



AIR EP

Ag Innovation & Research
Eyre Peninsula

ANNUAL REPORT TO AIR EP MEMBERS

2022-2023

Chairperson's report

I am pleased to present the Chairperson's Report for the year 2022-2023. It has been an eventful year, marked by progress and achievements in our mission to provide leadership and direction to deliver relevant and innovative, farmer driven RD&E to advance agriculture on Eyre Peninsula.

New and Existing Projects

AIR EP finishes the 2022-2023 in a strong position with 27 active projects ranging in value from \$750 to \$3.2m, to a total value of \$9.3 million.

Several large projects have recently concluded, including the Sustainable Agriculture Program and Regional Agricultural Landcare Facilitator projects being delivered by AIR EP on the EP Landscape Board's behalf. Our largest project to date, Resilient EP, funded by the National Landcare Program has also been recently completed, with strong progress being made in being able to utilise data collected on farm to make more informed and profitable decisions based on production capacity of soils. This project has now evolved into the new GRDC RiskWi\$e investment, aimed at supporting farmers to make decisions based on greater quantification of upside and downside risks, using a participatory action research approach, meaning farmers, advisors and researchers working together and directing activities.

Strategic Planning

Our commitment to planning for the future is evident in the refinement of our strategic plan. We have also worked closely with local landowners, AIR EP and EP Landscape Board members, and experts from the South Agricultural Research and Development Institute (SARDI) to create a document titled "EP Ag Vision 2050" that sets an ambitious vision for the next decade and beyond. Developing the action plan for participating organizations will be the focus for the coming year.

Staffing and Acknowledgments

To ensure we can continue to deliver on our ambitious goals, we are actively seeking additional quality project management staff to bolster our existing team.

I would like to extend my heartfelt thanks to our Executive Officer and her dedicated team for their outstanding work this year. Their tireless efforts have been instrumental in our organization's achievements.

I want to express my gratitude to each of our board members for their invaluable input and dedication to our mission.

A special thank you goes to Andrew Polkinghorne, who is retiring from our Board. Andrew's contributions over the years have been exceptional, and we wish him all the best in his new role as SAGIT Trustee.

Our sponsors have played a pivotal role in supporting our work, and I would like to emphasize the vital importance of staying connected with our agricultural community. Your continued support is deeply appreciated.

In conclusion, it has been a remarkable year of growth and accomplishment for our organization. As we look ahead to the next decade, we are filled with excitement and determination to achieve the ambitious vision outlined in our strategic plan and the EP Ag Vision 2050. Together, we will continue to make a positive impact on our community and the agricultural industry on Eyre Peninsula.

Thank you for your unwavering support and dedication to our mission.

A handwritten signature in black ink that reads "Bill Long". The signature is written in a cursive, flowing style.

Bill Long
Chairperson

The organisation

Agricultural Innovation & Research Eyre Peninsula (AIR EP) was officially incorporated on 26 May 2020, with the aim of creating a single entity for farmer driven applied research, local validation and extension of agricultural technologies and innovations on the Eyre Peninsula.

AIR EP, a not-for-profit incorporated association, is the result of a merger between the Eyre Peninsula Agricultural Research Foundation (EPARF) and the Lower Eyre Ag Development Association (LEADA) farming systems groups, who have been very effective in providing local RD&E outcomes for upper and lower Eyre Peninsula respectively over the past 15 years. By joining forces, the new organisation has created efficiencies in administration and operations, and provided a stronger face for regional RD&E to future funders, partners, members and supporters.

AIR EP is governed by a Board and RD&E activities are driven by members of the Low and Medium Rainfall RD&E Committees and other grower groups across Eyre Peninsula.

AIR EP attracts investment from a range of sources including the Australian and SA Government, Research & Development Corporations, SA Grains Industry Trust plus annual sponsorship and membership fees to facilitate agricultural RD&E activities on Eyre Peninsula.

Vision

A professional, farmer driven organisation that leads RD&E of agricultural technologies and innovations for farmers on the Eyre Peninsula.

Purpose

The AIR EP Board will provide leadership and direction to deliver relevant and innovative, farmer driven RD&E to advance agriculture on Eyre Peninsula.

Core values

Relevance, independence, creativity, respect.

Key priorities

- Effective partnerships
- Investment attraction
- Outcome focussed
- Farmer driven
- Demonstrate leadership
- Capacity and capability building

The organisation will access funds to support projects that address key issues and opportunities that will increase the profitability and resilience of farming businesses in the region.

AIR EP Board Members at 30 June 2023



Greg Arthur, Andrew Polkinghorne, Matthew Cook, Bill Long (Chair), Mark Stanley (special skills and experience), Greg Scholz (Deputy Chair, Public Officer), Ken Webber. Absent: Daniel Adams.

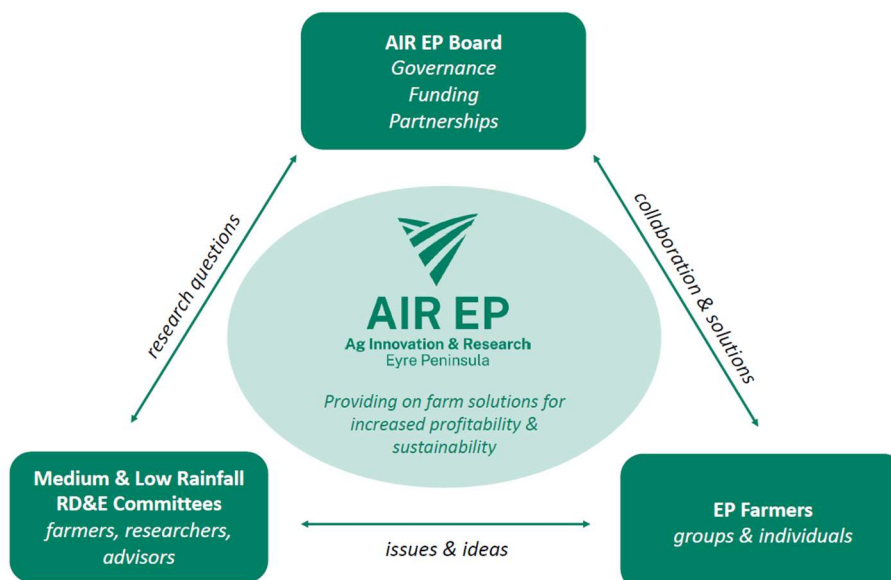
Bryan Smith and John Richardson completed their terms in October 2022 and chose not to renominate. Greg Scholz retired from the Low Rainfall RD&E Committee in October 2022, and nominated as a Board member in his own right.

Matthew Cook became the new Low Rainfall RD&E Committee representative in February 2023, replacing Greg Scholz.

Daniel Adams became the new Medium Rainfall RD&E Committee representative in February 2023, replacing John Richardson.

Structure

The AIR EP Board provides governance oversight and sets the strategic direction for the organisation. The Board is supported by two RD&E Committees, one with a focus on the medium rainfall zone (lower EP) and one on the low rainfall zone (upper EP). These committees focus on setting priorities for RD&E investment in the region, reviewing projects and providing input into events for farmers.



Medium Rainfall RD&E Committee at 30 June 2023

Covers lower and parts of Eastern Eyre Peninsula and comprises:

Dan Adams (Chair, AIR EP Board member rep), George Pedler, Billy Pedler, Dustin Parker, Jacob Giles, Denis Pedler, David Davenport, Lochie Siegert, Brett Masters, Daniel Puckridge, Nick Gale.

Low Rainfall RD&E Committee at 30 June 2023

Covers central, eastern and western Eyre Peninsula and comprises:

Symon Allen (Chair), Matthew Cook (AIR EP Board member rep), Andy Bates, Andrew Ware, Rhiannon Schilling, Amanda Cook, Daniel Bergmann, Rhys Tomney, Leigh Scholz, Kevin Dart, Chris Lymn.

Membership

2022/23 membership was 149, made up of 1 student member, 60 individual members, 88 business members (up to 10 members per business).

Memberships expire at 12 months and can be renewed via the AIR EP website:

<https://airep.com.au/memberships/types/>.

There are three annual membership types:

Individual: \$150 + GST

Business: \$200 + GST (up to 10 members)

Future Farmer: free for school and tertiary students

Note: As of 30 September 2023, memberships will run from March to March annually.

Staff

Executive Officer - Naomi Scholz

Finance Officer - Alanna Barns

Regional Agricultural Landcare Facilitator (RALF) - Amy Wright

Sustainable Agriculture Officer - Josh Telfer

Project Officer – Rebekah Fatchen

SAGIT Grains Research Interns

2021 Rhaquelle Meiklejohn, hosted by EPAG Research

2022 Rebekah Fatchen, hosted by EPAG Research

2023 Elijah Luo, hosted by SARDI Minnipa Ag Centre

Key activities timeline

START

- EPARF and LEADA members vote to merge January 2020
- First meeting of new Board members February 2020
- Executive Officer appointed May 2020
- Incorporation May 2020
- First Medium and Low Rainfall RD&E Committees meeting held July 2020
- Regional Agricultural Landcare Facilitator appointed September 2020
- Website live September 2020
- Lower EP crop walk held September 2020
- Finance Officer contracted October 2020
- Sustainable Agriculture Officer appointed November 2020
- Lower EP Ag Expo held March 2021
- Strategic plan adopted June 2021
- Member Days held (post-emergent herbicides) on upper and lower EP June 2021

30 JUNE 2021

- AIR EP AGM #1 August 2021
- Lower EP crop walk September 2021
- Tooligie GRDC Pulse Field Day October 2021
- Climate change workshop December 2021
- Lower EP Ag Expo March 2022
- Young Farmer network mapping workshops March 2022
- Sustainable Ag small grants workshop March 2022
- Regenerative Agriculture forum March 2022
- DLPS Pastures webinar April 2022
- GRDC Ryegrass deep dive June 2022
- Strategic plan reviewed June 2022
- Hosted various GRDC events across EP

30 JUNE 2022



Resilient EP Nitrogen workshop July 2022
GRDC Farm Business Update July 2022
Resilient EP Innovation Tour August 2022
GRDC Root health workshops August 2022
GRDC Updates for Farmers August 2022
Slug workshop August 2022
Sandy soils masterclasses (Murlong, Buckleboo) August 2022
Tooligie GRDC Pulse and Frost field days September 2022
Salinity Management workshop September 2022
Lower EP Crop Walk September 2022
AGM #2 September 2022
Commencement of GRDC RiskWi\$e project January 2023
Mallee Seeps advisor workshop February 2023
Lower EP Ag Expo February 2023
SPAA/GRDC VRT workshop February 2023
Soil Acidity Forums March 2023
Regen Ag Forum June 2023
FDF Science to Practice Forum June 2023
Soil Acidity webinar June 2023
Completion of National Landcare Program Resilient EP project June 2023

30 JUNE 2023



Above: AIR EP Lower EP crop walk September 2022 at Dan Adams' farm at Cockaleeche.

Below: AIR EP Ag Expo, Cummins March 2023



AIR EP Projects

At 30 June 2023, AIR EP are currently involved in delivery of 27 projects ranging in value from \$750 to \$3.2m.

Project title	Brief Summary of Project	Funder	Total Budget	Start Date	Finish Date
A new paradigm for resilient and profitable dryland farming on the Eyre Peninsula using data to improve on-farm decision making Activity ID 4-FTOJYCT	New and emerging technologies will be used to assist farmers make efficient use of soil moisture. The Eyre Peninsula has an extensive soil moisture probe network which is underutilised. A <i>Regional Innovators</i> group of farmers and advisers will engage researchers and link with the region's farmers to develop techniques to integrate information generated from the probe network, satellite imagery, climate and yield models. Farmers will be able to make more informed, timely decisions underpinned by innovations in agronomy and livestock management in order to optimise the region's productive potential whilst protecting soil and water resources in a changing climate.	Aust Govt NLP2	\$3,288,800	1/11/2019	30/06/2023
LEA120 - Taking South Australian Canola profitability to the next level	Determining the maximum achievable water limited yield of canola on Lower EP and the relative significance of key canola yield drivers once disease and phenology are optimised and inform growers and advisors on the yield driving mechanisms and profitability of high production canola systems.	SAGIT	\$130,400	1/07/2020	1/08/2023
DEW - 1648 Regional Agriculture Landcare Facilitator Services	Provision of RALF services for EP. Central point of contact for farmers, industry, groups for core services & projects. Collate & distribute information. Collect regional intelligence. Facilitate group collaboration, help seek funding. Promote NLP projects. Liaise with RALF network across Australia.	EP Landscape Board	\$367,200	1-Jul-20	30-Jun-23
DEW - 1604 Delivery of components of the regions existing Sustainable Agriculture program	Delivery of Sustainable Ag program.	EP Landscape Board	\$860,570	17-Aug-20	30-Jun-23

4.2.003: More profitable crops on highly calcareous soils by improving early vigour and overcoming soil constraints.	AIR EP providing in-kind to the project: access to networks for project extension, to the value of \$9000 total. The team is from PIRSA, NSW DPI, AIR EP and MFMG. Outcomes will be modified agronomic practices and improved soil conditions which increase WUE of crops and farm profitability as well as improved knowledge of the impact of high carbonate on crop performance.	Soil CRC	0	22/06/2020	31/03/2023
GRDC Legume Extension project UOA2105-013RTX	Delivery of extension activities around 4 pulse sites on EP	GRDC via SARDI	\$72,000	1/05/2021	30/06/2025
Knowledge-Sharing for Good Soil Stewardship 1.2.006	It aims to address challenges and opportunities associated with knowledge-sharing efforts directed at improving the uptake of new innovations and best-practice soil management. In order to support knowledge-sharing efforts for grower-groups across four case-study regions, this project will co-develop and test a range of knowledge-sharing modes and processes, from digital strategies to field days, drawing on the skills of a cross-institutional, cross-disciplinary research team.	Soil CRC	\$31,500	26/11/2021	15/11/2023
Eyre Peninsula internship in applied grains research 2023 AEP-01422-R	To improve the capacity of grains research, development and extension in the Eyre Peninsula region. To further develop applied research skills of recent graduates so they will be able to make an improved contribution to the grains R, D&E industry in South Australia.	SAGIT	\$140,000	1/07/2022	31/08/2024
Tactics to minimise frost damage on the Eyre Peninsula AIP2203-001SAX	Incidence of frost damage on the Eyre Peninsula (EP) in recent years has been increasingly damaging. Growers and advisers on the EP are looking for tactics to avoid, tolerate and/or mitigate frost damage of crops. 1 major frost trial site at Tooligie. 3 demonstration sites in central/lower EP (2 x soil amelioration, 1 x zoning management). Discussion groups led by advisors.	GRDC	\$238,000	4/03/2022	30/06/2024

<p>Managing crown rot on upper EP – a joint learning experience AEP-1022-R</p>	<p>Project activities will build on knowledge gained from prior research on Upper EP using trials and complementary grower-sown demonstrations with the objectives being to: 1. Reduce yield losses due to crown rot, so increasing the amount and consistency of grain quantities available for export. 2. Improve the consistency of cereal grain production and the profitability of cereal enterprises on UEP. 3. Increase adoption of existing (used in conventional and novel ways) and novel options for managing crown rot. 4. Improve the ability of farmers and advisors (and researchers) to understand trials and demonstrations and how to interpret the results for application and implementation in local farming systems.</p>	<p>SAGIT</p>	<p>\$150,724</p>	<p>1/07/2022</p>	<p>30/06/2024</p>
<p>SA Drought Hub activities 2022: Soil cover to retain water Project #1</p>	<p>Demonstration sites to be established in low rainfall farming systems to determine: 1. Can we measure increased stored soil water in strip/disc vs conventional no-till knife point systems? 2. Are there other measurable benefits to the farming system such as soil cover, nutrition, weeds, disease, yield, soil health measures? 3. Are there impacts on pre-sowing herbicide efficacy in a strip/disc system compared with a conventional system?</p>	<p>FDF: SA Drought Hub</p>	<p>\$90,000</p>	<p>1/04/2022</p>	<p>31/12/2022</p>
<p>Building drought resilience by scaling out farming practices that will enhance the productive capacity of sandy soil landscapes. Activity ID: 4-H6P3CX5</p>	<p>This project will enhance the drought resilience of farmers who manage 3 million hectares of sandy soils in the low-medium rainfall landscape of southeast Australia. This will be achieved through the adoption of practices that enhance the productive capacity of sandy soils by overcoming constraints including water repellence & compacted layers that prevent root growth & access to moisture & nutrients. Practices proven to work in small-scale trials will be scaled-out at 16 demonstration sites to build farmers' confidence across an extensive landscape of the Eyre Peninsula, Upper Yorke Peninsula, Mallee & Southeast regions. Case studies will be used to document outcomes from sites, with this information extended directly to 400 farmers through 17 events implemented by a consortium of grower groups. The project will also disseminate case studies using a digital extension hub & established social media networks to ensure maximum impact with farmers managing sandy soils across Australia.</p>	<p>FDF: Soil & landscape grant & GRDC</p>	<p>\$995,000</p>	<p>1/04/2022</p>	<p>30/06/2024</p>

Building drought resilience with landscape scale remediation of saline land	This project will demonstrate farmer ready management practices that break the cycle of saline land degradation exacerbated by very dry or drought conditions. Two key drivers of soil salinity will be addressed - dry saline land and Mallee seeps that cause lost production in low rainfall broad acre mixed farming landscapes.	MSF via FDF: Soil & landscape grant	\$132,000	1/07/2022	30/06/2024
Robust ground cover to enable resilient low rainfall mixed farms	This project will demonstrate, evaluate and communicate farming innovations that are not widely adopted by low rainfall farmers but have been proven in other regions or are close to market. Build resilient groundcover to protect the natural capital of low rainfall mixed farming region of the Mallee and Eyre Peninsula. While the focus of previous projects has been to ensure groundcover targets are met to minimise soil erosion in dry seasons, this project will also ensure resilient groundcover is maintained to enable farmers to quickly regain production potential when the drought breaks.	MSF via FDF: Innovation grant	\$303,240	1/08/2022	30/06/2024
Promoting best-practice feedbase management to deliver improved drought resilience in low to medium rainfall regions through on-farm demonstrations and case studies	This consortium project will demonstrate the application of best practice pasture management options to deliver enhanced drought resilience. Natural capital will be increased by 1) extending the pasture growing season and 2) increasing the ground cover of pastures to protect soils. This will be achieved by using better-adapted pasture species and mixtures and by implementing best practice technologies in pasture establishment and management.	FDF Soil & Landscape Grant via University of Adelaide	\$57,500	1/07/2022	30/06/2024
The farmer, the comedian and the psychologist project	Bringing together farmers, psychological science, technology and humour to equip agricultural-dependent communities with practical, evidence-based and entertaining strategies, that strengthen wellbeing and deepen social support	FDF	\$0	1/07/2022	30/06/2024
Soil extension support for extreme weather recovery areas of Eastern Eyre Peninsula	Farmers affected by the extreme weather events will be invited to express their interest in accessing technical support, soil testing and extension activities with a focus on production outcomes. Support will be provided on a 'first in first served' basis, until the funds are fully allocated.	EP Landscape Board & PIRSA	\$105,000	1/07/2022	30/06/2023

<p>National Risk Management Initiative - Action Research Groups Eyre Peninsula AIP2303-001BGX</p>	<p>The National Risk Management Initiative (NRMI) is a GRDC initiative extending over five years that aims to understand and improve risk-reward outcomes for Australian grain growers through participatory action research (PAR). In PAR, growers and their advisers will quantify the probabilities of uncertainty of outcomes and assess the risk-reward payoffs for given management decisions in the context of their own farming operations. At the conclusion of NRMI, a suite of extension packages and artefacts (decision support tools) will continue to inform and challenge grain growers, their consultants and advisers to consider farm management decisions as informed by probable rewards (profit \$/ha) and associated probable risks (loss \$/ha).</p>	<p>GRDC via SA Drought Hub</p>	<p>\$1,823,000</p>	<p>1/01/2023</p>	<p>30/12/2027</p>
<p>PROC-9176666 Enterprise choice and sequence strategies that drive sustainable and profitable southern Australian farming systems</p>	<p>By June 2027, at least 80% of growers and advisers in the Southern Grains Region understand the water-limited production potential of their farming systems and the management strategies required to meet new and existing performance frontiers. Growers and their advisers will have a clear indication of the opportunities, financial risk and threats of their crop management decisions for maximising their production profit across rotations.</p>	<p>GRDC via University of Adelaide</p>	<p>\$240,000</p>	<p>1/03/2023</p>	<p>30/06/2027</p>
<p>Eyre Peninsula internship in applied grains research 2024 [AEP 03423]</p>	<p>Intern for 2024 to be hosted by EPAG Research</p>	<p>SAGIT 50% SA Drought Hub 50%</p>	<p>\$66,790</p>	<p>1/06/2023</p>	<p>31/03/2025</p>
<p>Eyre Peninsula internship in applied grains research 2024 [SAGIT_23_01]</p>	<p>Intern for 2024 to be hosted by EPAG Research (50% SAGIT, 50% SA Drought Hub funded)</p>	<p>SA Drought Hub</p>	<p>\$66,790</p>	<p>1/07/2023</p>	<p>30/06/2024</p>
<p>Drought Resilience Practices in Mixed Farming Systems- Cross Hub Project DNX_22_7</p>	<p>Demonstration sites to be established in low rainfall farming systems to: 1. Demonstrate practices to improve rotations to increase soil N and reduce grass weeds for wheat production. 2. Determine if there are other measurable benefits to the farming system e.g. biomass production (for livestock feed), weed control and yield from early sowing?</p>	<p>Cross hub: SA Drought Hub via Uni of Adelaide</p>	<p>\$0</p>	<p>1/04/2022</p>	<p>30/06/2023</p>

Sheep Climate Resilience (IH_22_10a)	<p>Activities reported on for this project include:</p> <ul style="list-style-type: none"> • 10.1 Demonstration of practical strategies which improve the fertility of sheep joined during summer • 10.2 Collation and communication of results from management trials • 10.3. Demonstration of the benefits of using dietary betaine to improve sheep fertility during summer, and establish the impacts on their thermoregulation 	SA Drought Hub via Uni of Adelaide	\$8,000	1/01/2023	30/09/2023
SA Drought Hub: Cropping without glyphosate [IH_22_04]	Demo site (small plot replicated trial in reality) at Wangary, alternatives to glyphosate.	SA Drought Hub	\$2,800	1/04/2022	30/09/2023
SA Drought Hub: Filling feed gaps [DN5_23_01]	The project aims to improve primary producer decision making around the cost effective and sustainable production of hay and silage, and preparing for drought through best practice feed conservation and storage. The project will be conducted in the Limestone Coast (LC), Fleurieu Peninsula (FP), Kangaroo Island (KI) and Eyre Peninsula (EP) regions. 1 fact sheet for EP	SA Drought Hub via MFMG	\$750	11/04/2023	15/06/2024
SA Drought Hub: Retaining soil water in farming systems using strip/disc machinery 2023 [DN1_23_02]	Year 2 of strip and disc farming systems demonstrations	SA Drought Hub	\$103,500	1/04/2023	15/06/2024
SA Drought Hub: Best practice for early sowing opportunities 2023 [DN1_23_03]	<p>2 Demonstration sites to be established in low rainfall farming systems to:</p> <ol style="list-style-type: none"> 1. Demonstrate practices to reduce fertiliser toxicity and increase plant establishment in early sowing situations. 2. Determine if we can increase the seeding opportunities and plant establishment using new long coleoptile wheat varieties, sowing rate or seed priming? 3. Determine if there are other measurable benefits to the farming system e.g. biomass production (for livestock feed), weed control and yield from early sowing? 	SA Drought Hub	\$51,000	1/04/2023	25/01/2024
Total project value:			\$9,324,564		

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Thank you to all sponsors for their generous support.

Sponsorship is a vital link in AIR EP being able to provide the services to our members and we hope to be able to continue these relationships.

A special mention and thanks goes to Letcher Moroney Chartered Accountants who willingly audited the finances and supplied the Financial Report for the AIR EP AGM. This support is greatly appreciated.

Funding partners 2022-2023



National
Landcare
Program



Research partners 2022-2023



RiskWi\$e

– the National Risk Management Initiative

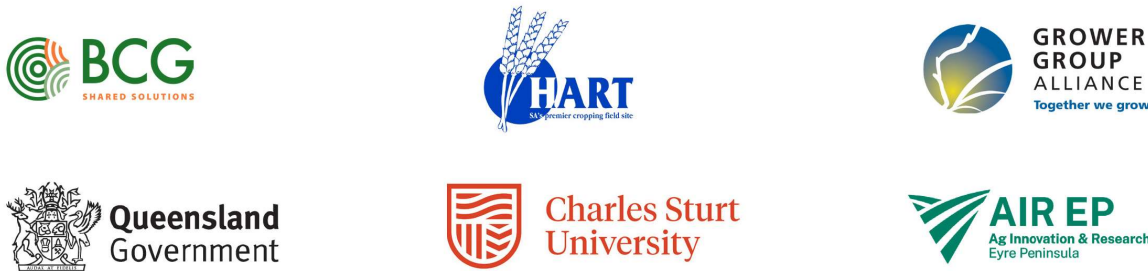
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