.00
Machine learning applied to high-throughput feature	•	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
extraction from imagery to map spatial variability	The University of Queensland	\$198,607.50
Using Machine Learning To Develop New Methods For	C. Parlier and	4
Genetic Gain In Crops Challenged By Fungal Diseases Machine learning to map soil constraint variability and	Curtin University	\$117,704.00
predict crop yield	University of Sydney	\$137,284.16
Machine Learning Technical Consultation Group	oniversity of Syuney	\$137,204.10
participant	The University of Queensland	\$26,006.00
Machine Learning Technical Consultation Group	·	, ,
participant (Machine Learning for Agricultural Image and		
Data Analysis)	University of Saskatchewan	\$20,306.00
Deep Learning for early detection and classification of		400.040.50
crop disease and stress	University of Western Australia	\$90,912.50
AgAsk: A Machine Learning Generated Question- Answering Conversational Agent for Data-driven		
Growing Decisions	The University of Queensland	\$348,409.50
INVITA - A technology and analytics platform for		φο το, του.σσ
improving variety selection	The University of Queensland	\$1,364,000.00
Common Seed Bulk-Up: 2020 - 2024	Multiple delivery partners	\$500,878.85
	Federation University of	
Provision of Services in relation to the Online Farm Trial	· · · · · · · · · · · · · · · · · · ·	
database and website	Ballarat)	\$385,000.00
Profarmer Price and Forecast Data Subscription	Australian Crop Forecasters	-\$625.00
Australian Agricultural and Grazing Industries Survey	Department of Assignature	
(AAGIS) and Grains Reports: 2020-21 and 2022-23 ABARES	Department of Agriculture, Water and the Environment	\$637,676.00
Grains Industry Supply/Demand Drivers and Trends:	Australian Export Grains	φυ37,070.00
Considerations for Australian Grains RDE	Innovation Centre	\$120,000.00
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Australian grain farm performance: Frameworks and		
approaches to invest in and measure the impact of		
grains RDE on grower profit, to inform development of	District Addition Divided	4
the GRDC RDE Plan 2023-28	Pinion Advisory Pty Ltd	\$140,000.00
Provision of Grains Industry Data, Data Integration and		
Mapping Services 2021/22-2022-23	Kynetec Australia Pty Ltd	\$115,235.96
Building and Maintaining the GRDC Data Catalogue	Elysium Digital Pty Ltd	\$610,447.49
Assessing the efficiency and impact of GRDC's pre-		
breeding outputs and current deployment strategies	Betzner Consulting Pty Ltd	\$39,000.00
	Federation University of	
Procuring datasets from the Online Farm Trials database	Australia (formerly University of	
for on-farm Impact assessment	Ballarat)	\$48,000.00
Assessment of on-farm performance and impact of		
technology adoption	CSIRO	\$330,000.00
3, 1	Farmanco Management	4000,000.00
Datasets	Consultants Pty Ltd	\$223,500.00
	concananto i sy 200	Ψ220,000.00
Seed increase of a Canola Diversity set held by CSIRO	Kalyx Australia Pty Ltd	\$41,000.00
Datasets	Kynetec Australia Pty Ltd	\$88,898.00
Next Generation Machine Learning models for 3D soil-	11.2	
mapping applications	University of Sydney	\$320,000.00
APSIM simulations services to inform GRDC business		
cases	John Patrick Dimes	\$26,000.00
Data Partnerships Initiative	Multiple research partners	\$533,500.00
Mapping Portfolio Environmental Impact	Umbers Rural Services Pty Ltd	\$19,200.00
Subtotal		\$12,207,526.96
Grower communication and extension framework		4.11,107,010.00
Glower communication and extension framework		
Soil Quality i Book	Murdoch I Iniversity	¢24.000.00
Soil Quality iBook	Murdoch University	\$24,000.00
Soil Quality iBook GRDC branded publications	Murdoch University Coretext	\$24,000.00 \$86,458.73
-	•	
GRDC branded publications	Coretext	\$86,458.73
GRDC branded publications	Coretext	\$86,458.73
GRDC branded publications	Coretext ORM Pty Ltd	\$86,458.73
GRDC branded publications	Coretext ORM Pty Ltd INDEPENDENT CONSULTANTS	\$86,458.73
GRDC branded publications GRDC Research Update Series - Southern Region	Coretext ORM Pty Ltd INDEPENDENT CONSULTANTS AUSTRALIA NETWORK PTY.	\$86,458.73 \$732,755.00
GRDC branded publications GRDC Research Update Series - Southern Region	Coretext ORM Pty Ltd INDEPENDENT CONSULTANTS AUSTRALIA NETWORK PTY. LIMITED(ICAN Pty Ltd)	\$86,458.73 \$732,755.00
GRDC branded publications GRDC Research Update Series - Southern Region GRDC Research Update Series - Northern Region	Coretext ORM Pty Ltd INDEPENDENT CONSULTANTS AUSTRALIA NETWORK PTY. LIMITED(ICAN Pty Ltd) Grain Industry Association of Western Australia	\$86,458.73 \$732,755.00 \$727,047.66
GRDC branded publications GRDC Research Update Series - Southern Region GRDC Research Update Series - Northern Region GRDC Grains Research Updates Western Region	Coretext ORM Pty Ltd INDEPENDENT CONSULTANTS AUSTRALIA NETWORK PTY. LIMITED(ICAN Pty Ltd) Grain Industry Association of Western Australia CanPrint Communications Pty	\$86,458.73 \$732,755.00 \$727,047.66 \$681,937.00
GRDC branded publications GRDC Research Update Series - Southern Region GRDC Research Update Series - Northern Region	Coretext ORM Pty Ltd INDEPENDENT CONSULTANTS AUSTRALIA NETWORK PTY. LIMITED(ICAN Pty Ltd) Grain Industry Association of Western Australia CanPrint Communications Pty	\$86,458.73 \$732,755.00 \$727,047.66
GRDC branded publications GRDC Research Update Series - Southern Region GRDC Research Update Series - Northern Region GRDC Grains Research Updates Western Region Storage and distribution of GRDC hard copy publications	Coretext ORM Pty Ltd INDEPENDENT CONSULTANTS AUSTRALIA NETWORK PTY. LIMITED(ICAN Pty Ltd) Grain Industry Association of Western Australia CanPrint Communications Pty	\$86,458.73 \$732,755.00 \$727,047.66 \$681,937.00 \$6,174.82
GRDC branded publications GRDC Research Update Series - Southern Region GRDC Research Update Series - Northern Region GRDC Grains Research Updates Western Region Storage and distribution of GRDC hard copy publications RURAL FOCUS INTERVIEWS WITH THE GRDC	Coretext ORM Pty Ltd INDEPENDENT CONSULTANTS AUSTRALIA NETWORK PTY. LIMITED(ICAN Pty Ltd) Grain Industry Association of Western Australia CanPrint Communications Pty Ltd Southern Cross Austereo Pty Ltd	\$86,458.73 \$732,755.00 \$727,047.66 \$681,937.00 \$6,174.82 \$10,400.00
GRDC branded publications GRDC Research Update Series - Southern Region GRDC Research Update Series - Northern Region GRDC Grains Research Updates Western Region Storage and distribution of GRDC hard copy publications	Coretext ORM Pty Ltd INDEPENDENT CONSULTANTS AUSTRALIA NETWORK PTY. LIMITED(ICAN Pty Ltd) Grain Industry Association of Western Australia CanPrint Communications Pty Ltd Southern Cross Austereo Pty	\$86,458.73 \$732,755.00 \$727,047.66 \$681,937.00 \$6,174.82
GRDC branded publications GRDC Research Update Series - Southern Region GRDC Research Update Series - Northern Region GRDC Grains Research Updates Western Region Storage and distribution of GRDC hard copy publications RURAL FOCUS INTERVIEWS WITH THE GRDC Communication Support - North	Coretext ORM Pty Ltd INDEPENDENT CONSULTANTS AUSTRALIA NETWORK PTY. LIMITED(ICAN Pty Ltd) Grain Industry Association of Western Australia CanPrint Communications Pty Ltd Southern Cross Austereo Pty Ltd Jeffrey Rural Communications	\$86,458.73 \$732,755.00 \$727,047.66 \$681,937.00 \$6,174.82 \$10,400.00 -\$12,249.30
GRDC branded publications GRDC Research Update Series - Southern Region GRDC Research Update Series - Northern Region GRDC Grains Research Updates Western Region Storage and distribution of GRDC hard copy publications RURAL FOCUS INTERVIEWS WITH THE GRDC Communication Support - North Communication Support - Southern & Western Regions	Coretext ORM Pty Ltd INDEPENDENT CONSULTANTS AUSTRALIA NETWORK PTY. LIMITED(ICAN Pty Ltd) Grain Industry Association of Western Australia CanPrint Communications Pty Ltd Southern Cross Austereo Pty Ltd Jeffrey Rural Communications AgCommunicators Pty Ltd	\$86,458.73 \$732,755.00 \$727,047.66 \$681,937.00 \$6,174.82 \$10,400.00
GRDC branded publications GRDC Research Update Series - Southern Region GRDC Research Update Series - Northern Region GRDC Grains Research Updates Western Region Storage and distribution of GRDC hard copy publications RURAL FOCUS INTERVIEWS WITH THE GRDC Communication Support - North Communication Support - Southern & Western Regions GRDC Grower Network - Coordination and facilitation	Coretext ORM Pty Ltd INDEPENDENT CONSULTANTS AUSTRALIA NETWORK PTY. LIMITED(ICAN Pty Ltd) Grain Industry Association of Western Australia CanPrint Communications Pty Ltd Southern Cross Austereo Pty Ltd Jeffrey Rural Communications AgCommunicators Pty Ltd Rural Management Strategies	\$86,458.73 \$732,755.00 \$727,047.66 \$681,937.00 \$6,174.82 \$10,400.00 -\$12,249.30 -\$1,174.50
GRDC Branded publications GRDC Research Update Series - Southern Region GRDC Research Update Series - Northern Region GRDC Grains Research Updates Western Region Storage and distribution of GRDC hard copy publications RURAL FOCUS INTERVIEWS WITH THE GRDC Communication Support - North Communication Support - Southern & Western Regions GRDC Grower Network - Coordination and facilitation services for Southern NSW	Coretext ORM Pty Ltd INDEPENDENT CONSULTANTS AUSTRALIA NETWORK PTY. LIMITED(ICAN Pty Ltd) Grain Industry Association of Western Australia CanPrint Communications Pty Ltd Southern Cross Austereo Pty Ltd Jeffrey Rural Communications AgCommunicators Pty Ltd	\$86,458.73 \$732,755.00 \$727,047.66 \$681,937.00 \$6,174.82 \$10,400.00 -\$12,249.30
GRDC branded publications GRDC Research Update Series - Southern Region GRDC Research Update Series - Northern Region GRDC Grains Research Updates Western Region Storage and distribution of GRDC hard copy publications RURAL FOCUS INTERVIEWS WITH THE GRDC Communication Support - North Communication Support - Southern & Western Regions GRDC Grower Network - Coordination and facilitation services for Southern NSW GRDC Grower Network: Coordination and facilitation	Coretext ORM Pty Ltd INDEPENDENT CONSULTANTS AUSTRALIA NETWORK PTY. LIMITED(ICAN Pty Ltd) Grain Industry Association of Western Australia CanPrint Communications Pty Ltd Southern Cross Austereo Pty Ltd Jeffrey Rural Communications AgCommunicators Pty Ltd Rural Management Strategies Pty Limited	\$86,458.73 \$732,755.00 \$727,047.66 \$681,937.00 \$6,174.82 \$10,400.00 -\$12,249.30 -\$1,174.50 \$298,652.73
GRDC Branded publications GRDC Research Update Series - Southern Region GRDC Research Update Series - Northern Region GRDC Grains Research Updates Western Region Storage and distribution of GRDC hard copy publications RURAL FOCUS INTERVIEWS WITH THE GRDC Communication Support - North Communication Support - Southern & Western Regions GRDC Grower Network - Coordination and facilitation services for Southern NSW	Coretext ORM Pty Ltd INDEPENDENT CONSULTANTS AUSTRALIA NETWORK PTY. LIMITED(ICAN Pty Ltd) Grain Industry Association of Western Australia CanPrint Communications Pty Ltd Southern Cross Austereo Pty Ltd Jeffrey Rural Communications AgCommunicators Pty Ltd Rural Management Strategies	\$86,458.73 \$732,755.00 \$727,047.66 \$681,937.00 \$6,174.82 \$10,400.00 -\$12,249.30 -\$1,174.50
GRDC Branded publications GRDC Research Update Series - Southern Region GRDC Research Update Series - Northern Region GRDC Grains Research Updates Western Region Storage and distribution of GRDC hard copy publications RURAL FOCUS INTERVIEWS WITH THE GRDC Communication Support - North Communication Support - Southern & Western Regions GRDC Grower Network - Coordination and facilitation services for Southern NSW GRDC Grower Network: Coordination and facilitation services for Central NSW	Coretext ORM Pty Ltd INDEPENDENT CONSULTANTS AUSTRALIA NETWORK PTY. LIMITED(ICAN Pty Ltd) Grain Industry Association of Western Australia CanPrint Communications Pty Ltd Southern Cross Austereo Pty Ltd Jeffrey Rural Communications AgCommunicators Pty Ltd Rural Management Strategies Pty Limited	\$86,458.73 \$732,755.00 \$727,047.66 \$681,937.00 \$6,174.82 \$10,400.00 -\$12,249.30 -\$1,174.50 \$298,652.73
GRDC Branded publications GRDC Research Update Series - Southern Region GRDC Research Update Series - Northern Region GRDC Grains Research Updates Western Region Storage and distribution of GRDC hard copy publications RURAL FOCUS INTERVIEWS WITH THE GRDC Communication Support - North Communication Support - Southern & Western Regions GRDC Grower Network - Coordination and facilitation services for Southern NSW GRDC Grower Network: Coordination and facilitation services for Central NSW GRDC Grower Network - Coordination and facilitation	Coretext ORM Pty Ltd INDEPENDENT CONSULTANTS AUSTRALIA NETWORK PTY. LIMITED(ICAN Pty Ltd) Grain Industry Association of Western Australia CanPrint Communications Pty Ltd Southern Cross Austereo Pty Ltd Jeffrey Rural Communications AgCommunicators Pty Ltd Rural Management Strategies Pty Limited Grain Orana Alliance Inc	\$86,458.73 \$732,755.00 \$727,047.66 \$681,937.00 \$6,174.82 \$10,400.00 -\$12,249.30 -\$1,174.50 \$298,652.73
GRDC Branded publications GRDC Research Update Series - Southern Region GRDC Research Update Series - Northern Region GRDC Grains Research Updates Western Region Storage and distribution of GRDC hard copy publications RURAL FOCUS INTERVIEWS WITH THE GRDC Communication Support - North Communication Support - Southern & Western Regions GRDC Grower Network - Coordination and facilitation services for Southern NSW GRDC Grower Network: Coordination and facilitation services for Central NSW GRDC Grower Network - Coordination and facilitation services for GRDC's investment idea capture and grower	Coretext ORM Pty Ltd INDEPENDENT CONSULTANTS AUSTRALIA NETWORK PTY. LIMITED(ICAN Pty Ltd) Grain Industry Association of Western Australia CanPrint Communications Pty Ltd Southern Cross Austereo Pty Ltd Jeffrey Rural Communications AgCommunicators Pty Ltd Rural Management Strategies Pty Limited Grain Orana Alliance Inc	\$86,458.73 \$732,755.00 \$727,047.66 \$681,937.00 \$6,174.82 \$10,400.00 -\$12,249.30 -\$1,174.50 \$298,652.73 \$256,591.50
GRDC Branded publications GRDC Research Update Series - Southern Region GRDC Research Update Series - Northern Region GRDC Grains Research Updates Western Region Storage and distribution of GRDC hard copy publications RURAL FOCUS INTERVIEWS WITH THE GRDC Communication Support - North Communication Support - Southern & Western Regions GRDC Grower Network - Coordination and facilitation services for Southern NSW GRDC Grower Network: Coordination and facilitation services for Central NSW GRDC Grower Network - Coordination and facilitation services for GRDC's investment idea capture and grower engagement program - Western Region	Coretext ORM Pty Ltd INDEPENDENT CONSULTANTS AUSTRALIA NETWORK PTY. LIMITED(ICAN Pty Ltd) Grain Industry Association of Western Australia CanPrint Communications Pty Ltd Southern Cross Austereo Pty Ltd Jeffrey Rural Communications AgCommunicators Pty Ltd Rural Management Strategies Pty Limited Grain Orana Alliance Inc	\$86,458.73 \$732,755.00 \$727,047.66 \$681,937.00 \$6,174.82 \$10,400.00 -\$12,249.30 -\$1,174.50 \$298,652.73
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GRDC Research Update Series - Southern Region GRDC Research Update Series - Northern Region GRDC Grains Research Updates Western Region Storage and distribution of GRDC hard copy publications RURAL FOCUS INTERVIEWS WITH THE GRDC Communication Support - North Communication Support - Southern & Western Regions GRDC Grower Network - Coordination and facilitation services for Southern NSW GRDC Grower Network: Coordination and facilitation services for Central NSW GRDC Grower Network - Coordination and facilitation services for GRDC's investment idea capture and grower engagement program - Western Region GRDC Grower Network - Coordination and facilitation services for the Southern Region	Coretext ORM Pty Ltd INDEPENDENT CONSULTANTS AUSTRALIA NETWORK PTY. LIMITED(ICAN Pty Ltd) Grain Industry Association of Western Australia CanPrint Communications Pty Ltd Southern Cross Austereo Pty Ltd Jeffrey Rural Communications AgCommunicators Pty Ltd Rural Management Strategies Pty Limited Grain Orana Alliance Inc KJ Heenan and JR Hill AgCommunicators Pty Ltd	\$86,458.73 \$732,755.00 \$727,047.66 \$681,937.00 \$6,174.82 \$10,400.00 -\$12,249.30 -\$1,174.50 \$298,652.73 \$256,591.50
GRDC Research Update Series - Southern Region GRDC Research Update Series - Northern Region GRDC Grains Research Updates Western Region Storage and distribution of GRDC hard copy publications RURAL FOCUS INTERVIEWS WITH THE GRDC Communication Support - North Communication Support - Southern & Western Regions GRDC Grower Network - Coordination and facilitation services for Southern NSW GRDC Grower Network: Coordination and facilitation services for Central NSW GRDC Grower Network - Coordination and facilitation services for GRDC's investment idea capture and grower engagement program - Western Region GRDC Grower Network - Coordination and facilitation	Coretext ORM Pty Ltd INDEPENDENT CONSULTANTS AUSTRALIA NETWORK PTY. LIMITED(ICAN Pty Ltd) Grain Industry Association of Western Australia CanPrint Communications Pty Ltd Southern Cross Austereo Pty Ltd Jeffrey Rural Communications AgCommunicators Pty Ltd Rural Management Strategies Pty Limited Grain Orana Alliance Inc KJ Heenan and JR Hill	\$86,458.73 \$732,755.00 \$727,047.66 \$681,937.00 \$6,174.82 \$10,400.00 -\$12,249.30 -\$1,174.50 \$298,652.73 \$256,591.50

GRDC Video and Podcast Investment	Anvil Media Pty Ltd	\$251,305.16
GroundCover suite - editorial content and hardcover publications	Coretext	\$1,652,783.25
Grain and Grazing management of canola and wheat	Corclext	\$1,032,763.23
production systems- A technical manual	CSIRO	\$5,000.00
2021 GRDC Grower Survey	Down To Earth Research	\$33,983.00
ARD&E Business Group investment and impact strategy	Reconstruct Consulting	\$9,900.00
2021 GRDC Farm Practices Survey	Down To Earth Research	\$139,994.00
Communications Support	AgCommunicators Pty Ltd	\$45,900.00
GRDC Branded Publications 2022-2024	Coretext	\$65,000.00
Storage and distribution of GRDC hard copy publications	CanPrint Communications Pty	
2022	Ltd	\$27,454.83
Corporate affairs and issues management advice	Porter Novelli Pty Ltd	\$40,125.02
Pilot project to deliver informative, timely podcasts to		
growers that are seasonally relevant	Humans of Agriculture	\$4,000.00
2022 GRDC research partner survey	Down To Earth Research	\$72,850.00
2022 GRDC grower survey	Down To Earth Research	\$101,947.00
Corporate Communications support for the RD&E Plan	Porter Novelli Pty Ltd	\$15,474.88
RD&E Funding Landscape Analysis	ACIL Allen Consulting Pty Ltd	\$20,543.00
	ACIL Allen Consulting Fty Ltd	
Subtotal Research and Development support sects		\$6,386,186.45
Research and Development support costs		\$1,388,775.19
Total		\$177,120,108.70