



FAR AUSTRALIA FIELD WALK

INCREASING PRODUCTIVITY & PROFITABILITY

Wednesday 15th October 2025



FAR Australia Bordertown Crop
Technology Centre 2025

SOWING THE SEED FOR A BRIGHTER FUTURE

Thanks to our host farmers: The Langley family



This publication is intended to provide accurate and adequate information relating to the subject matters contained in it and is based on current information at the time of publication. Information contained in this publication is general in nature and not intended as a substitute for specific professional advice on any matter and should not be relied upon for that purpose. No endorsement of named products is intended nor is any criticism of other alternative, but unnamed products. It has been prepared and made available to all persons and entities strictly on the basis that FAR Australia, its researchers and authors are fully excluded from any liability for damages arising out of any reliance in part or in full upon any of the information for any purpose.

VISITOR INFORMATION

We trust that you will enjoy your day with us at our Bordertown Crop Technology Centre Field Day. Your health and safety are paramount, therefore whilst on the property we ask that you both read and follow this information notice.

HEALTH & SAFETY

- All visitors are requested to follow instructions from FAR Australia staff at all times.
- All visitors to the site are requested to stay within the public areas and not to cross into any roped off areas.
- All visitors are requested to report any hazards noted directly to a member of FAR Australia staff.

FARM BIOSECURITY

- Please be considerate of farm biosecurity. Please do not walk into farm crops without permission. Please consider whether footwear and/or clothing have previously been worn in crops suffering from soil borne or foliar diseases.

FIRST AID

- We have a number of First Aiders on site. Should you require any assistance, please ask a member of FAR Australia staff.

LITTER

- Litter bins are located around the site for your use; we ask that you dispose of all litter considerately.

VEHICLES

- Vehicles will not be permitted outside of the designated car parking areas. Please ensure that your vehicle is parked within the designated area(s).

SMOKING

- There is No Smoking permitted inside any farm shed, marquee or gazebo.

Thank you for your cooperation, enjoy your day.

INCREASING PRODUCTIVITY AND PROFITABILITY IN SOUTH AUSTRALIA

FEATURING FAR Australia INDUSTRY INNOVATIONS and GRDC Levy investments

On behalf of myself and the FAR Australia team, I am delighted to welcome you to our 2025 Bordertown Crop Technology Centre Field Walk featuring Industry Innovations.

Industry Innovations (II) is a FAR Australia initiative which continues to engage with industry to provide innovative research solutions which are helping to create a more productive, profitable and sustainable future for the Australian grains industry. With our Crop Technology Centres (CTCs) operating nationally across the growing regions of Australia, we provide the perfect platform to showcase new industry innovations, whether it be new crops, cultivars, agrichemicals, fertilisers or Ag technologies. More information on our Industry Innovations initiatives is available in the booklet.

Today will provide you with a unique 'seeing is believing' opportunity to experience the latest innovations in cereal germplasm, agronomy, and agrichemical usage. You will witness first-hand the impact of innovative treatments and techniques on enhancing crop performance and profitability.

Event Highlights:

- Topics for all agroecological regions from the High Rainfall Zone (HRZ) to the Medium Rainfall Zone (MRZ)
- Profitable Yield Frontiers in the MRZ and LRZ regions of the southern region.
- Expert Presentations: Hear from industry leaders, who will share insights into the latest research and trends shaping the Australian grains industry.
- Interactive Discussions: Engage in group discussions on crucial topics regarding crop agronomy and profitability.

Putting together a quality Crop Technology Centre takes a fair amount of planning so a very big thanks to our host farmers the Langley Family. A big thank you to Ted and the team for their tremendous practical support given to the FAR Australia team.

Finally, I would like to thank the GRDC and the wider industry for investing in our research programme this season.

Should you require any assistance today, please don't hesitate to contact a FAR Australia staff member. We hope you find the day informative, and as a result, take away something new which can be implemented in your own farming business.

Nick Poole Managing Director
FAR Australia



Meteorological Data

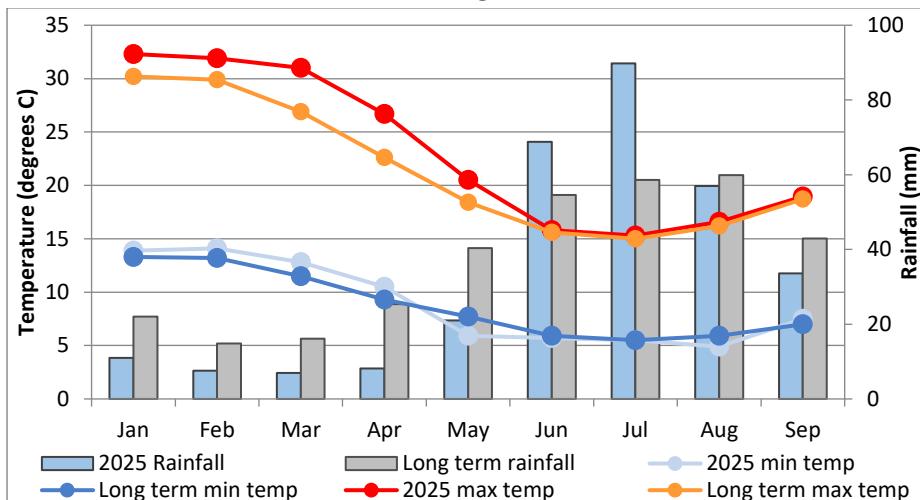


Figure 1. 2025 year to date rainfall and long-term rainfall recorded at Bordertown (Industrial Estate) (2002 -2025) and long-term min and max temperatures recorded at Keith (1906 to 2025). *Rainfall April to September= 278mm.*

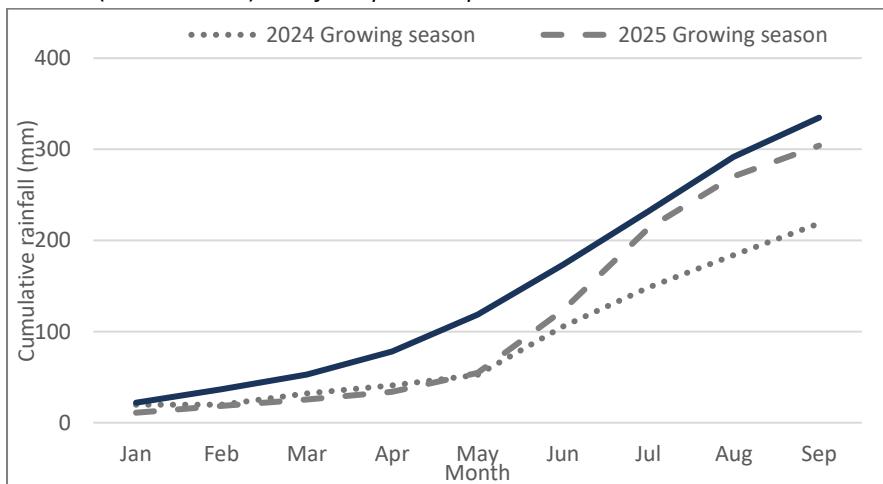


Figure 2. Cumulative year to September rainfall for 2024, 2025 and the long-term average.



Bordertown Site Details 2025
MIR - Aus Soil Texture: Clay loam
Rotation Position: Following Canola
Sampling date: 13th May



Analyte	Units	Result	Result	Result	Result	Result
Sample Depth		0-10	10-20	20-40	40-60	60-100
pH 1:5 water	pH units	7.54	8.21	8.81	9.35	9.72
pH CaCl ₂ (following 4A1)	pH units	7.09	7.63	8	8.37	8.72
Organic Carbon (W&B)	% (40°C)	2.11				
Nitrate - N (2M KCl)	mg/kg	31	12	5.6	3.8	2.3
Ammonium - N (2M KCl)	mg/kg	2.5	1	1.1	1.1	<1.0
Coilwell Phosphorus	mg/kg	33				
PBI + Col P		79				
KCl Sulfur (S)	mg/kg	43	23	12	23	59
Calcium (Ca) - AmmAc	mg/kg	4500	4770	5250	4400	3600
Magnesium (Mg) - AmmAc	mg/kg	486	558	937	1480	1610
Potassium (K) - AmmAc	mg/kg	775	411	268	318	392
Sodium (Na) - AmmAc	mg/kg	124	169	440	1180	2030
Calcium (Ca) - AmmAc	cmol/kg	22.4	23.8	26.2	21.9	18
Magnesium (Mg) - AmmAc	cmol/kg	4	4.59	7.71	12.2	13.2
Potassium (K) - AmmAc	cmol/kg	1.98	1.05	0.686	0.812	1
Sodium (Na) - AmmAc	cmol/kg	0.541	0.734	1.92	5.13	8.81
ECR	%	8.7	5.9	7.1	15	24
ECEC	cmol/kg	29	30.2	36.5	40.1	41
Chloride	mg/kg					
Boron	mg/kg	2.3	2.4	3.1	130	320
Iron (Fe)	mg/kg	15				
Manganese (Mn)	mg/kg	4.4				
Copper (Cu)	mg/kg	0.35				
Zinc (Zn)	mg/kg	1.8				



Bordertown Site Details 2025

MIR - Aus Soil Texture: Clay loam

Rotation Position: Following Canola

Sampling date: 13th May

Sampling Depth	Total Available N
0-10cm	43.6 kg N/ha
10-20cm	16.9 kg N/ha
20-40cm	17.4 kg N/ha
40-60cm	12.7 kg N/ha
60-100cm	17.1 kg N/ha
Total	107.7 kg N/ha

Closing the yield gap - reflection on FAR Australia research results from east v west.

Nick Poole & FAR Australia team

Background

The following results are taken from observations in FAR's own Germplasm Evaluation Network (GEN) trials comparing the profitability of controlling disease with foliar fungicides in eastern states versus WA. Why is this important? Compared to 20 years ago we have some of the most advanced fungicide technology available to us here in Australia. However, over those 20 years we have moved from under use of fungicide to overuse of fungicides particularly in L-MRZ regions of Australia. The following research data starts to identify where we don't see profitable returns from fungicides.

Key Points

- *The current presence of stripe rust *Puccinia striiformis* and *Septoria tritici* blotch (STB) *Zymoseptoria tritici* in eastern states milling wheat crops results in significantly higher returns from fungicide application in the Eastern states crops compared to WA.*
- *The maximum yield response in Scepter to a three-spray fungicide programme incorporating SDHI fungicide over three years at our high yielding research site at Wallendbeen has been 5.72t/ha 2022, 1.85t/ha 2023 and 3.28 t/ha 2024.*
- *In contrast in the WA HRZ of Esperance the following response were seen in Scepter in 0.11t/ha in 2021, 0.17t/ha in 2022 and no response in 2024 (no site in 2023).*
- *In lower yielding scenarios in the eastern states at 3-5t/ha one disease is driving response more than any other in wheat, **it is stripe rust**.*
- *As 2023 indicated you can have very high levels of STB inoculum at GS31, but it does not mean that the disease will rob you of yield. Yield reduction is associated with wet conditions during stem elongation when the main yield contributing leaves emerge, the so-called money leaves.*

Results

Foliar fungicide application in **wheat** in the eastern states is a major driver of closing the yield gap, even in drier years such as 2023 and 2024. In the relatively high yielding NSW research site at Wallendbeen, it was cereal rusts that were driving the yield responses, with stripe rust the key disease in all varieties except Triple 2 that lost yield potential as a result of leaf rust (Figure 1). However, in FAR Australia research results in the WA HRZ it has been difficult to demonstrate the same effect on yield and profit.

Closing the yield gap - reflection on FAR Australia research results from east v west.

Nick Poole & FAR Australia team

The following 2024 graphs illustrate this difference with reference to FAR Australia's Germplasm Evaluation Network (GEN) trials where cereal varieties are tested with and without a comprehensive fungicide programme.

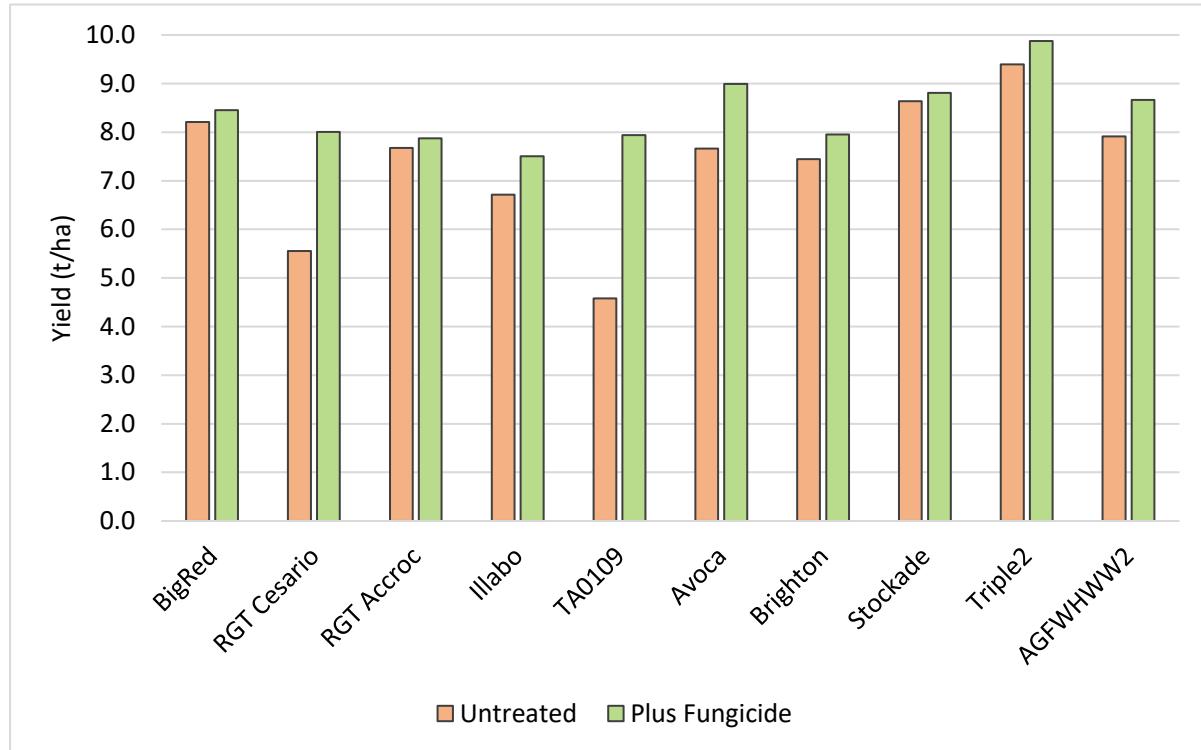


Figure 1. Variety yield response to fungicide application – **Wallendbeen CTC, NSW 2024** sown 17 April 2024. GSR (Apr-Nov) 390.8mm

When yield potential is high it is easy to make the case for fungicide applications in susceptible varieties. However, we can use data such as this over a number of years to explore the yield gap due to disease in different regions and use the data to pick reliable high yielding options that don't depend on the level of fungicide.

The ability of stripe rust to rob yield however is not limited to high yielding scenarios but also scenarios where rainfall deciles are well below the norm. This was observed in southern Victoria in 2024 when growing season rainfall was restricted to 255mm and yields from May sown wheats was pegged at 3-5t/ha (Figure 2).

In contrast in the same season with roughly similar and yields the following results were obtained in the Esperance port zone in the WA HRZ (Figure 3).

Closing the yield gap - reflection on FAR Australia research results from east v west.

Nick Poole & FAR Australia team

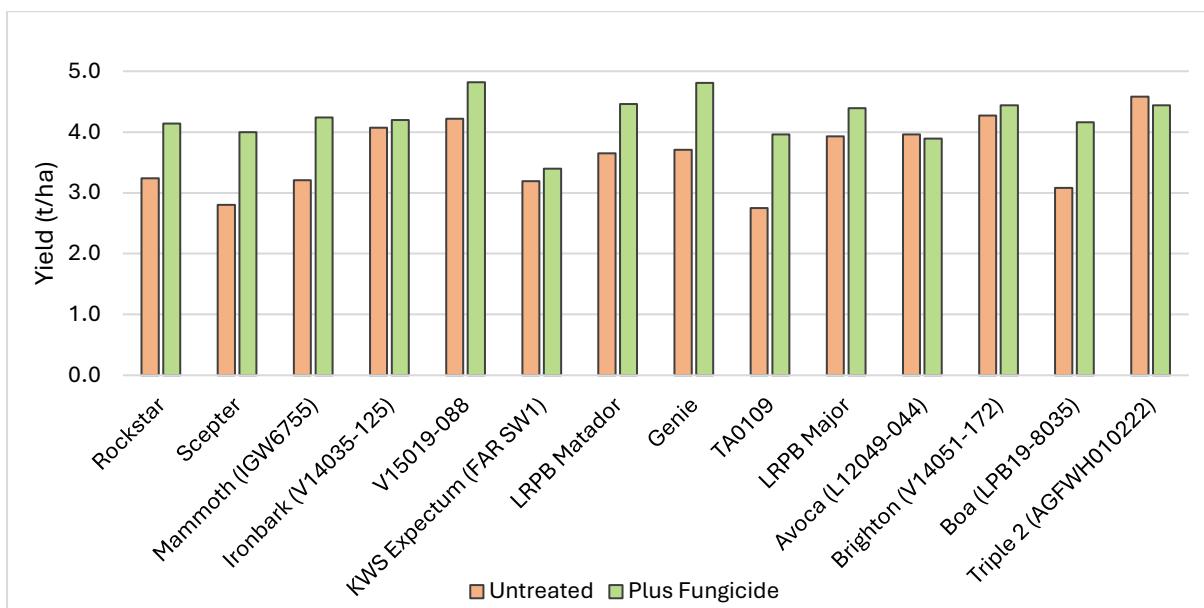


Figure 2. Influence of variety and fungicide application (based on three foliar sprays) on grain yield (t/ha) at **Gnarwarre, Victoria CTC** – sown 20 May 2024. GSR (Apr-Nov) 255mm.

Key point: The fungicide response of varieties averaged between minus 0.07t/ha – 1.2t/ha. Genie gave over a tonne response to fungicide compared to 0.08t/ha in Esperance, WA 0.28t/ha in Scaddan, WA and minus 0.31t/ha in Frankland River, WA. In Scepter the yields of fungicide treated crops were 1.2t/ha greater than untreated at Gnarwarre.

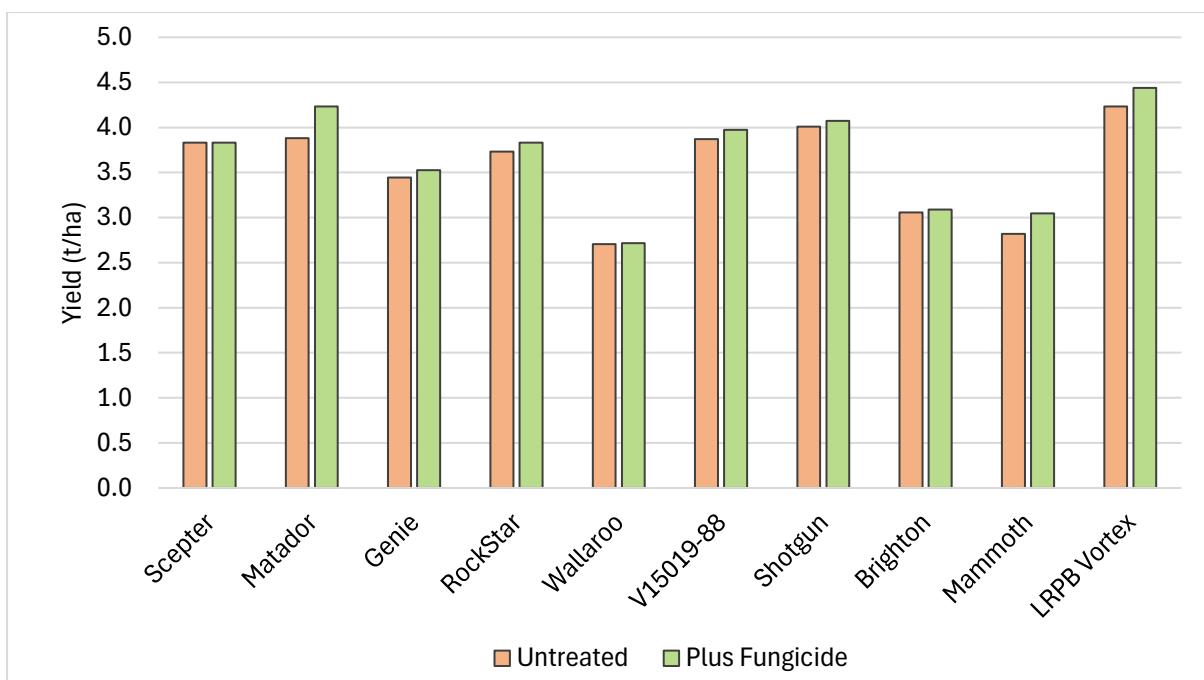


Figure 3. Influence of variety and fungicide application (based on two foliar sprays) on grain yield (t/ha) at **Gibson, Esperance CTC** – sown 10 May 2024 (t/ha). GSR (Apr-Oct) 279mm.

Closing the yield gap - reflection on FAR Australia research results from east v west.

Nick Poole & FAR Australia team

Key point: *The only significant yield results were amongst varieties in Esperance. There was no significant response to fungicide application. In Scepter the yields of treated and untreated were identical.*

So why the difference and was it just 2024?

The difference is simply the absence of two diseases in the west that are regularly robbing yield in the eastern states, stripe rust *Puccinia striiformis* and to a lesser extent Septoria tritici blotch (STB) *Zymoseptoria tritici*. Much of the milling wheat germplasm (e.g. Scepter) grown in the eastern states is susceptible to these two diseases. This difference between east and west appears not to be “a one off”, since been recorded in trials at FAR Australia in previous years. The only caveat is that WA trials have not been exposed to Wheat Powdery Mildew (WPM). However, in 2025 the later sown GEN trial in Esperance has high levels of WPM in susceptible varieties. This will be an important piece of new data for the GEN research programme.

GERMPLASM evaluation network

your trusted research partner for germplasm evaluation



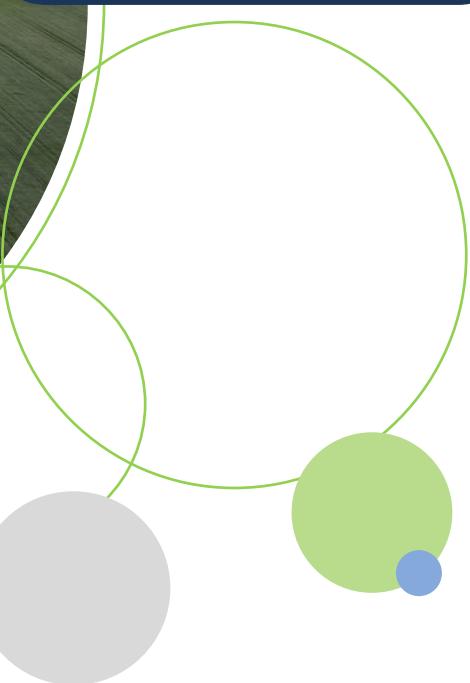
CALLING ALL BREEDERS!
Would you like to expose your
latest germplasm in GEN 2026?



**Developing higher
yielding crops
through germplasm
advances**

Expanded Programme for 2025!
*Now including milling oats plus and minus
fungicide*

SOWING THE SEED FOR A BRIGHTER FUTURE



An Industry Innovations (II) 2025 initiative



**Industry
Innovations**

leading the way to a brighter grains industry

GERMPLASM EVALUATION NETWORK (GEN) - BACKGROUND



Hagley, TAS

FAR Australia has been working with breeders to bring new products to the Australian Grains industry since its inception in 2012. It is a trusted development partner for many breeders, assisting with bringing in new germplasm to the marketplace, whilst ensuring the correct management to fulfil the genetic yield potential.

Industry Collaborations

FAR Australia is once again partnering with industry to independently showcase ***germplasm*** performance in a series of high productivity ***evaluation*** trials across the country as part of its Industry Innovations (II) initiative.

To develop independent research results on profitable germplasm developments in wheat, barley, milling oats and canola, using specific research strategies designed by FAR Australia for the High and Medium Rainfall Zones of Australia.

Should you wish to invest into FAR Australia's Germplasm Evaluation Network, please contact Darcy Warren 0455 022 044 darcy.warren@faraustralia.com.au

This independent initiative delivers a coordinated and independent network of high productivity trials in wheat, barley and canola. The trials will be managed 'plus and minus' fungicide with control varieties provided by FAR Australia.



Wallendbeen, NSW



Esperance, WA

Integrated management of Net form net blotch (NFNB) with triple mutant fungicide resistance threats

Darcy Warren¹, Nick Poole¹, Aaron Vague¹, Max Bloomfield¹ & Rajdeep Sandhu¹

¹ Field Applied Research (FAR) Australia

This paper brings together findings from the GRDC funded, QDPI lead project “Program 5 - Integrated management strategies for Net Form Net Blotch in low, medium, and high rainfall zones”, looking specifically at lessons learned in the NFNB Stubble management x fungicide management trial in 2024 and early observations in 2025.

Key point summary

- NFNB severity reached high levels in untreated plots, with late-season infection exceeding 80% in low-input fungicide programs.
- Fungicide management significantly increased yield (mean response +1.21 t/ha) while stubble management alone did not provide a yield benefit.
- High-input fungicide programs delivered the best economic returns (ROI up to \$3.78 per \$1 spent), though disease was not completely controlled.
- Stubble management (burning or cultivation) did not significantly influence disease or yield in this trial, but remains an important tool where barley follows barley.
- The presence of triple fungicide resistance in *P. teres f. teres* in South Australia highlights the need for integrated disease management (IDM), combining fungicides with resistant varieties, crop rotation and paddock hygiene.

Background

Net form net blotch (NFNB), caused by *Pyrenophora teres f. teres*, remains one of the most significant foliar diseases of barley in southern Victoria. Its prevalence has increased alongside widespread cultivation of susceptible barley cultivars. In recent years, resistance and reduced sensitivity to all three major fungicide groups (DMI, Qo1, and SDHI) has been confirmed in Australian NFNB populations. This triple resistance in the pathogen population presents a major challenge to disease control, requiring a shift away from reliance on fungicides alone.

The 2024 NFNB Stubble management trial was established as part of the GRDC funded, QDPI lead project “Program 5 - Integrated management strategies for Net Form Net Blotch in low, medium, and high rainfall zones” to investigate the interaction between fungicide input and stubble management, and to assess their impact on NFNB development, grain yield and economic return.

Trial 3. NFNB Stubble management x fungicide management multi-year trial

- **Location:** Lethbridge, Vic- medium grey clay soil
- **Previous crop:** Wheat (2023)
- **Sown:** 30 May 2024; harvested: 20 December 2024
- **Stubble treatments:** Standing, cultivated (2 May), burnt (2 May)
- **Fungicide strategies:**
 - *Low input:* Systiva (fluxapyroxad) seed treatment only
 - *High input:* Systiva, Opera (GS31), Aviator Xpro (GS39-49) & Opus (GS59)

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Grain yield:

Mean yield across the trial was 7.40 t/ha. The effect of fungicide management was highly significant ($p < 0.001$), increasing yield by an average of 1.21 t/ha. Stubble management had no significant effect on yield ($p = 0.678$).

Economic return:

High-input fungicide strategies produced strong positive margins (ROI up to \$3.78), while low-input programs returned negative margins in all stubble treatments (Table 1).

Disease severity:

NFNB infections were low to moderate early in the season (GS31–39) likely due to a late May sowing however escalated rapidly by the grain fill stage (GS71–75). Untreated/low input plots recorded 80–83% infection compared with 50–59% in high-input plots. Stubble management did not significantly affect disease in the wheat-barley rotation.

Discussion

The results from this trial confirm that fungicides remain effective in reducing NFNB severity and protecting yield, however they also highlight the limitations of a fungicide-dependent approach. Despite four applications across multiple modes of action, NFNB was not fully controlled, with late-season infection still exceeding 50% in high-input treatments. As the presence of triple resistant mutants becomes more widespread in the NFNB pathogen population so the sustainability of such high input programs becomes more questionable.

Stubble management and rotation

Although previous wheat stubble treatments did not influence final disease levels or grain yield in this trial, the preceding wheat crop meant inoculum carryover was relatively low. In continuous barley systems, stubble retention is a major driver of NFNB epidemics. Burning or cultivating barley stubbles remains an important strategy to reduce inoculum pressure, particularly where fungicide efficacy is compromised by resistance and reduced sensitivity. In 2025, trial plots have again been established, overlaying the 2024 trial, and therefore sown into barley stubble. Early season assessments at first node GS31 have shown significant reductions in disease severity in the lower canopy where stubble inoculum has been removed. Although severity levels recorded were relatively low (<10 % leaf area infected (LAI)), these results have been generated in a June sown crop of a MS variety cv Neo CL (more resistant than the 2024 trial) and would realistically be expected to have little to no infection under normal circumstances.

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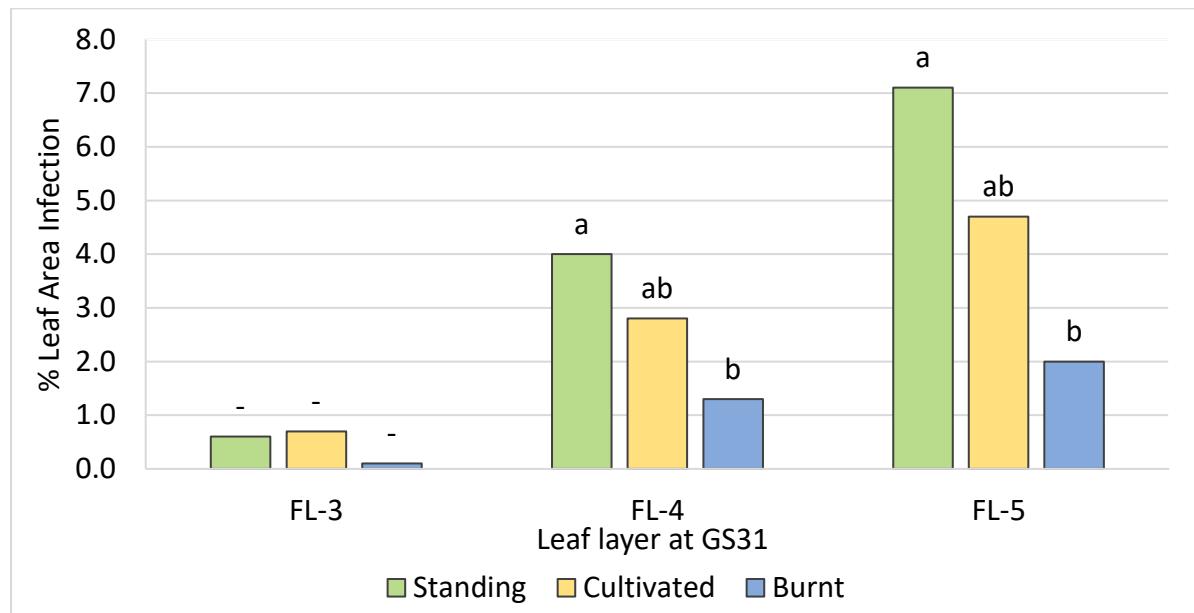


Figure 1. Influence of stubble management on early season Net form net blotch (NFNB) severity (%LAI), assessed 18 August 2025, cv Neo CL.

Resistant varieties

The trial highlights the vulnerability of susceptible varieties under high NFNB pressure. Fungicide input provided yield protection but was unable to deliver complete control. Resistant or moderately resistant cultivars provide the most sustainable protection and should form the foundation of integrated NFNB management. However, shifts in disease spectrum (e.g. increased scald and/or leaf rust) need to be monitored when varietal resistance is utilised.

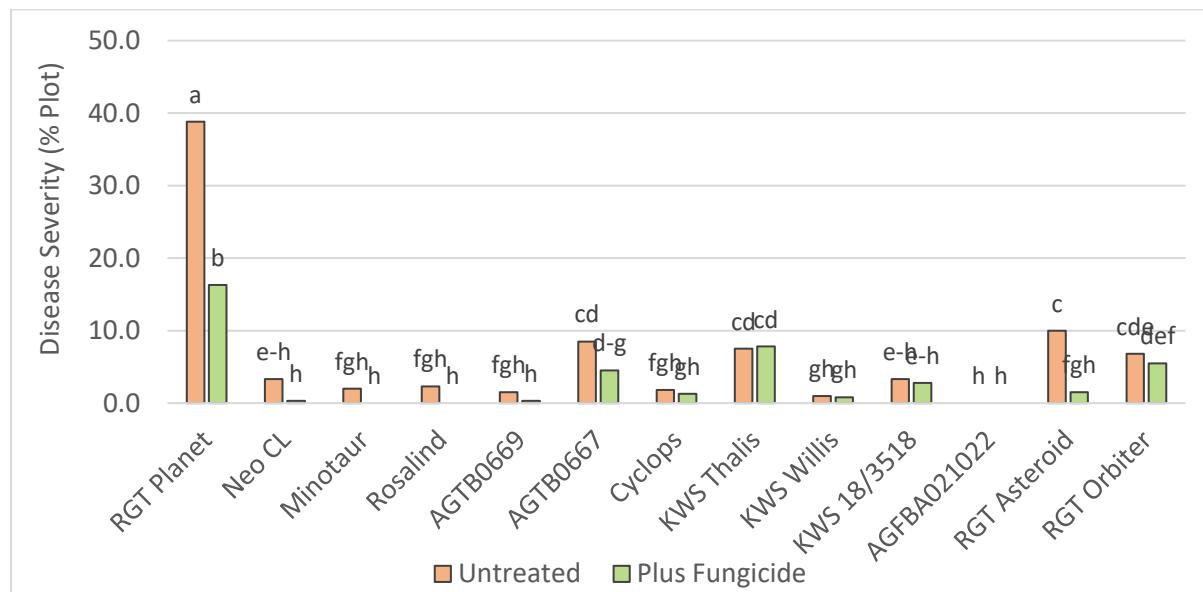


Figure 2. Results from FAR Australia's 2024 Bordertown Barley Germplasm Evaluation Network (GEN) trial showing influence of barley variety and fungicide application on disease severity (% Plot) during early grain fill (GS71-79). These trials provide an insight into newly released barley varieties and promising breeder lines and their potential to provide more disease resistant, high yielding options.

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Fungicide use

The economic data reinforces that low-input fungicide programs are not viable under high NFNB pressure, while high-input programs can still deliver ROI in the short term. However, in the presence of the triple resistant mutations, overuse of fungicides risk accelerating the loss of remaining efficacy. Strategic and targeted fungicide applications and integration of IDM tools is essential.

Table 1. Margin (\$/ha) after fungicide, application and stubble management costs have been deducted from the value of additional yield at \$345/t.

		Response to Fung. and Stubb. Man.	Cost of treatment	Extra income from fung.	Margin after input cost and app.	Return on Investment
Fung.	Stubble Management	t/ha	\$/ha	@\$345/t	\$/ha	\$ back for every extra \$1 spent
Low	Standing	0.00	\$36.00	\$0.00	-\$36.00	
Low	Cultivated	-0.06	\$125.00	-\$20.70	-\$145.70	-\$0.23
Low	Burnt	-0.24	\$46.00	-\$81.77	-\$127.77	-\$8.18
High	Standing	1.16	\$141.85	\$400.20	\$258.35	\$3.78
High	Cultivated	1.05	\$230.85	\$360.53	\$129.68	\$1.85
High	Burnt	1.11	\$151.85	\$383.99	\$232.14	\$3.31

Conclusion

This trial shows that fungicide programs continue to provide yield and economic benefit in susceptible barley varieties, but they cannot provide complete NFNB control. With triple fungicide resistance now present in Victoria and South Australia, integrated disease management strategies are critical. Resistant cultivars, stubble management in barley-on-barley rotations, and diverse cropping sequences should all be combined with strategic fungicide use. These strategies will reduce pathogen inoculum, limit reliance on chemical control, and extend the life of existing fungicide options.

These provisional results are offered by Field Applied Research (FAR) Australia solely to provide information. While all due care has been taken in compiling the information FAR Australia and employees take no responsibility for any person relying on the information and disclaims all liability for any errors or omissions in the publication.

GRDC Profitable Yield Frontiers – Bordertown

Kenton Porker

The GRDC project CSP2404-020RTX – Profitable Yield Frontiers (PYF) aims to refine tactical agronomy decisions in the low to medium rainfall zones of southern Australia to help crops achieve their water-limited yield potential.

The 2025 Bordertown trial asks a key question: *to what extent does early growth and crop setup influence water use and yield during the critical end-of-season window?*

This work recognises that in these environments, most crop expenditure occurs early, yet the return depends on how well those early decisions (density, canopy, and nitrogen strategy) support yield formation later in the season. Modern genetics and management are delivering higher water-use efficiencies (>25 kg grain/ha/mm) and reduced evaporation losses (<60 mm), but the challenge is understanding the cost and timing of achieving this efficiency. Our approach moves from reactive to proactive water-use management, focusing on establishing the canopy for success before the critical developmental period—the two to three weeks before flowering when grain number, and thus yield, are most sensitive to water, temperature, and nutrients. Evidence shows that shortening or stressing this period can sharply reduce yield (Cossani & Sadras 2021), while aligning it with favourable conditions explains over 70% of yield variation in high-yielding systems (Porker et al. 2025). By integrating these physiological insights into practical agronomy, this project seeks to define the management levers that allow crops to capitalise on good seasons while maintaining resilience when rainfall is limited like 2024 and 2025 in many parts of the Low-med Rainfall zone.

2024 Experiment at Bordertown

The trial was established to create different phenology and canopy development patterns with contrasting barley and wheat varieties. *Soil N was relatively high at sowing (0-60cm = 114, 0 -100cm = 144 kg N/ha), likely to contribute a substantial amount of N to the crop, however rainfall was scarce early in the season. The site had high background mineral N at sowing. Additional N was applied in split applications to evaluate timing and rate effects on yield and protein.*

Applied Nitrogen Strategy 2024

N Strategy	Sowing (kg N/ha)	17 Jun	2 Sep	3 Oct	Total Applied N (kg/ha)
Low N	10	10	10	—	30
High N	10	60	40	—	110
High N (Delayed)	10	10	10	80	110

Seasonal context, sowing date and variety performance

Sowing date had little influence on yield or grain quality in 2024 because both early and late sowings emerged around mid-June following the late seasonal break. This meant that sowing opportunity rather than sowing date per se dictated establishment and growth.

GRDC Profitable Yield Frontiers – Bordertown

Kenton Porker

Species / Variety	Earlier Sown (June Emerged)	Later Sown (June Emerged)	Mean Yield (t/ha)	Significance Group*
Winter Barley	5.55	—	5.55	b
Winter Wheat (Mowhawk)	4.46	—	4.46	a
Neo (Barley)	6.07	6.15	6.11	d
Beast (Barley)	—	5.95	5.95	bcd
Cyclops (Barley)	—	6.05	6.05	cd
Shotgun (Wheat)	4.44	4.70	4.57	a
Rockstar (Wheat)	4.35	—	4.35	a

Letters that differ, indicate significance different in yield

2024 Results

- **Barley outperformed wheat**, yielding around **1.5 t/ha more** on the best treatments. This was largely due to better nitrogen uptake and biomass accumulation after the late break, indicating barley's capacity to respond under these conditions at this site
- Among the winter types, **winter barley (5.55 t/ha)** exceeded **winter wheat (4.46 t/ha)**, demonstrating the promise of winter barley (and wheat) systems even with delayed establishment.
- Within spring barleys, **Neo (6.1 t/ha)** was the top performer, followed closely by **Cyclops** and **Beast**.
- In wheat, **Shotgun (4.6 t/ha)** and **Rockstar (4.4 t/ha)** performed similarly, with limited advantage from variety selection.

Nitrogen Responses

N Strategy	Wheat (Shotgun) Yield (t/ha)	Barley (Neo) Yield (t/ha)	Wheat Protein (%)	Barley Protein (%)
Low N	4.62 b	6.08 c	9.2 a	10.0 c
High N	4.73 b	6.09 c	9.6 b	11.8 e
High N (delayed)	4.36 a	6.17 c	9.7 bc	11.1 d

- Nitrogen timing had **limited effect on yield** but influenced **grain protein**, particularly in barley compared to wheat, this requires more investigation and may suggest better utilization under the same seasonal constraints.

GRDC Profitable Yield Frontiers – Bordertown

Kenton Porker

- Delaying top-dressing did not increase yield nor have a significant effect on protein and quality, highlighting the difficulty of delaying N decisions vs early N supply in low to medium rainfall scenario like 2024 where root growth is challenged early

Interpretation

- Species choice (barley vs wheat) remained the most significant driver of yield under a late-break scenario in 2024.
- Variety and nitrogen timing effects were smaller but still relevant for protein management and market specifications.
- Winter types-maintained yield potential despite delayed establishment, suggesting value for risk management in seasons with uncertain breaks.
- Future analysis should investigate whether the yield differences between wheat and barley are primarily physiological (biomass/N accumulation) or phenological (development rate, canopy duration).
- More experiments are being conducted in 2025 to improve the yield of wheat and understand how better to set it up for success.



This independent initiative allows the industry to compare product applications and timings under identical conditions, assessing efficacy, yield response, and profitability. It helps generic manufacturers showcase their products and provides a platform for new actives to demonstrate improvements over existing standards. Resellers and consultants can also test fungicide strategies before recommending them to clients.

Fungicide Fingerprinting, developed by FAR Australia, was launched in 2021 and is the first coordinated and independent fungicide evaluation network in Australia. This initiative aims to generate an independent evaluation of existing and newly developed fungicide strategies to help growers and advisers make better decisions when managing disease. It is:

- independent
- accurate
- consistent in the approach to disease assessment
- within the label stipulations and AFREN compliant control framework

Collaborating Industry Stakeholders

This industry initiative is of benefit to agrichemical manufacturers involved in both new active and generic, fungicide resellers with agronomists in the field, private advisers and regional farming groups.

Purpose

To develop independent results on profitable, productive and sustainable approaches to disease management in wheat and barley using specific strategies devised by fungicide manufacturers, resellers consultants and FAR Australia for commonly occurring fungal pathogens in the HRZ of Australia.

BIOLOGICAL BENCHMARKING- FIRST IN ITS FIELD



This initiative allows biological products to be evaluated under identical field conditions to synthetic standards, accelerating industry understanding and adoption of effective biological solutions.

Biological Benchmarking, developed by FAR Australia, is a brand-new initiative launching in 2025 to independently evaluate biological crop protection and productivity-enhancing products under Australian conditions. As interest in sustainable farming practices grows, so too does the demand for reliable data on the performance of these products. This initiative aims to provide side-by-side comparisons of new biological options against conventional synthetic controls to support confident decision-making by growers and advisers.

It is:

- **independent**
- **scientifically robust and replicated**
- **aligned with real-world agronomic practice**
- **focused on productivity, sustainability, and profitability**
- **With FAR Australia funded control treatments**

Collaborating Industry Stakeholders

This program is designed for biological product developers, distributors, agronomists, private consultants, and farming groups seeking to better understand the performance and positioning of biological products and demonstrate them to the wider industry.

With increased availability and global interest in biological inputs—from microbial inoculants to plant defense stimulants and biopesticides—there is a growing need for rigorous testing. The Biological Benchmarking series will provide that platform, offering clarity and confidence in a rapidly evolving product space.

SCAN THE QR CODE TO LEARN MORE ABOUT US



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