Department of
Primary Industries and
Regional Development

GOVERNMENT OF
WESTERN AUSTRALIA

Protect
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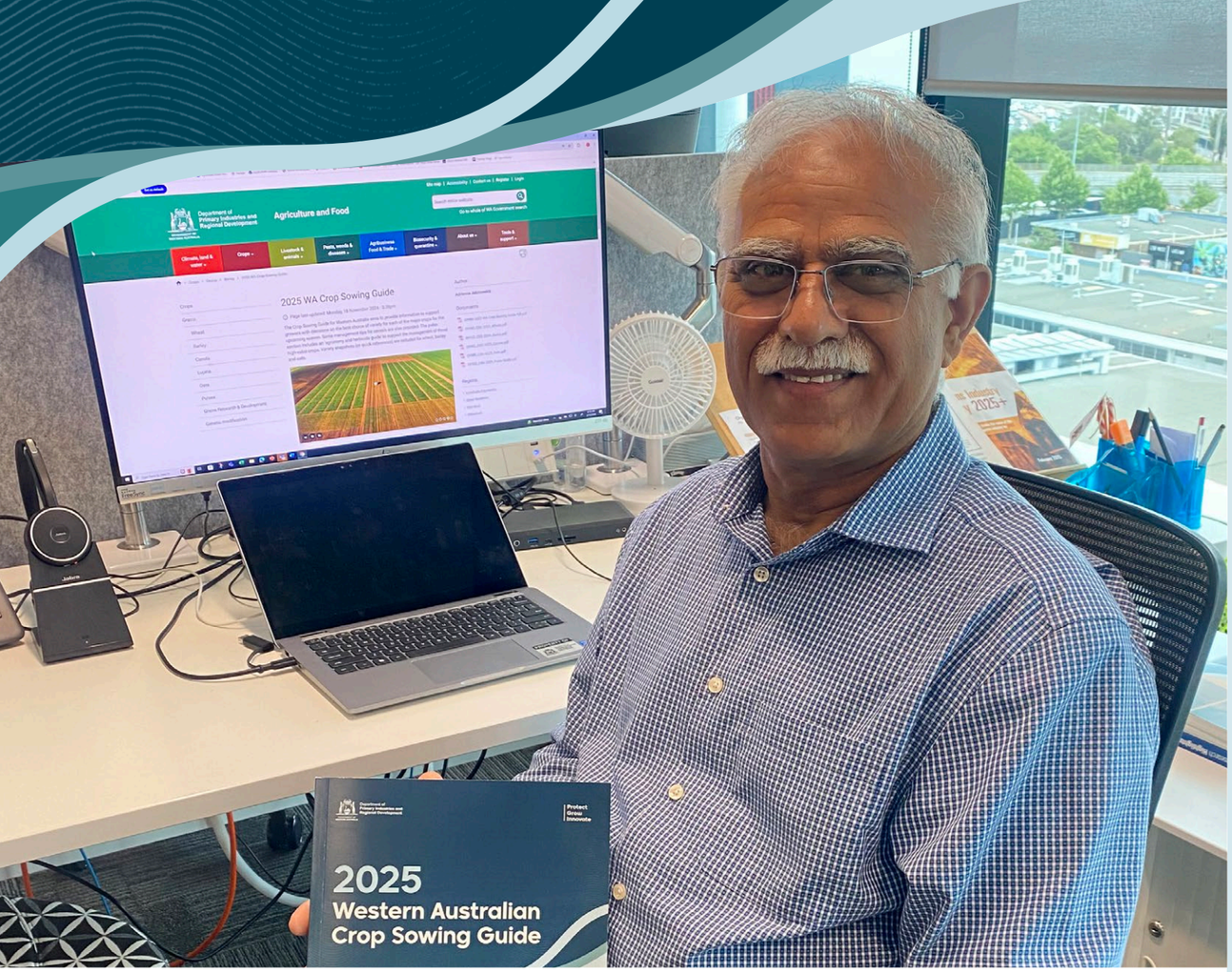
DPIRD Grains R&D
Stakeholder Update

January 2025 Edition



From Acting Director of Grains
Darshan Sharma

Introduction

Hello, research and industry colleagues.

It is with great pleasure that we present the latest edition of the Grains R&D Stakeholder Update, highlighting what has been an extraordinary year for Western Australia's grains industry as we step into 2025.

Our growers have achieved an incredible milestone, delivering a crop of nearly 20 million tonnes in 2024. This marks the third-largest grain crop on record for WA, an exceptional result considering the challenging start to the season and below-average rainfall for much of the state, apart from the northern agricultural zones. This success reflects not only the resilience and ingenuity of WA's growers but also the critical role that collaboration and innovation play in overcoming adversity.

I would also like to take a moment to recognise Kerry Regan, who led the Grains Directorate with excellence for more than 7 years and served the department for decades. Kerry's leadership left an enduring legacy, and I have the privilege of stepping into her very big shoes, carrying forward the great work she championed. Her dedication to the grains industry has set a benchmark that inspires all of us at DPIRD.

Looking back at 2024, DPIRD celebrated several prestigious achievements at the Australian Agronomy Conference, where our team's exceptional contributions were recognised. Kerry Regan was awarded the inaugural Neil Fettell Award for her outstanding leadership and dedication to agronomy. Dr Brenton Leske received the Young Agronomist Award for his pioneering work in frost research, and Mark Seymour was recognised as a Fellow of the Australian Society of Agronomy for his significant contributions to pulse and oilseed research. These accolades are a testament to the talent, commitment, and innovation that define DPIRD's grains team.

As we begin 2025, I want to extend my gratitude to our industry partners, growers, and DPIRD staff. Your collaboration, dedication, and hard work made 2024 a truly exceptional year. Together, we are continuing to build a stronger, more sustainable future for WA's grains industry.

Warm regards,

Darshan Sharma
Acting Director of Grains
Department of Primary Industries and Regional Development (DPIRD)

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Dr Darshan Sharma and Roopali Bhoite, Genetic Improvement

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Cover: DPIRD Research Scientist and PhD candidate Amber Balfour-Cunningham pictured at a cage trial, part of research into budworm damage in wheat. Photo by Christiaan Valentine.

Acknowledgment of Country

The Department of Primary Industries and Regional Development (DPIRD) acknowledges the Traditional Custodians of Country, the Aboriginal people of the many lands that we work on and their language groups throughout Western Australia (WA) and recognise their continuing connection to the land and waters. We respect their continuing culture and the contribution they make to the life of our regions, and we pay our respects to their Elders past, present and emerging.

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2024 milestones in research, innovation and industry impact

DPIRD has had a remarkable year, driving innovation through its four dynamic Grains R&D portfolios. Here are some of the standout achievements in 2024:

Active experiments and projects	
Over 220 grains research experiments and 78 active projects in progress, delivering transformative solutions tailored to the needs of WA grain growers.	
New and completed projects	
New research projects	Initiated 19 projects.
Completed projects	Successfully completed 18 projects delivering actionable results.
Research outputs	
Scientific papers	36 peer-reviewed papers on soil science, crop nutrition, genetics, and pest management.
Conference papers	43 conference papers presented to national and international audiences.
Publications	116 online and print publications translating science into actionable knowledge for growers.
Newsletters	40 newsletters, including Grains Convo, PestFacts WA, and Protecting WA Crops.
Webinars, podcasts, and media engagements	44 hosted webinars, podcasts, and media interviews for outreach to growers and consultants.
Extension and engagement activities	
Industry meetings	Participated in 31 meetings to share insights and collaborate on solutions.
Presentations	Delivered 134 presentations at field days and extension events.
Paving the way for future grains expertise	
Developing future experts	Two PhD candidates, Amber Balfour-Cunningham and Miranda Slaven, commenced their research journeys, while Tom Edwards successfully completed his PhD, contributing valuable insights and expertise to the grains industry.

WA's agricultural sector leads the nation in productivity gains

Western Australia's (WA) agricultural sector has recorded significant productivity growth over the past two decades, outpacing other states and solidifying its role as a key driver of economic progress.

According to a new report 'Public investment in R&D leads to impressive gains in productivity of broadacre agricultural industries of WA: A review of recent evidence' by DPIRD Manager of Industry Economic Analysis, Dr Amir Abadi, "WA's agriculture sector has outperformed interstate peers, with a five-year average productivity growth of 29% from 2013–14 to 2017–18, matched only by New South Wales".

WA Treasury's multifactor productivity (MFP) analysis indicates that, between 2003–04 and 2021–22, productivity in WA's broadacre agriculture increased by 20% to 29%, while discretionary input use fell by 17% to 23% over the same period.

Recent harvest performance in WA reflects this productivity growth, with the 2024 harvest marking another milestone. Preliminary reports indicate that WA's grain industry achieved substantial yields across key crops such as wheat, barley, and canola, totalling an estimated 20 million metric tonnes.

Despite low rainfall, the harvest ranks as WA's third-largest on record, following the two largest harvests in 2021 and 2022, showcasing the benefits of ongoing improvements in farming practices and innovation.

High global demand and near-record canola prices further contributed to a profitable year for the state's grain producers.These results demonstrate the ongoing impact of advanced farming techniques and improved agronomic practices. Key drivers for this include sustained investment in research, development, and extension (RD&E), alongside technological advancements and improved grower expertise in applying innovative agronomic practices.

According to the review, these findings reflect the sector's ability to increase efficiency and output despite challenges such as seasonal variability and climate change.The role of research and development (R&D) in driving this productivity growth has been significant.

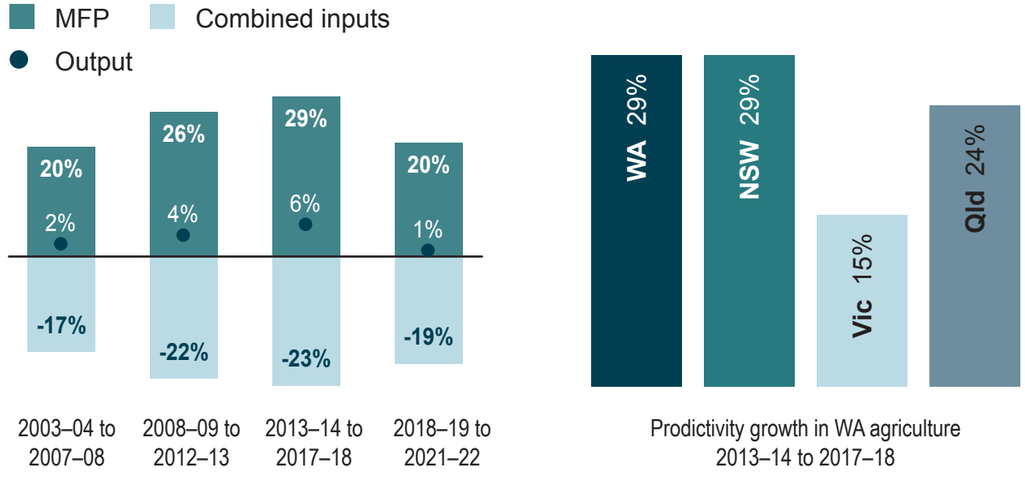


Figure 1: Multifactor productivity (MFP) of agriculture industry in WA adapted from WA Treasury (2024)

Source: Abadi, A. (2024). Public investment in R&D leads to impressive gains in productivity of broadacre agricultural industries of WA: A review of recent evidence. IEA Branch of the Primary Industries Development Pillar, Department of Primary Industries and Regional Development (DPIRD).

Dr Abadi highlighted the importance of industry-relevant and applied R&D conducted in collaboration with universities and CSIRO. "These research initiatives have contributed to practical improvements in agronomic practices, enabling growers to operate more efficiently," the review stated. Climate-adjusted productivity data further underscores WA agriculture's resilience.

Dr Abadi reports that "from the 1990s to the present, there has been close to 70% improvement in climate-adjusted productivity, with a general trend of 2% annual productivity growth." This demonstrates the sector's capacity to adapt to changing environmental conditions while maintaining long-term productivity growth.

The economic returns from public investment in agricultural R&D are also noteworthy. Dr Abadi states that "for every $1 invested in agricultural R&D, there is an almost $8 return for farmers over 10 years."

This highlights the value of ongoing research in delivering economic and practical benefits to producers. WA's broadacre agriculture, particularly in its harvest performance, provides a clear example of how targeted innovation, supported by data-driven research, can enhance productivity and efficiency.

With the 2024 harvest results underscoring sustained productivity growth, WA continues to lead the nation in demonstrating the transformative power of agricultural R&D and innovation.

Top pests and diseases of 2024

This year, the PestFacts WA team, part of DPIRD's Grains Crop Protection portfolio, received over 2,500 insect and plant disease reports (as of 31 October 2024). With contributions from growers, agronomists, and industry professionals, these reports help us better understand and respond to challenges across WA's grainbelt.

Top five reported invertebrates

In 2024, over 1,800 invertebrate reports were submitted, highlighting the most significant pests affecting crops. Native budworm topped the list with 799 reports, including those from our spring trapping program and additional submissions. The top five reported invertebrates are detailed in Table 1 below:

Insect	Number of reports
Native budworm	799
Diamondback moth	312
Green peach aphid	98
Redlegged earth mite	86
Hoverfly	70

It was encouraging to see numerous reports of beneficial insects across the WA grainbelt this growing season.

For more details, refer to: PestFacts WA map

*Native budworm (*Helicoverpa punctigera*)*

Blackleg in canola

Top five reported plant diseases

As of 31 October, the PestFacts WA team logged 694 plant disease reports, reflecting a variety of challenges growers faced this season. Blackleg in canola led the list with 97 reports, followed by Sclerotinia stem rot (64). The top five diseases are outlined in Table 2:

Disease	Number of reports
Blackleg in canola	97
Sclerotinia stem rot in canola	64
Spot-form net blotch in barley	62
Powdery mildew in wheat	62
Yellow spot in wheat	56

2024 PestFacts WA map: Insights and highlights

The PestFacts WA map continues to provide valuable insights into seasonal pest and disease trends. In 2024, an impressive 4,376 maps were generated, allowing users to explore occurrences by host, disorder, and time period.

Maps showing diamondback moth (424 views) and net-form net blotch in barley (72 views) were the most popular. Table 3 highlights the top disorder maps viewed this year:

Disorder	Number of maps viewed
Diamondback moth	424
Net-form net blotch of barley	72
Native budworm	54
Stem rust	54
Smuts and bunts	47

2024 Grains Innovations: Completed projects

In 2024, DPIRD tackled some of the biggest challenges in WA agriculture, delivering projects that boosted farm profitability and sustainability. From smarter soil management to cutting-edge pest and weed control, their work unlocked impressive economic benefits for growers. Dive in to see how these innovations are making a real difference in the grains industry!

Finding alternatives for glyphosate for summer weed control and pre-cropping

Achievement: This project identified effective alternatives to glyphosate for summer weed control and pre-cropping through eight experiments, providing species-specific herbicide recommendations. Most alternatives matched or exceeded glyphosate's efficacy, though no viable options were found for mature heliotrope, highlighting glyphosate's importance for certain weeds.

Economic benefit: The project identified some herbicide treatments that matched or exceeded glyphosate's efficacy at up to 30% lower cost ($14.6/ha), offering cost-effective options for weeds like Afghan melons, button grass, caltrop, sow thistle, and biserrula. These findings support growers in managing glyphosate-resistant weeds while reducing costs and promoting sustainable practices.

Link

DPIRD research scientist Dr Harmohindu Dhammu

Survey of the summer/autumn brassica refuges for diamondback moth in the western region to predict early season risk of infestation

Achievement: This project identified how brassica refuges, agro-ecological zone and rainfall patterns drive diamondback moth (DBM) infestations in canola. It revealed high infestation risks in regions like Geraldton and widespread resistance to most insecticides, guiding better pest management.

Economic benefit: Findings enable targeted DBM management, reducing crop losses and spray costs through predictive tools like moth trapping and risk models. Insights support more efficient, profitable pest control strategies.

Link

Disease surveillance and related diagnostics for the Australian grains industry (Western region)

Achievement: This project implemented a comprehensive disease surveillance and diagnostics program across WA, targeting cereals, oilseeds, and pulses. It generated over 1,300 disease reports, identified emerging threats, and contributed critical data to national programs, enhancing sustainable disease management practices. These reports were shared with growers and agronomists to enhance disease management in WA.

Economic benefit: Enhanced surveillance and early detection enabled growers to mitigate crop losses and effectively manage disease risks, safeguarding yields and profitability. These efforts strengthened the long-term economic resilience of WA's grains industry.

Link

Increased grower profitability on soils with sodicity and transient salinity in the eastern grain belt of the Western Region

Achievement: This project developed and tested novel soil amelioration techniques for sodic soils in the eastern wheatbelt of WA, achieving significant yield increases through micro water harvesting, mineral mulches, and gypsum applications.

Economic benefit: The project demonstrated a potential benefit:cost ratio of 24:1, indicating substantial economic returns. Yield increases of up to 0.59 t/ha were achieved, particularly in water-limited years, supporting the financial viability of these soil management strategies. Further investigation continues following the launch of the Soil Water and Nutrition (SWAN) strategic research collaboration, a 5-year initiative to boost WA grain yields by increasing water use efficiency by more than 10 per cent and improving crop nutrient availability by refining soil profile re-engineering and nutrient management practices.

Link

What is the best fit for electric weed control in Australia?

Achievement: Innovative trials in WA showcased the potential of electric weed control technology, marking significant progress in combating herbicide-resistant weeds. Led by the DPIRD Grains team, in collaboration with AGXTEND and co-investment by GRDC, Wine Australia, and the Cotton Research and Development Corporation, these trials were part of a pioneering project exploring the effectiveness of the AGXTEND XPower machine powered by Zasso™ under Australian conditions. Trials conducted over three years demonstrated the efficacy of electric weed control, particularly against annual ryegrass, kikuyu, wild radish, capeweed, and soursob.

Economic benefit: The technology has proven effective even against herbicide-resistant weed populations, showcasing its potential as an alternative to traditional chemical methods. Exploration into combating herbicide-resistant weeds continues in 2025, with PhD student and DPIRD research scientist, Miranda Slaven, investigating the efficacy and applicability of novel non-chemical weed control techniques for inter-row use in Australian broad-scale farming systems.

Link

Value added lupin exports

Achievement: This project established Sweet Lupin Western Australia (SLWA) to promote Australian Sweet Lupins, creating a website, technical dossiers, and food-grade standards to support industry growth. It fostered collaboration among processors, researchers, and businesses to advance value-adding initiatives.

Economic benefit: The project enhanced awareness, standards, and product development for Australian Sweet Lupins, supporting higher returns and growth in premium domestic and export markets. These advancements aim to benefit farmers, processors, and exporters.

Link

Investigating phenology diversity in germplasm to optimise profitability from April sown oats

Achievement: This project demonstrated that early sowing and improved agronomic practices significantly enhance the yield and quality of milling oats in Western Australia. It provided critical insights into oat phenology and management, identifying opportunities to optimise varieties and farming methods. These findings equip growers with evidence-based strategies to improve crop performance and support future breeding programs.

Economic benefit: The project highlighted that early sowing and refined agronomic techniques can increase oat yields by up to 0.65 t/ha while reducing losses from screenings. These improvements enable growers to meet quality standards, enhance profitability, and strengthen the competitiveness of WA oats in both domestic and global markets. This supports the long-term growth and sustainability of the oat industry.

IPMforGrains, delivered by the National Pest Information Network

Achievement: The IPMforGrains project delivered critical tools and resources to support Australian grain growers in managing invertebrate pests. Key achievements included the development of the PestFacts Reporter apps, publication of 42 PestFacts WA newsletter issues, delivery of industry training courses, and comprehensive pest surveillance. These initiatives enhanced integrated pest management practices and strengthened grower capacity to mitigate pest impacts.

Economic benefit: By reducing pest-related losses and supporting effective pest management strategies, the project contributed to maintaining profitability in grain farming. Tools such as insecticide spray guides, pest reporting apps, and surveillance programs enabled proactive and informed pest control, enhancing the economic resilience of the grains industry.

Link

Increasing farming system profitability and longevity of benefits following soil amelioration

Achievement: This project improved understanding of agronomic practices to maximise and sustain benefits from deep soil amelioration. Key findings include best results for crop establishment, early vigour, wind erosion protection and yield occur when soil is ameliorated wet and crop sown during May. There is significant potential in the Albany zone to close yield gaps with tailored strategies as current adoption of soil amelioration is low.

Economic benefit: Deep soil amelioration increased annual operating profits by an average $100/ha statewide. Break crop rotations, particularly with lupins, boosted profitability by up to $278/ha, supporting long-term financial growth for farms.

Field experiments supporting the project: Enhancing grower profitability on sodic and transiently saline soils in the eastern grainbelt of the Western Region.

Celebrating DPIRD's excellence in grains research

March 2024
Noel Fitzpatrick Medal

Chaiyya Cooper received the prestigious Noel Fitzpatrick Medal at the Young Professional in Agriculture Forum for her honours project on innovative solutions to mitigate frost damage. This award highlights DPIRD's commitment to fostering emerging talent and addressing critical agricultural challenges.

RIGHT: DPIRD Research Scientist Chaiyya Cooper

October 2024
Neil Fettell Award

Kerry Regan was honoured with the inaugural Neil Fettell Award at the Australian Agronomy Conference. This award recognised her exceptional leadership and dedication to advancing agronomy research in WA.

RIGHT: DPIRD Grains Research and Industry Development Director Kerry Regan and DPIRD Primary Industries Development Chief Scientist Dr Ben Biddulph

October 2024
Young Agronomist Award

Dr Brenton Leske won the Young Agronomist Award for his pioneering research into frost resilience, an achievement that reflects DPIRD's innovative approach to tackling climate challenges for WA growers.

RIGHT: DPIRD Research Scientist Dr Brenton Leske and DPIRD Primary Industries Development Chief Scientist Dr Ben Biddulph

October 2024
Fellowship of the Australian Society of Agronomy

Mark Seymour was awarded a Fellowship for his groundbreaking contributions to pulse and oilseed research, reinforcing DPIRD's role in driving excellence and innovation in grains research.

RIGHT: DPIRD Senior Research Scientist Mark Seymour and DPIRD Primary Industries Development Chief Scientist Dr Ben Biddulph

Game-changing $10M investment to revolutionise grain farming in WA's high rainfall zone

A $10 million investment is set to transform grain farming in WA's high rainfall zone (HRZ), delivering significant benefits to growers through enhanced profitability, sustainability, and long-term productivity.

Led by DPIRD in partnership with the Grains Research and Development Corporation (GRDC), the Sustainable Systems for Profit Maximisation in the High Rainfall Zone project promises to tackle key challenges facing this vital agricultural region.

Spanning Albany to Esperance, the HRZ accounts for over half of WA's canola, 40% of oats, and nearly a third of its wheat. However, tight cereal-canola rotations, high disease pressure, and underutilisation of legumes have constrained potential.

This project takes a bold approach to overcome these barriers, introducing innovative crop sequencing strategies that integrate legumes such as lupins, field peas, and faba beans. By improving soil health, reducing input costs, and lowering disease risks, these rotations offer growers immediate and enduring benefits.

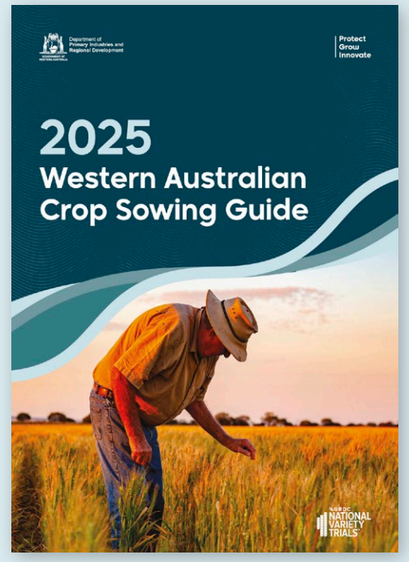
The four-year project will combine large-scale field trials and smaller experiments with advanced modelling to evaluate the economic and environmental impacts of various rotations. Integrated disease management, fertilisation strategies, and stubble management will be key focus areas, alongside an analysis of greenhouse gas emissions to ensure alignment with sustainability goals.

Through collaboration with grower groups like the South East Premium Wheat Growers Association and Stirlings to Coast Farmers, DPIRD is ensuring the outcomes are both practical and impactful. With trials set to commence in 2025, this project underscores DPIRD's leadership in grains research, empowering growers with science-backed strategies to maximise yields, improve profitability, and secure a sustainable future for WA's HRZ farming systems.

The essential resource for a successful 2025 crop season

At DPIRD, we understand that choosing the right crop variety is one of the most important decisions growers make each season. That's why we developed the WA Crop Sowing Guide – a comprehensive resource designed to provide growers with the latest, most reliable information to optimise their crop choices and maximise returns.

This year's guide introduces 20 new crop varieties across wheat, barley, canola, lupins, oats, and pulses, each carefully evaluated for yield potential, grain quality, and disease resistance. By offering clear and practical information, we enable growers to select varieties that align with their production goals, improving profitability and reducing risk.



The pulse section is a standout feature, including an agronomy and herbicide guide as well as detailed yield and profitability data. This section is designed to help growers explore the potential of these high-value crops, offering a pathway to diversification and greater system resilience.

With data drawn from our research trials and National Variety Trials (NVT), we ensure the guide reflects the latest and most reliable information. Variety comparisons for wheat, barley, and oats, combined with management tips, provide growers with a powerful tool for maximising farm productivity.

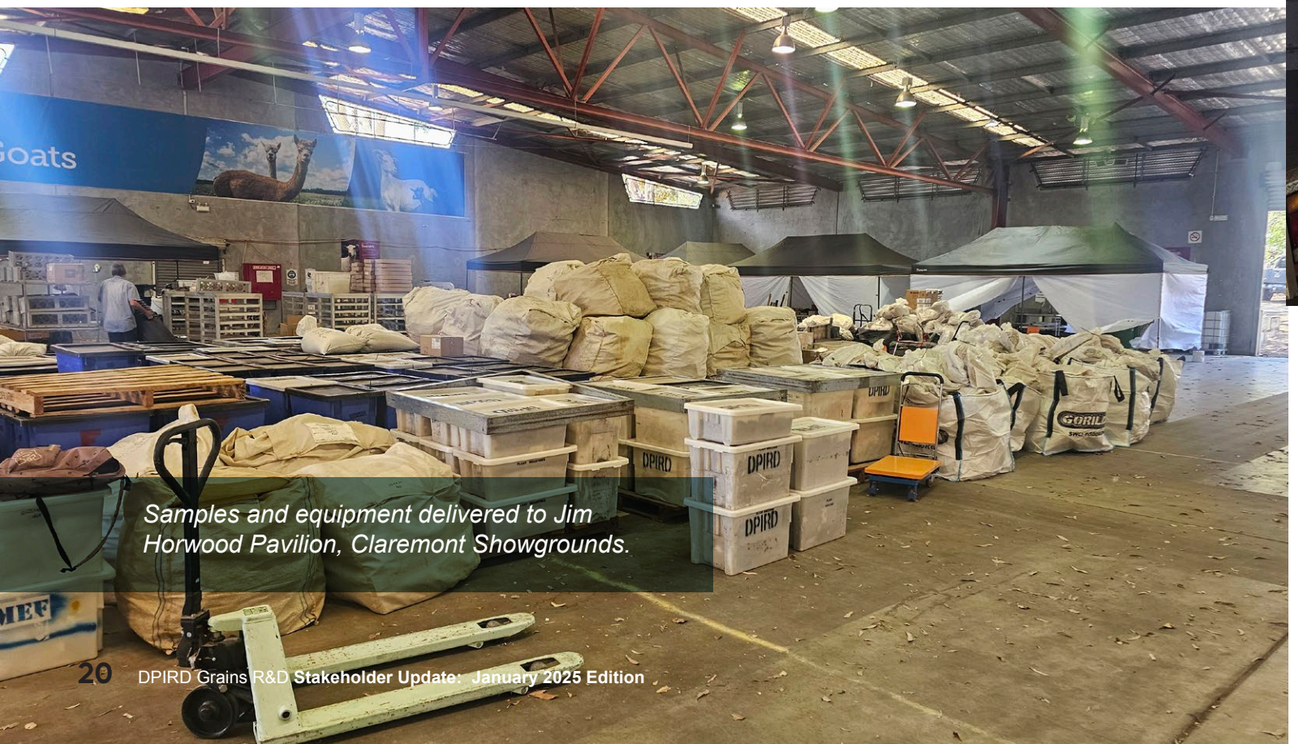
The 2025 WA Crop Sowing Guide is available as a downloadable document or in hardcopy from our DPIRD offices and agribusiness outlets. Through this resource, we aim to give growers the confidence to make informed decisions that lead to sustainable and profitable farming systems.

Download here: **2025 WA Crop Sowing Guide**

DPIRD grains staff rise to the challenge

Last year, the staff of the DPIRD Grains Directorate faced significant challenges following the necessary decision to restrict access to its South Perth Research Facilities on June 14 due to the results of asbestos testing. While the decision was made as a precautionary measure to ensure the safety and well-being of staff and those who use the site, the closure impacted critical research and caused significant disruption for staff.

DPIRD continues to work as quickly as possible to re-establish and maintain business continuity, including through leasing fit-for-purpose external facilities. Staff have been able to access critical equipment at the University of Western Australia (UWA) and Murdoch University (MU) at the SABC. Teams travelled from Perth to Northam and worked at the DPIRD laboratories there and at Merredin.



Samples and equipment delivered to Jim Horwood Pavilion, Claremont Showgrounds.

Locations such as Edith Cowan University (ECU) Joondalup campus and the Jim Horwood Pavilion at Claremont Showgrounds have been additional locations for maintaining operations. In early December staff at the Jim Horwood Pavilion began processing harvest grain samples, supported by the relocation of four truckloads of equipment cleaned and removed from South Perth. This enormous logistical effort showcased the remarkable collaboration, determination, and resilience of DPIRD staff.

The achievements of DPIRD Grains staff last year are a testament to their dedication and resolve. Other areas of the department which have been impacted, such as DPIRD Diagnostics and Laboratory Services, have also worked hard to continue providing the critical services that support WA's primary industries. The challenges faced and lessons learned this year have laid a strong foundation for continued success in 2025 and highlighted the adaptability and perseverance of DPIRD staff.

The first samples to be processed with piles of chickpeas from the frost trials at Dale.

Arrival of reefer container at Jim Horwood Pavilion, Claremont Showgrounds.

Project summaries

To learn more about our priority projects, click on the links in the table below.

Title	Portfolio	Commodity						
		Cereals			Oilseeds	Lupins	Pulses	Other
		Wheat	Barley	Oats	Canola	Lupins	Chickpea/ faba bean/ field pea	
Genetic Improvement (Breeding better crops)								
Increasing wheat yield and yield stability through improved heat tolerance during grain filling	GI	✔						
Increasing stable lupin productivity through enhanced disease resistances	GI					✔		
Fast tracking the delivery of improved chilling tolerance chickpea for Australian growers	GI						✔	
NVT– Disease resistance	GI	✔	✔	✔		✔	✔	
Precision gene editing for targeted trait improvement in grain crops	GI	✔	✔			✔		
Doubled haploid production	GI	✔	✔					
Crop Science and Grain Production (Agronomic advancements)								
Enhancing frost tolerance and/or avoidance in wheat barley and canola crops through in-season agronomic manipulation	CSGP	✔	✔		✔			
Matching Pulse crop designs to site and expected seasonalconditions to maximise yield an profit: a crop ecophyiology approach	CSGP					✔	✔	
Western Australian Farming Systems	CSGP	✔	✔		✔	✔	✔	✔
Reducing risks to canola establishment through an integrated understanding of genetics, management, and environment	CSGP				✔			
Crop sowing guide	CSGP	✔	✔	✔	✔	✔	✔	✔
Overcoming the root phenotyping bottleneck in cereals	CSGP	✔						✔
Soil Science and Crop Nutrition (Improving Soils)								
Predicting Nitrogen Cycling and Losses in Australian Cropping Systems – Augmenting Measurements to Enhance Modelling	SSCN							✔
Re-engineering soils to improve the access of crop root systems to water and nutrients stored in the subsoil	SSCN	✔	✔		✔			✔
Prolonging profitability and longevity following soil amelioration	SSCN							✔
Increased grower profitability on soils with sodicity amd transient salinity in the easter grainbelt of the Western Region (P03)	SSCN							
On-farm soil acidity and nutrient management (Watering WA Clean Waterways)	SSCN							✔
Crop Protection (Protecting crops)								
Effective control of brome grass in the southern and western cropping zones	CP							✔
Epidemiology and management of Rhizoctonia in low and medium rainfall zones	CP	✔	✔					
Furthering grower knowledge and understanding of the scientifically unidentified 'Dongara weevil'	CP				✔			
Investigating systems for the control of Desiantha weevil in relation to resistance and biology in WA	CP				✔			
More effective control of pest snails in Australian grain crops	CP							✔
What is the best fit for Electric Weed Control in Australia?	CP							✔
Effective virus management in grain crops	CP							✔
Disease epidemiology, modelling and delivery of management decision support tools	CP	✔	✔	✔	✔	✔	✔	
National Grains Diagnostic and Surveillance Initiative (NGDSI)	CP							✔

CP – Crop Protection; SSCN – Soil Science and Crop Nutrition; CSGP – Crop Science and Grain Production; GI – Genetic Improvement; FS – Farming Systems

Journal papers 2024

Crop Protection	Adnan, SM, Cattermole H, Saligari K, and Spafford H: Pastoral grasses and legumes as potential host plants for fall armyworm Spodoptera fruigperda (J.E. Smith) development. International Journal of Tropical Insect Science.	
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	Malik R, Scanlan C, van Burgel A, Singh B: Wheat response to foliar-applied phosphorus is determined by soil phosphorus buffering. Agronomy 14: 1630	
	Azam G, Rahman MS: Incorporation of undissolved lime from previous applications can ameliorate subsoil acidity promptly and improve crop performance on sandy soils of the semi-arid regions of Western Australia. Plant and Soil	

DPIRD Grains Crop Protection team

Where to hear about our work

24–25 February 2025

Grains Research Update in Perth

GRDC will host its annual Grains Research Update in Perth on 24–25 February 2025, at Crown Perth. This event will present the latest advancements in research, technology, and market developments aimed at enhancing the productivity and profitability of WA's grains industry. The program will feature numerous speakers from DPIRD, who will share their expertise on various topics relevant to the grains sector.

For more information and registration, please visit:

GRDC Events page

DPIRD Director General Heather Brayford and DPIRD Crop Protection Manager Helen Spafford at the 2024 Grains research Update.

Reach out to the Grains team

Grains Research and Industry Development
Acting Director: Dr Darshan Sharma

Crop Protection
Manager: Dr Helen Spafford

Soil Science and Crop Nutrition
Manager: Chris Gazey

Crop Science and Grain Production
Manager: Dr Bob French

Genetic Improvement
Manager: Dr Yong Han

Industry Development
Manager: Alex Edward

Field Research Operations
Manager: Dr Gavin Sarre