# INDUSTRY INNOVATIONS 2025
# HARVEST RESULTS – May Sown Wheat

## 2025 VIC Crop Technology Centre (HRZ Gnarwarre)

**Sown:** 21 May 2025
**Harvested:** 30 December 2025 (rep 2-4), 2 Jan 2026 (rep 1)
**Soil Type:** Grey clay
**Previous Crop:** 2024 canola, 2023 wheat

**Management:** Speed disced 1 pass (5-8cm depth), incorporated
**FAR Code:** FAR VIC II W25-66-02
**GSR (Apr-Nov):** 371.6mm

*The Germplasm Evaluation Network (GEN) is a FAR Australia 'Industry Innovations' initiative that tests crop variety performance across FAR Australia's national network of Crop Technology Centres. GEN sites test variety performance with and without fungicide. FAR Australia provides the control varieties and breeders enter their chosen lines for evaluation.*

**Key Points:**

- *There was a significant yield interaction ($p<0.001$) between variety and fungicide application, 16Q2H0310 had the greatest response to fungicide with a 1.2 t/ha yield increase, followed by RGT Ponsford and Rockstar. Triple 2 had an insignificant 0.06 t/ha decrease with fungicide.*
- *The highest yielding variety with fungicide was Rockstar and RGT Ponsford equally at 8.32 t/ha, without fungicide treatment the highest yielding was Triple2 with 8.34 t/ha.*
- *The lowest yielding variety without fungicide treatment was 16Q2H0310 (6.35 t/ha), followed by RGT Marsh (tested as H16Q3x0336.SCI-097D) (6.70 t/ha) which was also the lowest yielding variety with fungicide treatment (7.16 t/ha).*
- *Protein % was low, but H2 grade could be achieved for 16Q2H0310, Mowhawk; with fungicide treatment Genie; and without fungicide RGT Marsh.*
- *Disease assessments were only conducted for 2 replicates, therefore statistical references have not been included, but commentary has been provided.*
- *16Q2H0310 had the greatest response to fungicide against Septoria tritici blotch (STB).*
- *Genie had the highest response to fungicide against wheat powdery mildew (WPM).*
- *Scepter had the greatest reduction to stripe rust (Yr) infection with fungicide application.*
- *Leaf rust (Lr) had minimal impact for most varieties,* AGT-Rio (tested as V15019-88) had the greatest response.
- *Test weights increased for all varieties with fungicide application ($p<0.001$) except Beaufort.*
- *Screenings were only significant for variety ($p<0.001$) and not influenced by fungicides.*

## Yield (t/ha) & quality data (% protein, test weight, % screenings)

**Table 1.** Influence of fungicide application on the grain yield (t/ha) of winter and spring wheat (varieties grown plus and minus fungicide).

| | Management Level | | | | | |
|---|---|---|---|---|---|---|
| **Variety** | **Untreated** | | **Plus fungicide** | | **Mean** | |
| | **Yield t/ha** | | **Yield t/ha** | | **Yield t/ha** | |
| **Scepter (s)** | 6.85 | hi | 7.42 | fg | **7.14** | **f** |
| **LRPB Matador (s)** | 7.85 | bcd | 8.30 | a | **8.08** | **abc** |
| **Genie (s)** | 7.46 | efg | 8.06 | abc | **7.76** | **de** |
| **Rockstar (s)** | 7.48 | efg | 8.32 | a | **7.90** | **cd** |
| **Mowhawk (w)** | 7.78 | cde | 8.11 | abc | **7.94** | **bcd** |
| **AGT-Rio (V15019-88) (s)** | 8.14 | ab | 8.24 | a | **8.19** | **ab** |
| **Triple 2 (w)** | 8.34 | a | 8.28 | a | **8.31** | **a** |
| **RGT Ponsford (s)** | 7.44 | efg | 8.32 | a | **7.88** | **cd** |
| **19Q3H0499 (s)** | 7.57 | def | 8.08 | abc | **7.82** | **d** |
| **16Q2H0310 (s)** | 6.35 | j | 7.63 | def | **6.99** | **f** |
| **RGT Marsh (H16Q3x0336.SCI-097D) (s)** | 6.70 | ij | 7.16 | gh | **6.93** | **f** |
| **Beaufort (s)** | 7.44 | efg | 7.65 | def | **7.55** | **e** |
| **Mean** | **7.45** | **b** | **7.96** | **a** | **7.71** | |
| **LSD Variety p = 0.05** | 0.25 | | **P val** | | <0.001 | |
| **LSD Management p = 0.05** | 0.43 | | **P val** | | 0.031 | |
| **LSD Variety x Man. p = 0.05** | 0.36 | | **P val** | | <0.001 | |

**(w) – winter wheat, (s) – spring wheat**

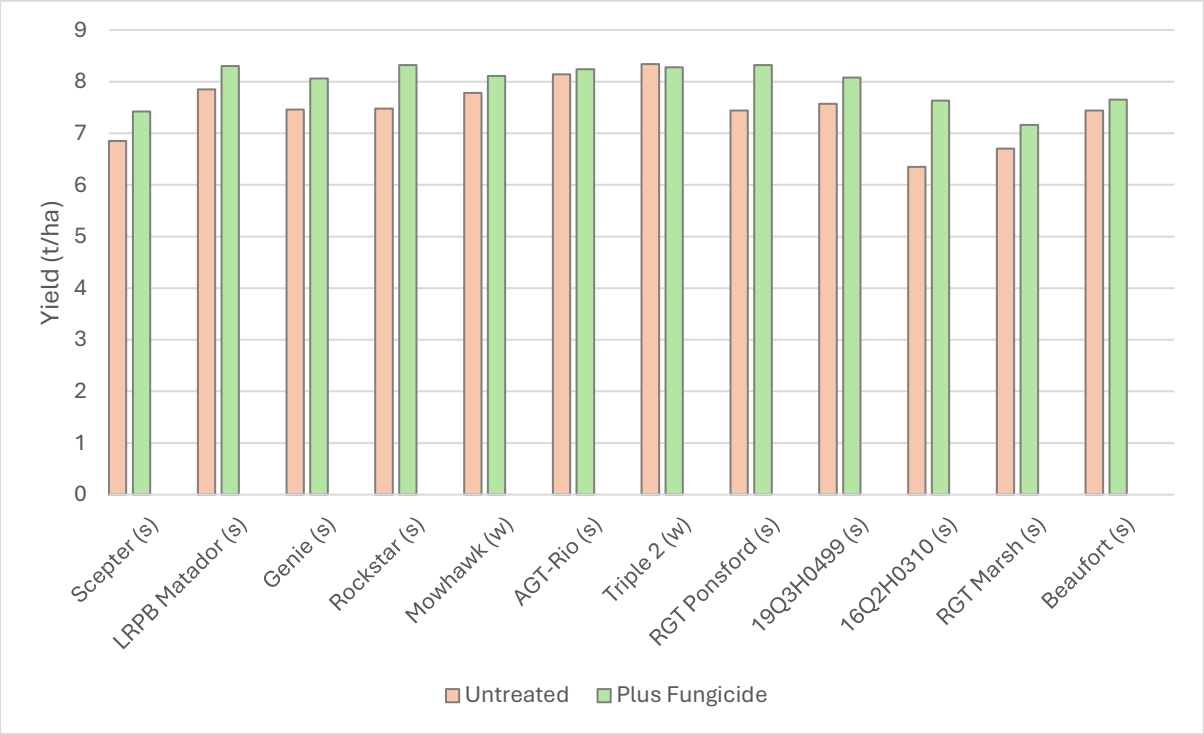


**Figure 1.** Influence of wheat variety and fungicide application on grain yield (t/ha).

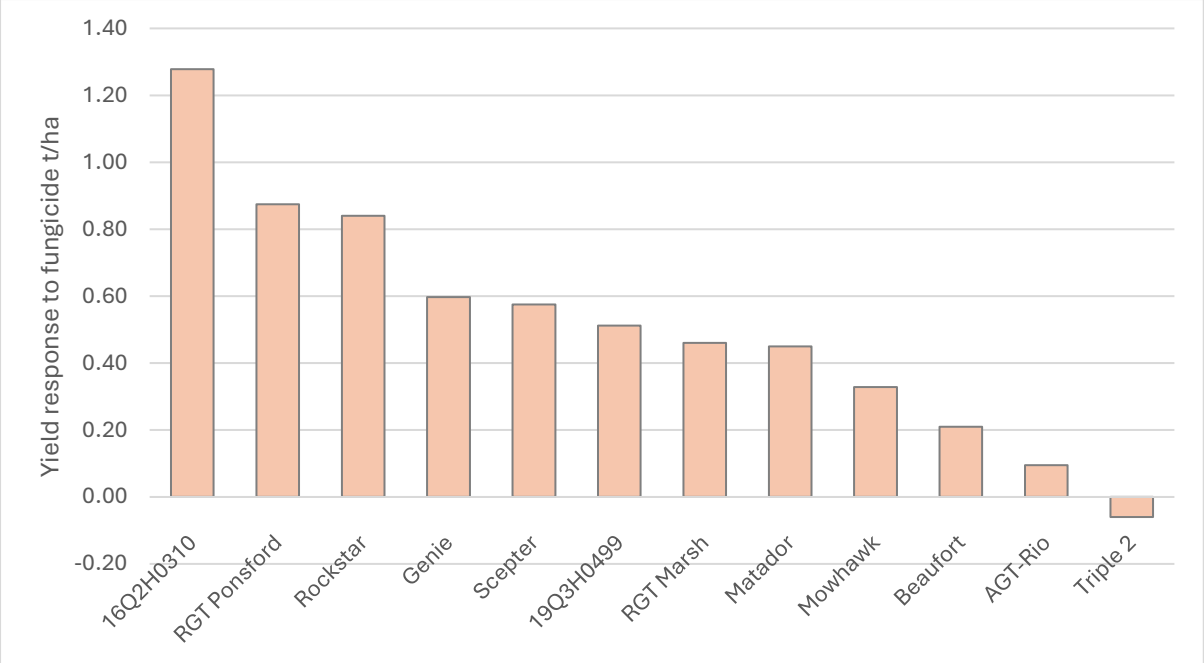


**Figure 2**. Fungicide yield response (t/ha) in winter and spring wheat.

**Table 2.** Influence of fungicide on the protein (%) of wheat varieties plus and minus fungicide.

| Variety | Management Level: Untreated | | Plus fungicide | | Mean | |
|---|---|---|---|---|---|---|
| | Protein % | | Protein % | | Protein % | |
| **Scepter (s)** | 11.4 | fg | 11.3 | gh | **11.3** | **e** |
| **LRPB Matador (s)** | 11.3 | gh | 11.4 | fg | **11.4** | **de** |
| **Genie (s)** | 11.4 | efg | 11.7 | bcd | **11.6** | **c** |
| **Rockstar (s)** | 11.0 | ij | 11.1 | hi | **11.1** | **f** |
| **Mowhawk (w)** | 11.6 | cde | 11.9 | ab | **11.8** | **b** |
| **AGT-Rio (V15019-88) (s)** | 10.9 | jkl | 11.1 | ij | **11.0** | **f** |
| **Triple 2 (w)** | 11.0 | ijk | 11.2 | hi | **11.1** | **f** |
| **RGT Ponsford (s)** | 10.7 | m | 10.8 | klm | **10.7** | **g** |
| **19Q3H0499 (s)** | 10.9 | j-m | 10.7 | lm | **10.8** | **g** |
| **16Q2H0310 (s)** | 11.8 | bc | 11.9 | ab | **11.9** | **ab** |
| **RGT Marsh (H16Q3x0336.SCI-097D) (s)** | 11.6 | def | 11.4 | fg | **11.5** | **cd** |
| **Beaufort (s)** | 11.8 | bcd | 12.1 | a | **11.9** | **a** |
| **Mean** | **11.3** | **-** | **11.4** | **-** | **11.3** | |
| **LSD Variety p = 0.05** | 0.1 | | **P val** | | <0.001 | |
| **LSD Management p = 0.05** | ns | | **P val** | | 0.248 | |
| **LSD Variety x Man. p = 0.05** | 0.2 | | **P val** | | 0.003 | |

**Table 3.** Influence of fungicide on test weight (kg/hL) of wheat varieties plus and minus fungicide.

| Variety | Management Level: Untreated | | Plus fungicide | | Mean | |
|---|---|---|---|---|---|---|
| | Test Weight Kg/hL | | Test Weight Kg/hL | | Test Weight Kg/hL | |
| **Scepter (s)** | 75.1 | i | 77.7 | ef | **76.4** | **g** |
| **LRPB Matador (s)** | 77.9 | def | 79.1 | a-d | **78.5** | **bcd** |
| **Genie (s)** | 78.8 | a-e | 79.8 | a | **79.3** | **ab** |
| **Rockstar (s)** | 75.7 | hi | 78.8 | a-e | **77.2** | **efg** |
| **Mowhawk (w)** | 76.9 | fgh | 77.9 | def | **77.4** | **ef** |
| **AGT-Rio (V15019-88) (s)** | 79.4 | abc | 79.7 | ab | **79.5** | **a** |
| **Triple 2 (w)** | 78.7 | a-e | 79.0 | a-d | **78.8** | **abc** |
| **RGT Ponsford (s)** | 76.0 | ghi | 79.5 | abc | **77.7** | **def** |
| **19Q3H0499 (s)** | 76.3 | ghi | 79.7 | ab | **78.0** | **cde** |
| **16Q2H0310 (s)** | 76.1 | ghi | 78.6 | b-e | **77.3** | **ef** |
| **RGT Marsh (H16Q3x0336.SCI-097D) (s)** | 77.1 | fg | 78.4 | cde | **77.7** | **def** |
| **Beaufort (s)** | 77.0 | fg | 76.8 | fgh | **76.9** | **fg** |
| **Mean** | **77.1** | **b** | **78.7** | **a** | **77.9** | |
| **LSD Variety p = 0.05** | 0.9 | | **P val** | | <0.001 | |
| **LSD Management p = 0.05** | 1.3 | | **P val** | | 0.027 | |
| **LSD Variety x Man. p = 0.05** | 1.2 | | **P val** | | <0.001 | |

**Table 4.** Influence of fungicide on screenings (%) of wheat cultivars plus and minus fungicide.

| Variety | Management Level: Untreated | | Plus fungicide | | Mean | |
|---|---|---|---|---|---|---|
| | Screening % | | Screening % | | Screening % | |
| **Scepter (s)** | 2.9 | - | 2.6 | - | 2.7 | **def** |
| **LRPB Matador (s)** | 3.2 | - | 2.9 | - | 3.1 | **c** |
| **Genie (s)** | 4.1 | - | 4.0 | - | 4.0 | **a** |
| **Rockstar (s)** | 3.2 | - | 3.0 | - | 3.1 | **cd** |
| **Mowhawk (w)** | 2.9 | - | 3.2 | - | 3.0 | **cd** |
| **AGT-Rio (V15019-88) (s)** | 2.5 | - | 2.5 | - | 2.5 | **f** |
| **Triple 2 (w)** | 2.7 | - | 2.5 | - | 2.6 | **ef** |
| **RGT Ponsford (s)** | 3.4 | - | 3.8 | - | 3.6 | **b** |
| **19Q3H0499 (s)** | 2.6 | - | 2.6 | - | 2.6 | **ef** |
| **16Q2H0310 (s)** | 1.9 | - | 2.2 | - | 2.0 | **g** |
| **RGT Marsh (H16Q3x0336.SCI-097D) (s)** | 2.9 | - | 2.7 | - | 2.8 | **c-f** |
| **Beaufort (s)** | 3.0 | - | 2.7 | - | 2.8 | **cde** |
| **Mean** | **2.9** | **-** | **2.9** | **-** | **2.9** | |
| **LSD Variety p = 0.05** | 0.3 | | **P val** | | <0.001 | |
| **LSD Management p = 0.05** | ns | | **P val** | | 0.671 | |
| **LSD Variety x Man. p = 0.05** | ns | | **P val** | | 0.351 | |

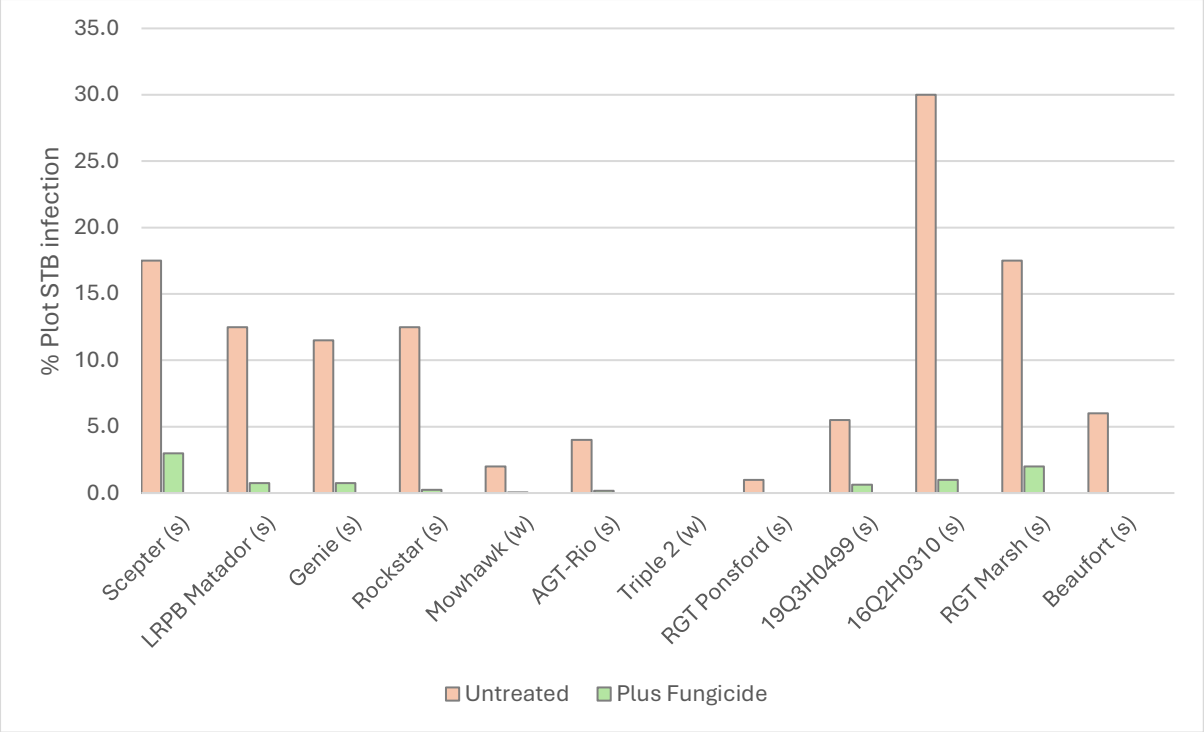


**Figure 3.** Influence of variety and fungicide on plot Infection (%) of Septoria tritici blotch (STB), assessed 29 October 2025.

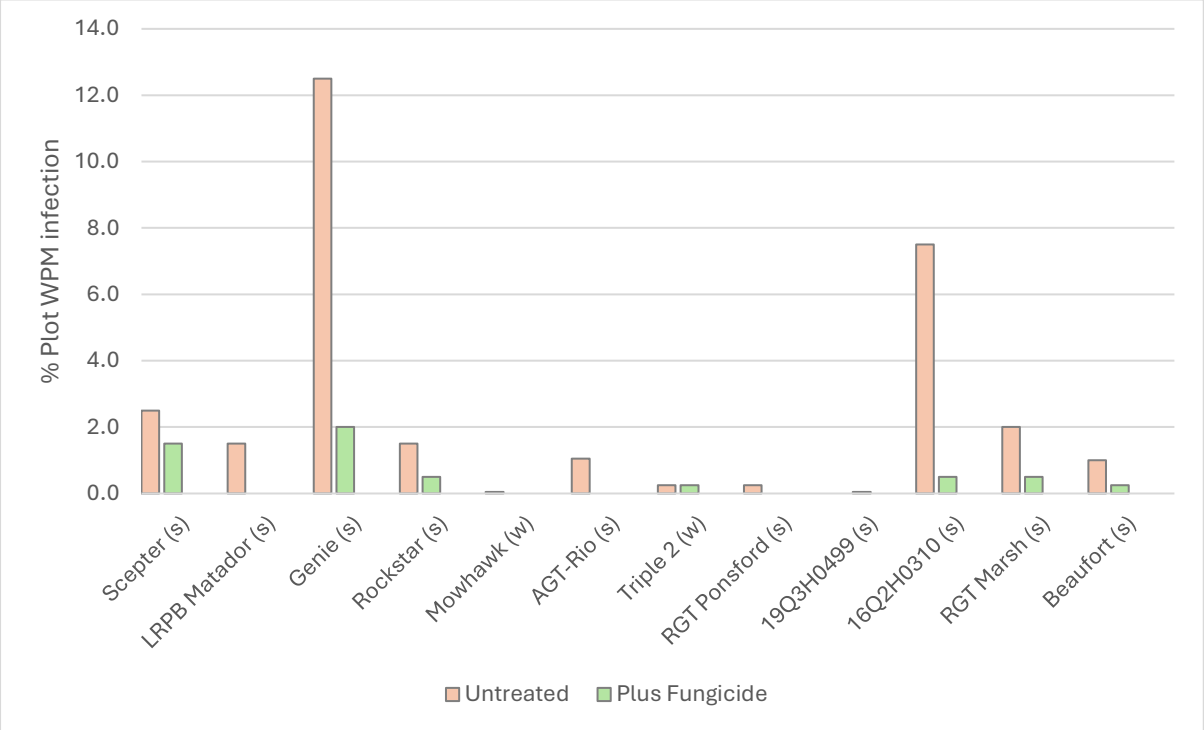


**Figure 4.** Influence of variety and fungicide on plot Infection (%) of wheat powdery mildew (WPM), assessed 29 October 2025.

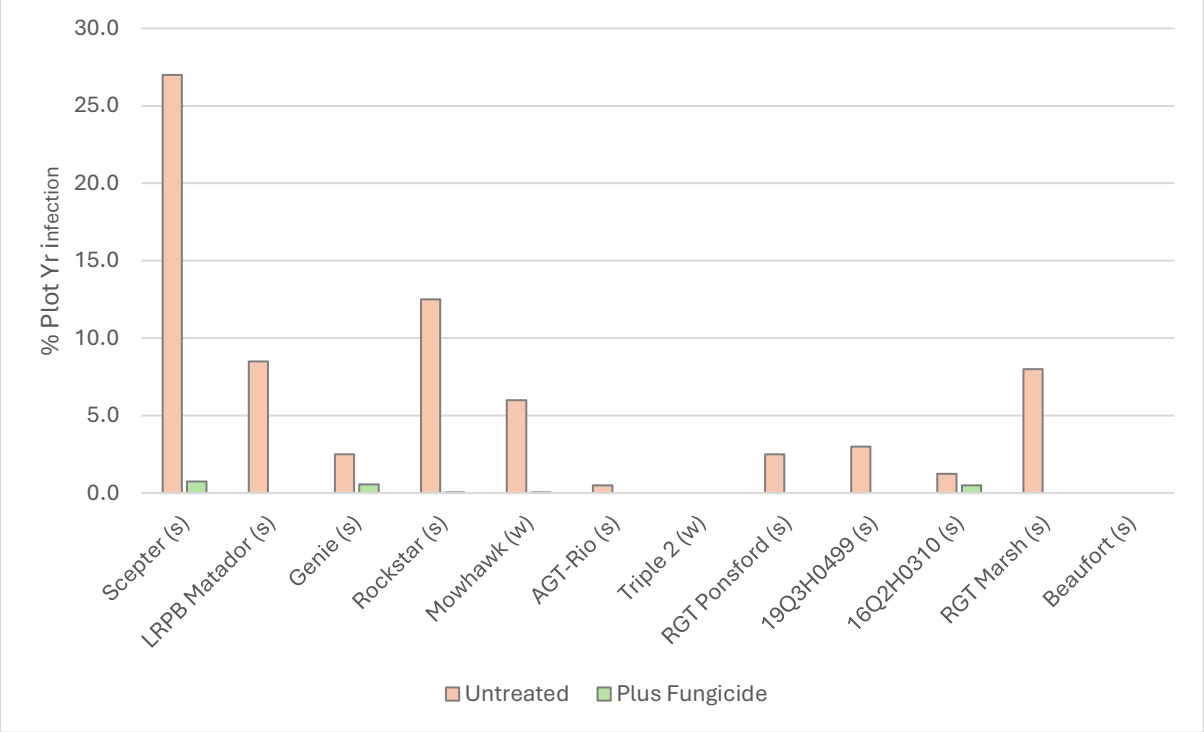


**Figure 5.** Influence of variety and fungicide on plot Infection (%) of stripe rust (Yr), assessed 29 October 2025.

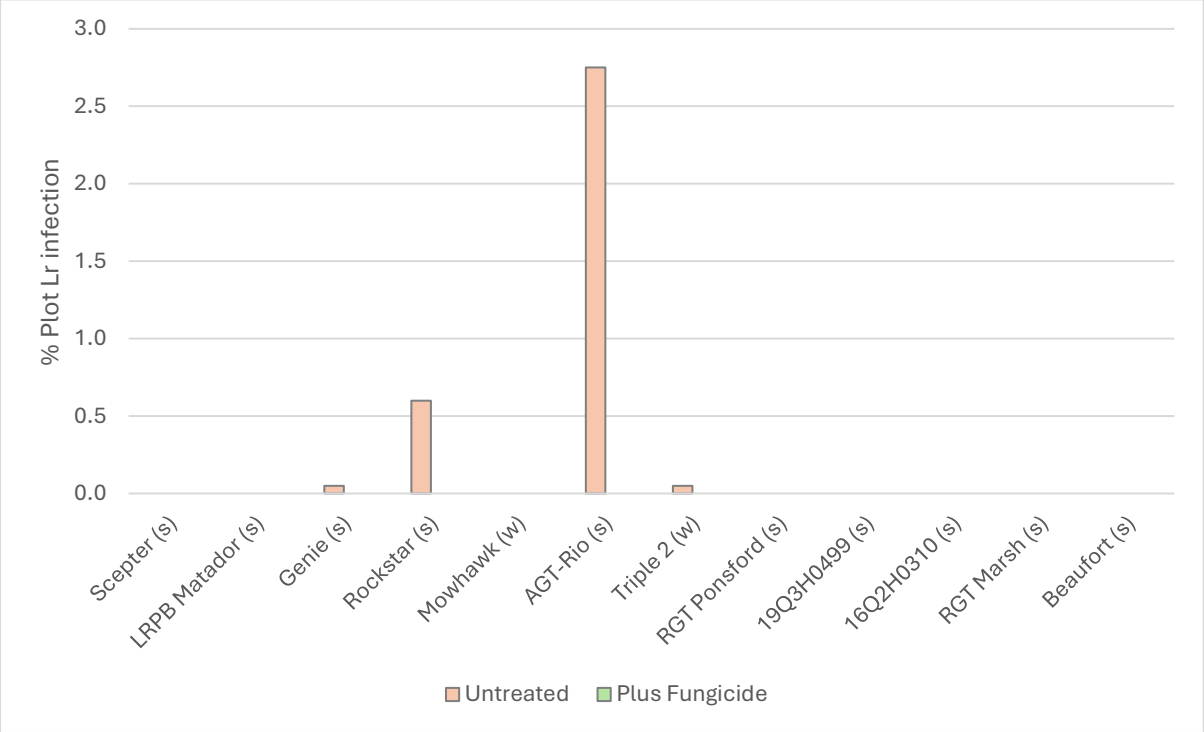


**Figure 6.** Influence of variety and fungicide on plot Infection (%) of leaf rust (Lr), assessed 29 October 2025.

**Table 5.** Trial input and management details.

| | | | |
|---|---|---|---|
| **Sowing date:** | | **21 May 2025** | |
| **Harvest date:** | | **30 December 2025 (rep 2-4), 2 Jan 2026 (rep 1)** | |
| **Seed rate:** | | 180 seeds/$m^2$ | |
| **Basal fertiliser:** | 20 May | 100 kg MAP/ha | |
| | | | |
| **Pre-em herbicide:** | 22 May | Mateno Complete 0.75 L/ha | |
| | | | |
| **Post-em herbicide:** | 18 Jul | Paradigm 25 g/ha | |
| | 18 Jul | LV MCPA 570 0.5 L/ha | |
| | 18 Jul | CanDo adjuvant 0.5 L/100 L | |
| | | | |
| **Nitrogen:** | 16 July | Urea 108 kg/ha (50kg N/ha) | |
| | 22 Aug | Urea 217 kg/ha (100kg N/ha) | |
| | | | |
| **Fungicide:** | | **Untreated** | **Plus fungicide** |
| | GS31 | ---- | Prosaro 0.3 L/ha |
| | GS39 | ---- | Revystar 0.75 L/ha |

**Meteorological Data**

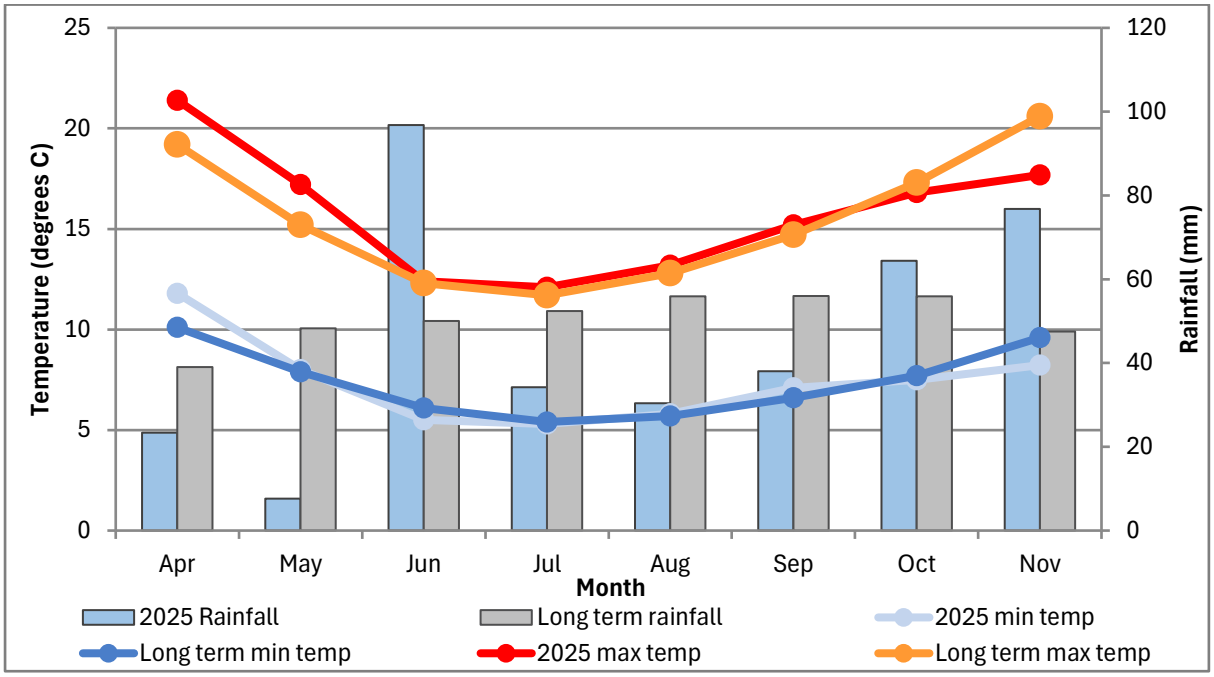


**Figure 7.** 2025 growing season rainfall and long-term rainfall recorded at Winchelsea Post Office (1898 -2025) and long-term min and max temperatures recorded at Mount Gellibrand (2000 to 2025) for the growing season (April to November). *Rainfall April to November = 371.6mm.*

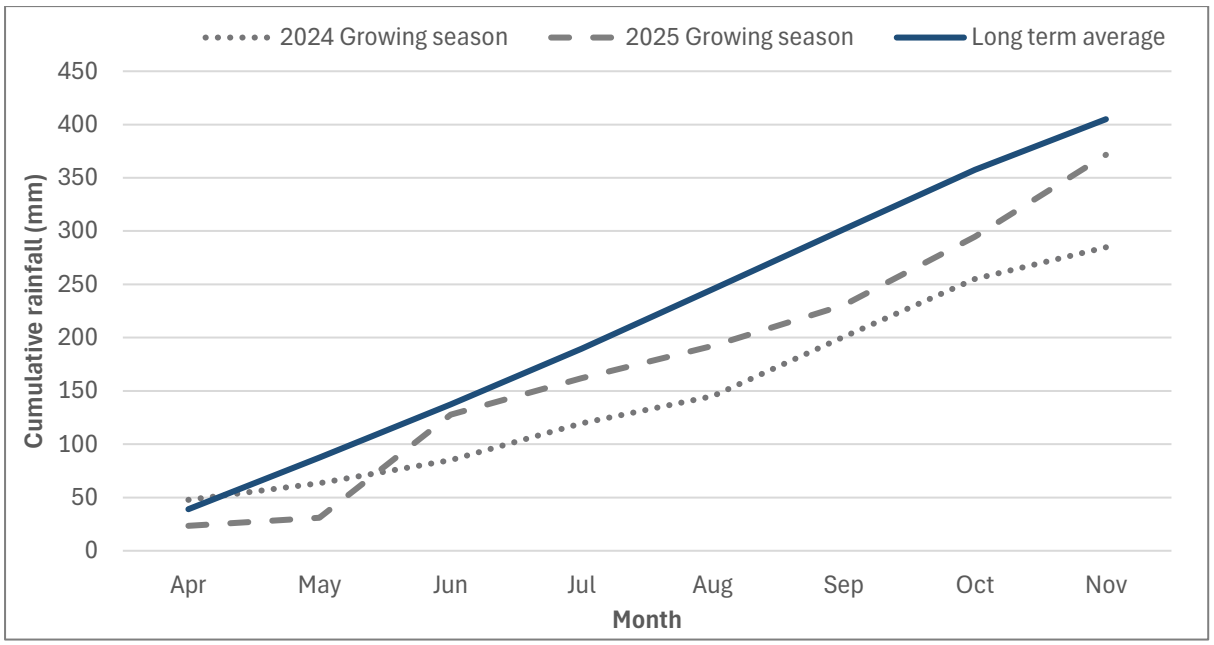


**Figure 8.** Cumulative growing season rainfall for 2024, 2025 and the long-term average for the growing season (April-November).

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