# Esperance

March 2025

GRDC NATIONAL VARIETY TRIALS™ | CELEBRATING 20 YEARS

# NVT HARVEST REPORT

## INTERIM VERSION

nvt.grdc.com.au

**Title:** NVT Harvest Report Interim Version – Esperance

**Published:** March 2025

**Authors:**
Katherine Hollaway, Astute Ag and
Dr Sue Knights, SE Knights Consulting

**Acknowledgements:**
We would like to thank all those who provided information and assistance with the development of this Harvest Report.



**GRDC contact details:**
PO Box 5367
KINGSTON ACT 2604
**Phone:** 02 6166 4500
**Email:** comms@grdc.com.au

**Design and production:**
Coretext, coretext.com.au

**COVER:** Kalyx Australia harvesting at the GRDC National Variety Trials (NVT) site on John and Brendan Pattison's farm near Marrar, New South Wales.
**PHOTO:** Nicole Baxter

# CONTENTS

**Download this guide at:**
**nvt.grdc.com.au/harvest-reports**



## LEGEND: MEAN VARIETY YIELD PERFORMANCE

**HIGH** **LOW**

Long-term mean yield illustrated by colour gradient from high (green) to low (red)

## LEGEND: DISEASE RATING COLOUR RANGE

| R | RMR | MR | MRMS | MS | MSS | S | SVS | VS |
|---|---|---|---|---|---|---|---|---|

Disease severity scale from resistant (R) to very susceptible (VS)

The disease ratings in the report are current at the time of publication.
Regularly visit nvt.grdc.com.au/nvt-disease-ratings to find the latest NVT disease ratings.

Refer to the latest *Crop Sowing Guide* for further information at
nvt.grdc.com.au/resources/crop-sowing-guides

# INTRODUCTION

*The NVT Harvest Report – Esperance* provides information to support growers and advisers with decisions on variety selection for **Esperance**. The information has been generated from the Grains Research and Development Corporation's (GRDC) National Variety Trials (NVT) database. This publication provides a summary of the 2024 and long-term yield performance of varieties of crop species suitable for production in **Esperance** together with their quality and disease responses.

The NVT program provides growers and advisers with comparative results on yield performance, quality and disease resistance ratings of commercially available grain varieties that is independent, consistent, timely and robust.

Conducted to a set of predetermined protocols, trials are sown and managed to reflect local best practice such as sowing time, fertiliser application, weed management, pest/disease control and fungicide application. The NVT is not designed to grow varieties to their maximum yield potential.

GRDC recognises that sustaining a project of this nature hinges on the collaboration of growers who willingly provide sites and often lend a hand in trial management on their properties. Equally significant is the partnership with seed companies who supply seed of commercial varieties and experimental lines to the program.

## Interpreting long-term yield results

A factor analytic (FA) mixed model approach is used in the multi-environment trial (MET) analysis conducted by GRDC, supported by the Analytics for the Australian Grains Industry (AAGI).

This approach generates long-term MET values for varieties at an individual trial level.

This format provides more detailed results to better understand a variety's performance over several years at the individual trial/environment level, rather than just a single averaged value.

In the ***NVT Harvest Report – Esperance***, results are presented in year groupings for yield for the past five years and quality for the past two years. Further detailed interrogation of the NVT Online results using the Long Term Yield Reporter will provide more specific performance results on all varieties of each crop species in each NVT location throughout **Esperance**.

The results presented in this Harvest Report are based on the default filters in the Long Term Yield Reporter. In some cases, trial results are excluded because they do not meet the default standards for statistical validity. These are listed in the tables as 'Trial results below standard'. Trials below standard can be viewed by reducing the default VAF settings within the Long Term Yield Reporter.

Trials listed as compromised are not suitable for making variety decisions. Results can be found in the Quarantined trial reports.

Refer to the latest ***Crop Sowing Guide*** for further information at **nvt.grdc.com.au/resources/crop-sowing-guides**

## NVT 20th anniversary

In 2025, the National Variety Trials (NVT) proudly celebrates 20 years of empowering Australian grain growers and their advisers with trusted, independent results to support varietal decision-making.

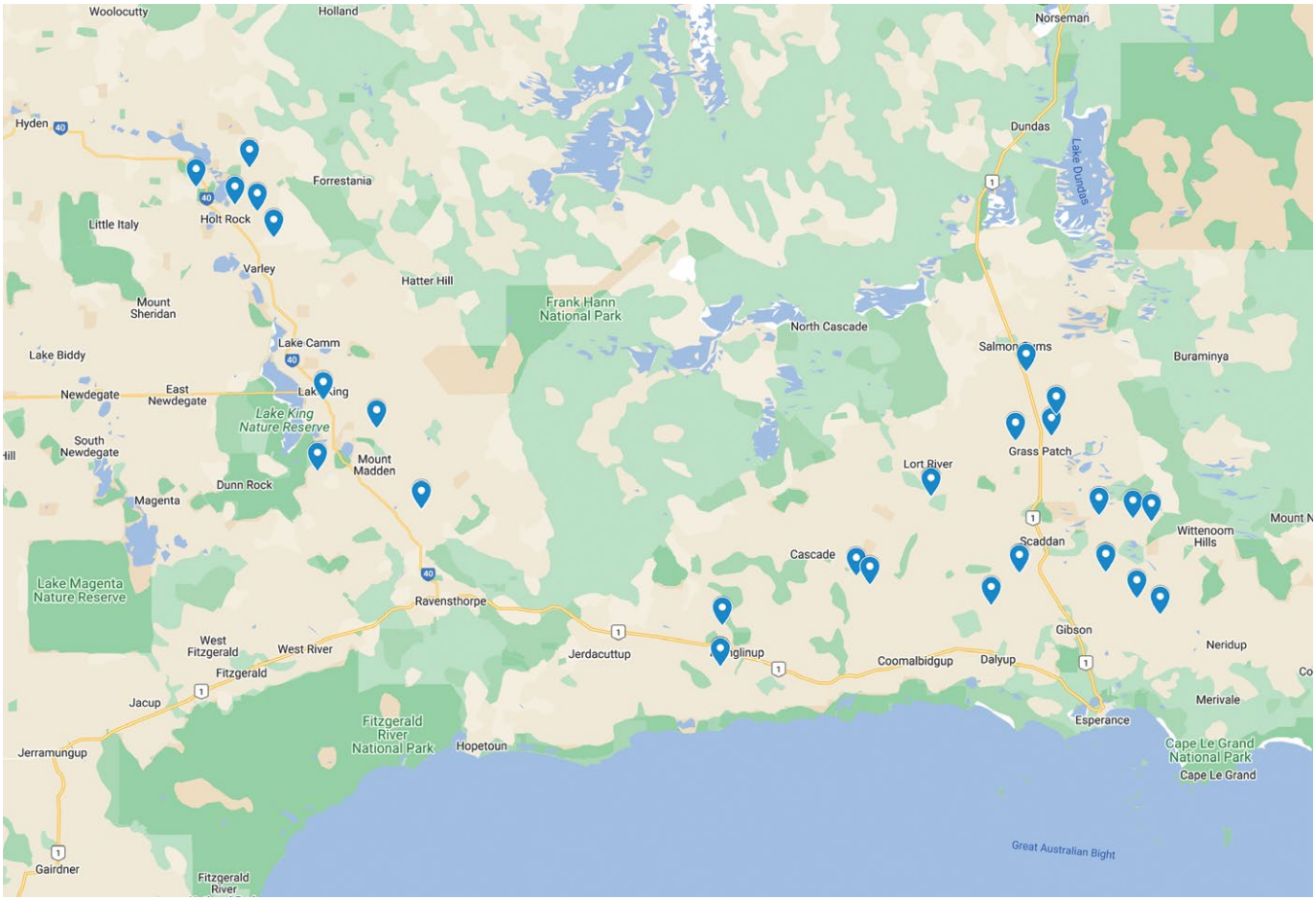
Established in 2005 by the Grains Research and Development Corporation (GRDC), the NVT program has evolved into the largest coordinated variety trial network in the world. Each year, more than 640 trials are conducted across over 300 locations nationwide, encompassing 10 different crop species. Over the past two decades, NVT has been a transformative force, providing growers with credible insights into newly released varieties that drives the rapid adoption of superior genetics.

The success of NVT is a testament to the collaborative efforts of many. GRDC extends heartfelt thanks to the growers, GRDC staff and panellists, service providers, trial hosts, breeding companies and members of the National Advisory Committee who have been instrumental in this journey. Your dedication has delivered exceptional outcomes, advancing the productivity and profitability of Australian grain growers and strengthening the grains industry as a whole.

As we mark this significant milestone, GRDC celebrates the achievements of NVT and looks forward to continuing to deliver game-changing innovations for Australia's grains sector in the years to come.

## NVT SITE LOCATIONS – Esperance

**Figure 1: Locality of NVT trial sites in Esperance from 2020 to 2024.**




SOURCE: National Variety Trials

See all NVT trial locations and view trial results at nvt.grdc.com.au/trial-results.

# WHEAT

## New wheat varieties

The following information is for wheat varieties released in the 12 months to the date when the MET analysis was published on NVT online. Please go to nvt.grdc.com.au to find trial results for any new varieties released since the publication of this harvest report.

| Variety | Breeding company | Grain classification – western zone | End point royalty* ($) | Comments supplied by breeding company[1] |
|---|---|---|---|---|
| Brighton(Φ) | Australian Grain Technologies Pty Ltd | TBC | 4.10 | Brighton(Φ) is a dual-purpose winter wheat suitable for grazing and grain production. It is a higher-yielding alternative to Illabo(Φ) and slightly quicker than Illabo(Φ). It has improved test weight compared with Illabo(Φ). **Maturity description:** quick winter |
| Lancelin(Φ) | Australian Grain Technologies Pty Ltd | TBC | 3.70 | Lancelin(Φ) has Australian Soft (ASFT) quality classification. It has high and stable yields in WA, similar to Scepter(Φ). It is similar to Scepter(Φ) with an excellent physical grain quality package, high test weights and low screenings. **Maturity description:** mid spring |
| LRPB Vortex(Φ) | LongReach Plant Breeders Pty Ltd | APW | 3.50 | LRBP Vortex(Φ) is a high-yielding variety suitable for main season sowing across all Western Australian agzones. LRPB Vortex(Φ) has a solid grain receivals performance. APW classification in WA. Marketed by Pacific Seeds. **Maturity description:** mid spring |
| Mammoth(Φ) | InterGrain Pty Ltd | APW | 3.50 | Mammoth(Φ)'s unique phenology makes it an excellent option for an early break scenario, from late March to mid-April. Unlike winter wheats that have similar maturity, Mammoth(Φ) does not have the same vernalisation requirement, allowing it to continue to develop using day length rather than needing low temperature to trigger flowering like winter varieties typically need. This attribute is advantageous in both high and low-rainfall regions as it allows Mammoth(Φ) to respond to seasonal conditions and minimise frost risk. Mammoth(Φ) is well suited to WA and SA and some areas in Victoria. **Maturity description:** very slow spring |
| Rottnest(Φ) | Australian Grain Technologies Pty Ltd | ANW | 3.90 | Rottnest(Φ) is an udon noodle wheat in a plant type similar to Scepter(Φ). It offers a substantial yield improvement over currently grown udon noodle varieties. It is very broadly adapted with stable yield across a range of environments. **Maturity description:** mid spring |
| Shotgun(Φ) | Australian Grain Technologies Pty Ltd | AH | 3.90 | Shotgun(Φ) is a Scepter(Φ) replacement with a significant yield advantage. It is agronomically very similar to Scepter(Φ). **Maturity description:** mid spring |
| Splendid(Φ) | InterGrain Pty Ltd | TBC | 4.00 | Splendid(Φ) is a high-yielding noodle wheat set to replace Ninja(Φ) across WA. Splendid(Φ) provides a significant yield jump over Ninja(Φ) and similar physical grain characteristics to Ninja(Φ). **Maturity description:** quick-mid spring |
| Wallaroo(Φ) | Trigall Australia | TBC | 4.00 | Variety description not supplied. |

*EPR amount is ex-GST, (Φ)denotes Plant Breeder's Rights apply. [1]All data in the table was provided by breeders. Readers should raise any issues with the displayed data directly with the breeder. Consult the Grains Australia Wheat Variety Master List for final classification in your region.

Refer to the latest *Crop Sowing Guide* for further information at nvt.grdc.com.au/resources/crop-sowing-guides

# Wheat variety yield performance – Esperance

Yield results are presented from the top-performing varieties within each NVT location in the region for the past five seasons. Results are presented (as a percentage) for each variety relative to the mean trial yield for the location within each year. Varieties are listed in descending order of average yield over the period.

The Long Term Yield Reporter provides additional information on varieties not listed and can be viewed as a table or chart with error bars. Rainfall is provided for January to March (J–M) and April to October (A–O) and, where relevant, irrigation from April to October.

## Table 1: Cascade main season wheat.

| Year | | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|
| Mean yield (t/ha) | Class | | | | | 4.15 |
| Vixen[Ф] | AH (N) | No trial | No trial | No trial | No trial | 114 |
| Tomahawk CL Plus[Ф] | APW | | | | | 112 |
| LRPB Avenger[Ф] | APW (N) | | | | | 111 |
| Sting[Ф] | AH | | | | | 111 |
| LRPB Anvil[Ф] CL Plus | AH | | | | | 110 |
| LRPB Havoc[Ф] | AH (N) | | | | | 109 |
| Calibre[Ф] | AH | | | | | 109 |
| Shotgun[Ф] | | | | | | 108 |
| Scepter[Ф] | AH | | | | | 108 |
| LRPB Vortex[Ф] | APW | | | | | 108 |
| Lancelin[Ф] | | | | | | 107 |
| Devil[Ф] | AH (N) | | | | | 106 |
| Rottnest[Ф] | | | | | | 106 |
| Brumby[Ф] | APW (N) | | | | | 106 |
| LRPB Matador[Ф] | FEED | | | | | 105 |
| **Sowing date** | | | | | | **23 May** |
| **Rainfall J–M (mm)** | | | | | | **57** |
| **Rainfall A–O (mm)** | | | | | | **296** |

Special thanks to 2024 trial cooperator, Scott Welke.
Learn more via the NVT Long Term Yield Reporter

## Table 2: Gibson main season wheat.

| Year | | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|
| Mean yield (t/ha) | Class | 4.83 | 5.56 | 5.09 | 2.44 | 4.06 |
| LRPB Vortex[Ф] | APW | | | 110 | 108 | 111 |
| Tomahawk CL Plus[Ф] | APW | | | 107 | 116 | 112 |
| Rottnest[Ф] | | | | | | 108 |
| Vixen[Ф] | AH (N) | 110 | 106 | 103 | 117 | 111 |
| Brumby[Ф] | APW (N) | | 108 | 108 | 107 | 108 |
| Shotgun[Ф] | | | | | 108 | 109 |
| Scepter[Ф] | AH | 110 | 106 | 105 | 110 | 108 |
| Devil[Ф] | AH (N) | 109 | 106 | 107 | 107 | 107 |
| LRPB Havoc[Ф] | AH (N) | 110 | 107 | 99 | 116 | 107 |
| Calibre[Ф] | AH | 109 | 102 | 106 | 109 | 108 |
| Sting[Ф] | AH | 108 | 103 | 103 | 113 | 109 |
| RockStar[Ф] | AH (N) | 105 | 110 | 108 | 100 | 104 |
| Thumper[Ф] | AH | | | | 101 | 106 |
| Splendid[Ф] | | | | | | 104 |
| LRPB Avenger[Ф] | APW (N) | 102 | | 98 | 116 | 109 |
| **Sowing date** | | **12 May** | **14 May** | **16 May** | **21 May** | **4 Jun** |
| **Rainfall J–M (mm)** | | **82** | **51** | **44** | **44** | **126** |
| **Rainfall A–O (mm)** | | **346** | **510** | **521** | **451** | **279** |

Special thanks to 2024 trial cooperator, Kogody Farming.
Learn more via the NVT Long Term Yield Reporter

## Table 3: Mt Madden main season wheat.

| Year | | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|
| Mean yield (t/ha) | Class | 2.62 | 3.29 | 2.50 | | 3.85 |
| LRPB Vortex[Ф] | APW | | | 112 | Compromised trial | 108 |
| Rottnest[Ф] | | | | | | 114 |
| Shotgun[Ф] | | | | | | 111 |
| Thumper[Ф] | AH | | | | | 116 |
| Brumby[Ф] | APW (N) | | 110 | 112 | | 110 |
| Tomahawk CL Plus[Ф] | APW | | | 115 | | 101 |
| RockStar[Ф] | AH (N) | 108 | 107 | 108 | | 116 |
| Devil[Ф] | AH (N) | 110 | 109 | 111 | | 107 |
| Calibre[Ф] | AH | 109 | 111 | 113 | | 104 |
| Splendid[Ф] | | | | | | 113 |
| LRPB Matador[Ф] | FEED | | | | | 110 |
| Firefly[Ф] | ANW | | 105 | | | 115 |
| Scepter[Ф] | AH | 110 | 109 | 110 | | 100 |
| Ninja[Ф] | ANW | 105 | 103 | 107 | | 110 |
| Kinsei[Ф] | ANW | 100 | 102 | 102 | | 116 |
| **Sowing date** | | **13 May** | **20 May** | **22 May** | **3 Jun** | **8 May** |
| **Rainfall J–M (mm)** | | **76** | **89** | **37** | **20** | **61** |
| **Rainfall A–O (mm)** | | **196** | **338** | **354** | **181** | **189** |

Special thanks to 2024 trial cooperator.
Learn more via the NVT Long Term Yield Reporter

## Table 4: Munglinup main season wheat.

| Year | | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|
| Mean yield (t/ha) | Class | 2.71 | 3.06 | 3.49 | 2.32 | |
| RockStar[Ф] | AH (N) | 118 | 113 | 115 | 101 | No trial |
| LRPB Vortex[Ф] | APW | | | 111 | 106 | |
| Brumby[Ф] | APW (N) | | 113 | 112 | 105 | |
| Shotgun[Ф] | | | | | 107 | |
| Thumper[Ф] | AH | | | | 104 | |
| Tomahawk CL Plus[Ф] | APW | | | 110 | 109 | |
| Devil[Ф] | AH (N) | 110 | 111 | 110 | 105 | |
| Ninja[Ф] | ANW | 110 | 110 | 112 | 101 | |
| LRPB Matador[Ф] | FEED | | | 110 | 105 | |
| Scepter[Ф] | AH | 106 | 110 | 107 | 105 | |
| Calibre[Ф] | AH | 105 | 109 | 105 | 108 | |
| Kinsei[Ф] | ANW | 114 | 104 | 108 | 98 | |
| Catapult[Ф] | AH | 108 | 105 | 107 | 100 | |
| Zen[Ф] | ANW | 104 | 107 | 109 | 98 | |
| Denison[Ф] | APW | 115 | 100 | 106 | 95 | |
| **Sowing date** | | **7 May** | **19 May** | **17 May** | **24 May** | |
| **Rainfall J–M (mm)** | | **83** | **68** | **50** | **31** | |
| **Rainfall A–O (mm)** | | **314** | **431** | **584** | **357** | |

No 2024 trial cooperator.
Learn more via the NVT Long Term Yield Reporter

## Table 5: Salmon Gums main season wheat.

| Year | | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|
| Mean yield (t/ha) | Class | 0.96 | | 2.77 | 1.41 | 2.80 |
| Vixen[Ф] | AH (N) | 150 | Compromised trial | 112 | 117 | 114 |
| Tomahawk CL Plus[Ф] | APW | | | 111 | 116 | 113 |
| LRPB Avenger[Ф] | APW (N) | 153 | | 110 | 109 | 111 |
| Sting[Ф] | AH | 139 | | 109 | 115 | 111 |
| LRPB Anvil[Ф] CL Plus | AH | 152 | | 105 | 109 | 110 |
| Calibre[Ф] | AH | 125 | | 109 | 116 | 110 |
| LRPB Havoc[Ф] | AH (N) | 138 | | 106 | 106 | 109 |
| Shotgun[Ф] | | | | | 114 | 108 |
| LRPB Vortex[Ф] | APW | | | 112 | 107 | 107 |
| Scepter[Ф] | AH | 122 | | 107 | 110 | 108 |
| Lancelin[Ф] | | | | 105 | 109 | 107 |
| Devil[Ф] | AH (N) | 113 | | 107 | 110 | 107 |
| Brumby[Ф] | APW (N) | | | 108 | 109 | 106 |
| Rottnest[Ф] | | | | | | 106 |
| Mace[Ф] | AH (N) | 122 | | 101 | 106 | 106 |
| **Sowing date** | | **20 May** | **25 May** | **20 May** | **5 Jun** | **1 Jun** |
| **Rainfall J–M (mm)** | | **92** | **99** | **38** | **40** | **53** |
| **Rainfall A–O (mm)** | | **158** | **269** | **299** | **168** | **171** |

Special thanks to 2024 trial cooperator, Digby Graham.
Learn more via the NVT Long Term Yield Reporter

## Table 6: Scaddan main season wheat.

| Year | | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|
| Mean yield (t/ha) | Class | 2.05 | 3.91 | 4.56 | 3.41 | 3.39 |
| Tomahawk CL Plus[Ф] | APW | | | 110 | 112 | 116 |
| LRPB Vortex[Ф] | APW | | | 110 | 108 | 114 |
| Shotgun[Ф] | | | | | 110 | 110 |
| Rottnest[Ф] | | | | | | 108 |
| Calibre[Ф] | AH | 116 | 109 | 108 | 111 | 111 |
| Vixen[Ф] | AH (N) | 122 | 108 | 101 | 111 | 117 |
| Brumby[Ф] | APW (N) | | 111 | 111 | 108 | 109 |
| Thumper[Ф] | AH | | | | 108 | 106 |
| Devil[Ф] | AH (N) | 110 | 110 | 109 | 108 | 109 |
| Sting[Ф] | AH | 118 | 106 | 102 | 110 | 113 |
| Scepter[Ф] | AH | 112 | 108 | 106 | 107 | 110 |
| LRPB Matador[Ф] | FEED | | | | 107 | 105 |
| RockStar[Ф] | AH (N) | 101 | 110 | 112 | 104 | 104 |
| Splendid[Ф] | | | | | | 103 |
| Lancelin[Ф] | | | | 104 | 106 | 108 |
| **Sowing date** | | **3 Jun** | **18 May** | **4 May** | **22 May** | **5 Jun** |
| **Rainfall J–M (mm)** | | **48** | **51** | **44** | **36** | **126** |
| **Rainfall A–O (mm)** | | **249** | **510** | **521** | **225** | **279** |

Special thanks to 2024 trial cooperator, Greg Shipley.
Learn more via the NVT Long Term Yield Reporter

## Table 7: Varley main season wheat.

| Year | | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|
| Mean yield (t/ha) | Class | | | | | 2.87 |
| Vixen[Ф] | AH (N) | No trial | No trial | No trial | No trial | 115 |
| Tomahawk CL Plus[Ф] | APW | | | | | 114 |
| LRPB Avenger[Ф] | APW (N) | | | | | 113 |
| LRPB Havoc[Ф] | AH (N) | | | | | 111 |
| Sting[Ф] | AH | | | | | 111 |
| LRPB Vortex[Ф] | APW | | | | | 111 |
| LRPB Anvil[Ф] CL Plus | AH | | | | | 110 |
| Scepter[Ф] | AH | | | | | 109 |
| Shotgun[Ф] | | | | | | 109 |
| Calibre[Ф] | AH | | | | | 109 |
| Devil[Ф] | AH (N) | | | | | 107 |
| Rottnest[Ф] | | | | | | 107 |
| Lancelin[Ф] | | | | | | 107 |
| Brumby[Ф] | APW (N) | | | | | 107 |
| Thumper[Ф] | AH | | | | | 105 |
| **Sowing date** | | | | | | **4 Jun** |
| **Rainfall J–M (mm)** | | | | | | **128** |
| **Rainfall A–O (mm)** | | | | | | **191** |

Special thanks to 2024 trial cooperator, Guy Coxon.
Learn more via the NVT Long Term Yield Reporter

## Table 8: Gibson early season wheat.

| Year | | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|
| Mean yield (t/ha) | Class | 4.38 | | 2.88 | | 4.34 |
| Denison[Ф] | APW | 116 | Trial failed | 113 | No trial | 108 |
| Genie[Ф] | AH | | | | | 108 |
| Wallaroo[Ф] | | | | 112 | | 100 |
| Valiant[Ф] CL Plus | AH | | | 110 | | 106 |
| Mammoth[Ф] | APW | | | | | 93 |
| RockStar[Ф] | AH (N) | 107 | | 110 | | 106 |
| Kinsei[Ф] | ANW | 107 | | 109 | | 105 |
| Cutlass[Ф] | APW (N) | 108 | | 106 | | 105 |
| Catapult[Ф] | AH | 104 | | 106 | | 107 |
| Brumby[Ф] | APW (N) | | | | | 107 |
| Stockade[Ф] | APW | | | 105 | | 94 |
| Mowhawk[Ф] | AH | | | 100 | | 96 |
| Willaura[Ф] | FEED | | | | | 103 |
| Longsword[Ф] | AWW | 101 | | 95 | | 100 |
| Brighton[Ф] | | | | | | 96 |
| **Sowing date** | | **23 Apr** | **22 Apr** | **29 Apr** | | **25 Apr** |
| **Rainfall J–M (mm)** | | **82** | **51** | **44** | | **126** |
| **Rainfall A–O (mm)** | | **346** | **510** | **521** | | **279** |

Special thanks to 2024 trial cooperator, Kogody Farming.
Learn more via the NVT Long Term Yield Reporter

| Table 9: Munglinup early season wheat. | | | | | | |
|---|---|---|---|---|---|---|
| Year | | 2020 | 2021 | 2022 | 2023 | 2024 |
| Mean yield (t/ha) | Class | | | | 2.71 | |
| Denison[Φ] | APW | No trial | No trial | No trial | 108 | No trial |
| Cutlass[Φ] | APW (N) | | | | 108 | |
| Wallaroo[Φ] | | | | | 108 | |
| Valiant[Φ] CL Plus | AH | | | | 107 | |
| Longsword[Φ] | AWW | | | | 106 | |
| Genie[Φ] | AH | | | | 103 | |
| Brighton[Φ] | | | | | 103 | |
| Willaura[Φ] | FEED | | | | 103 | |
| Stockade[Φ] | APW | | | | 102 | |
| Mammoth[Φ] | APW | | | | 101 | |
| Catapult[Φ] | AH | | | | 101 | |
| DS Pascal[Φ] | APW | | | | 100 | |
| Yitpi | AH | | | | 100 | |
| Kinsei[Φ] | ANW | | | | 99 | |
| RockStar[Φ] | AH (N) | | | | 98 | |
| **Sowing date** | | | | | **23 Apr** | |
| **Rainfall J–M (mm)** | | | | | **44** | |
| **Rainfall A–O (mm)** | | | | | **451** | |

No 2024 trial cooperator.
Learn more via the NVT Long Term Yield Reporter

# Wheat variety quality – Esperance

Grain quality for individual varieties varies from site to site and from year to year. However, long-term and across-site trends highlight varieties that can consistently achieve high protein percentage, high test weight or low grain screenings under a wider range of environments.

The following figures show the grain quality trends as histograms from 2023 and 2024 NVT averaged for trials in the Esperance region. Only the varieties evaluated at every site are included. These are plotted in order of performance, up to a maximum of 20.

## Protein and yield comparisons

**Figure 1: Protein (%) and yield (t/ha) comparisons for main season wheat varieties from four NVT sites in Esperance in 2023.**

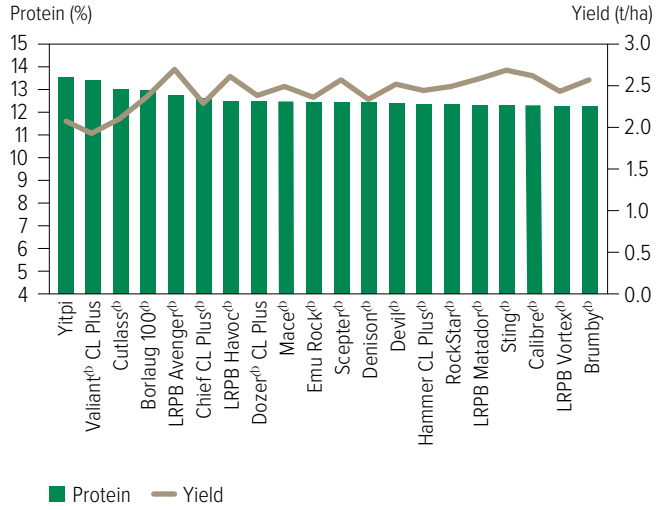



**Figure 2: Protein (%) and yield (t/ha) comparisons for main season wheat varieties from six NVT sites in Esperance in 2024.**

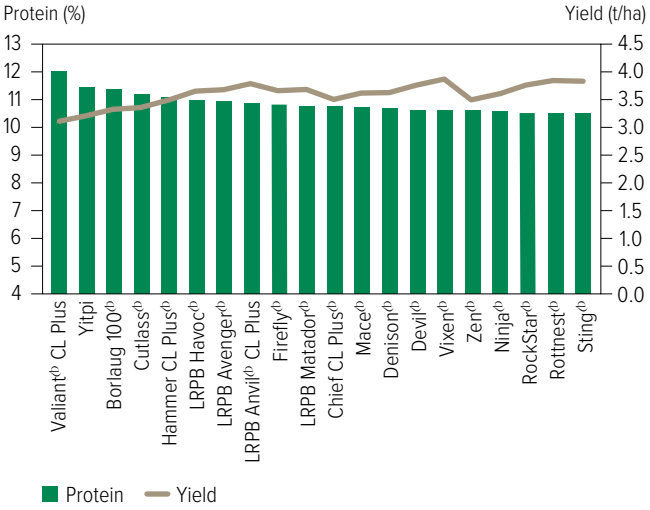



**Figure 3: Protein (%) and yield (t/ha) comparisons for early season wheat varieties from one NVT site in Esperance in 2023.**

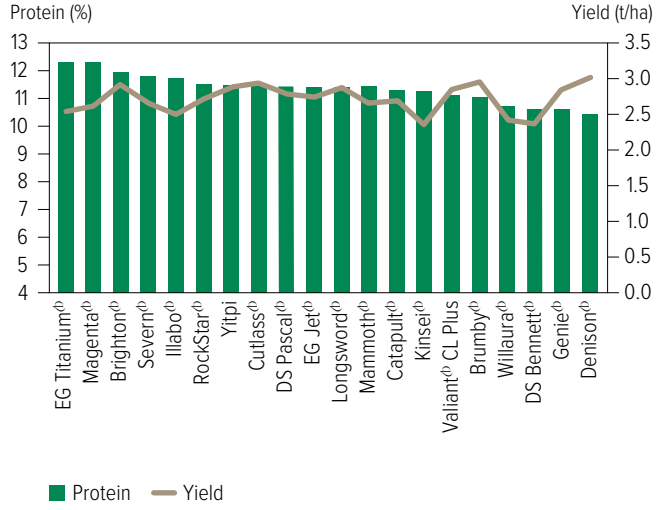
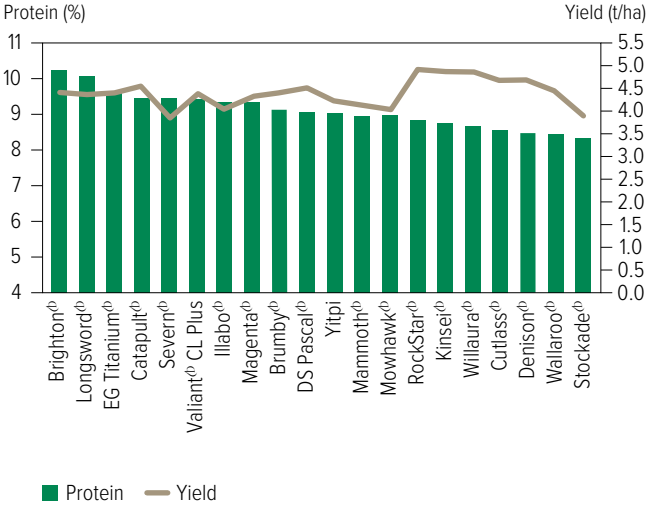



**Figure 4: Protein (%) and yield (t/ha) comparisons for early season wheat varieties from one NVT site in Esperance in 2024.**



## Test weight comparisons

**Figure 5: Test weight (kg/hL) comparisons for main season wheat varieties from four NVT sites in Esperance in 2023.**

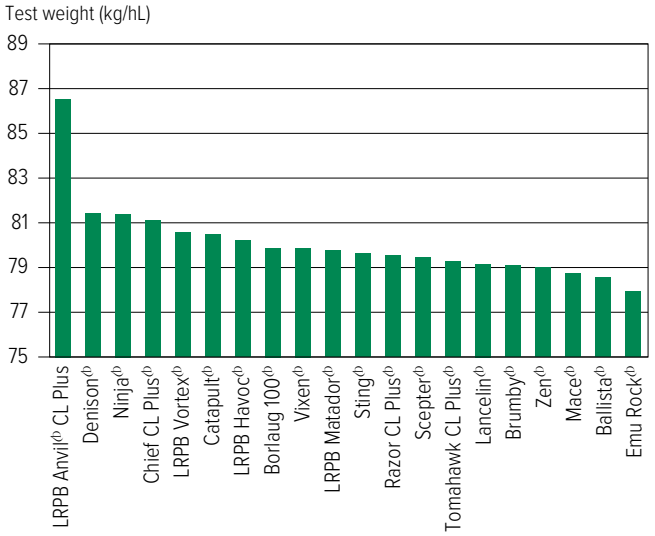



**Figure 6: Test weight (kg/hL) comparisons for main season wheat varieties from six NVT sites in Esperance in 2024.**

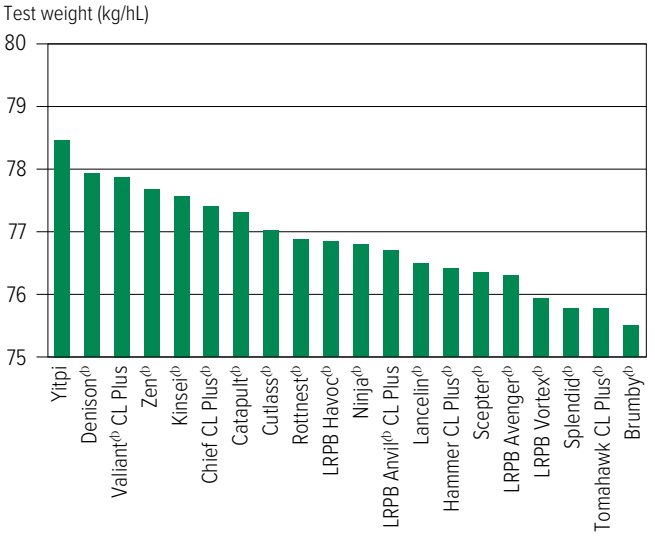



**Figure 7: Test weight (kg/hL) comparisons for early season wheat varieties from one NVT site in Esperance in 2023.**

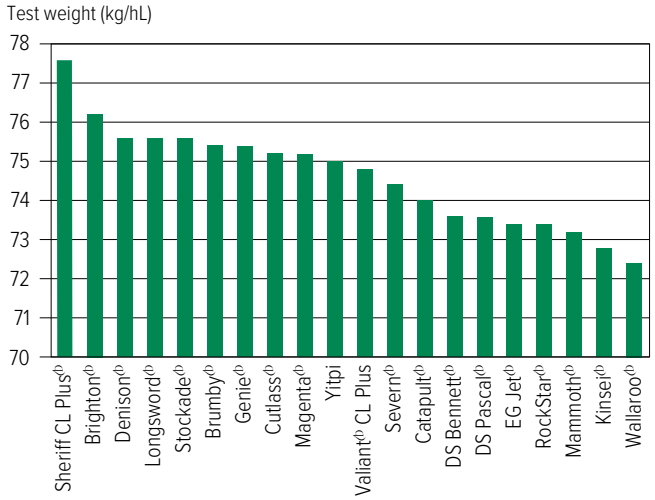
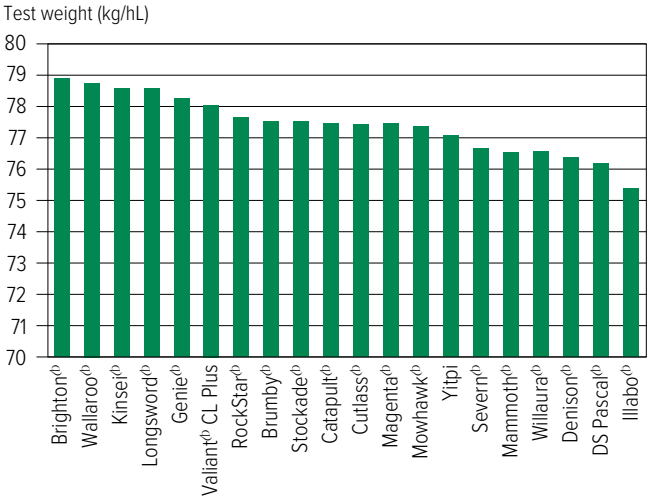



**Figure 8: Test weight (kg/hL) comparisons for early season wheat varieties from one NVT site in Esperance in 2024.**



## Screenings comparisons

**Figure 9: Screenings (<2.0mm) comparisons for main season wheat varieties from four NVT sites in Esperance in 2023.**

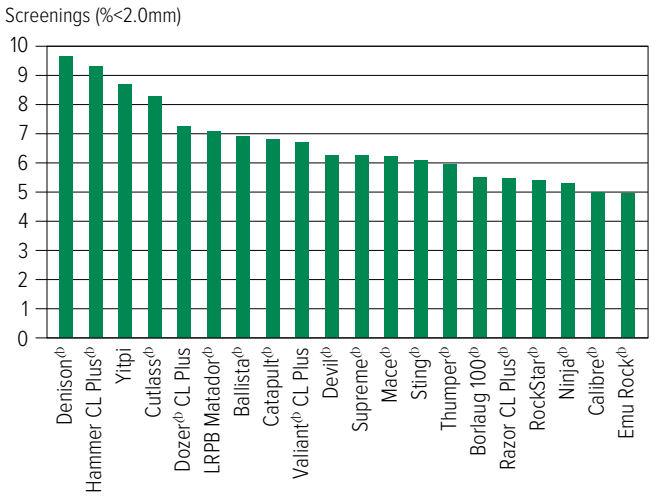



**Figure 10: Screenings (<2.0mm) comparisons for main season wheat varieties from six NVT sites in Esperance in 2024.**

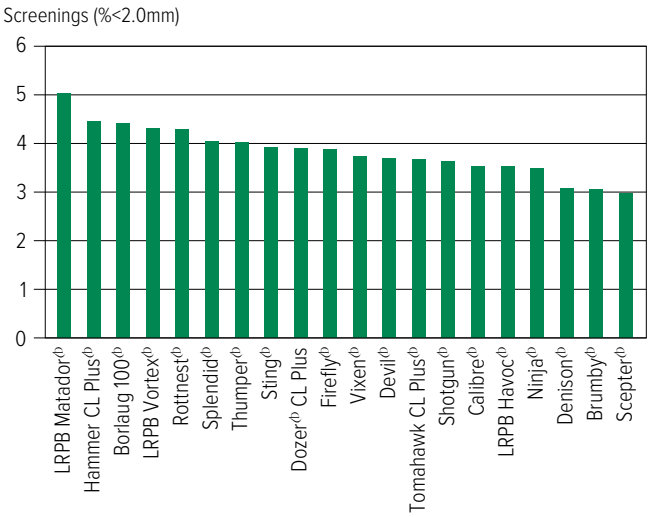



**Figure 11: Screenings (<2.0mm) comparisons for early season wheat varieties from one NVT site in Esperance in 2023.**

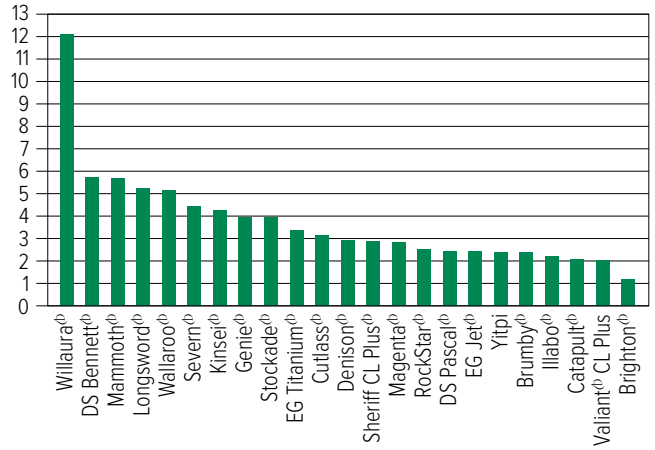
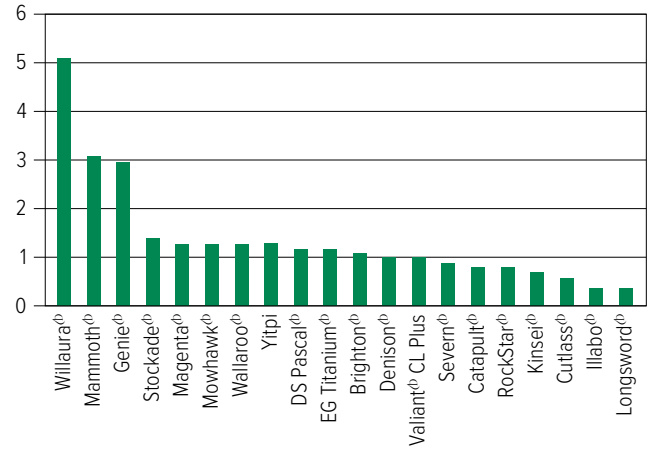



**Figure 12: Screenings (<2.0mm) comparisons for early season wheat varieties from one NVT site in Esperance in 2024.**



# Wheat variety disease ratings – Western Australia

The following tables contain varietal ratings for the predominant diseases of wheat in Western Australia. These ratings are updated annually by crop pathologists and were released in March 2025.

Selected varieties of most relevance to Western Australian growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and tolerance ratings.

**Table 10: Wheat disease guide for Western Australia.**

| Variety | Yellow spot | Nodorum blotch (leaf) | Nodorum blotch (glume) | Stem rust | Stripe rust (west coast resistance) | Leaf rust | Powdery mildew | *Septoria tritici* blotch | RLN resistance (*Pratylenchus neglectus*) | RLN resistance (*Pratylenchus quasitereoides*) | CCN | Crown rot |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ballista(b) | MS | MS | MRMS | MR | | S | S | SVS | S | | MRMS | S |
| Boree(b) | MRMS | MS | MRMS | MR | | S | S | S | S | | MSS | S |
| Borlaug 100(b) | MRMS | MRMS | MRMS | MR | RMR | MR | S | MS | S | | MS | MSS |
| Brighton(b) | MRMS | MR | MR | MRMS | RMR | S | MSS | MRMS (P) | S | | R | S |
| Brumby(b) | MRMS | MRMS | MS | MR | RMR | SVS | R | MSS (P) | MRMS | MS (P) | MRMS | S |
| Calibre(b) | MRMS | MS | MSS | MR | RMR | S | MSS | S | S | MS | MRMS | S |
| Catapult(b) | MRMS | MRMS | MS | MR | RMR | S | S | MSS | S | MRMS | R | MSS |
| Chief CL Plus(b) | MRMS | MS | MRMS | MR | S | MR | S | MSS | MRMS | MRMS | MS | MSS |
| Coota(b) | MSS | MRMS | MS | RMR | | MR | S | MSS | MR | | MR | MSS |
| Cutlass(b) | MSS | MRMS | MRMS | R | RMR | RMR | S | MSS | MSS | MS | MR | S |
| Denison(b) | MRMS | MR | MRMS | MS | MR | S | S | MS | S | MRMS (P) | MS | MSS |
| Devil(b) | MRMS | MRMS | MS | S | RMR | SVS | SVS | SVS | MSS | MRMS | MSS | MSS |
| Dozer(b) CL Plus | MRMS | MRMS | MSS | MS | MRMS | S | S | MSS (P) | MRMS | MSS (P) | MS | S |
| DS Bennett(b) | MRMS | MRMS | MR | MS | | SVS | RMR | MR | S | | S | VS |
| DS Pascal(b) | MS | MRMS | MRMS | MSS | RMR | MRMS | RMR | MS | S | | S | S |
| EG Jet(b) | MRMS | MSS | | S | | MSS | MS | MSS | S | | MRMS | S |
| EG Titanium(b) | MSS | MRMS | MS | MS | RMR | MS | MRMS (P) | MSS | MSS | | R | MSS |
| EGA Wedgetail(b) | MSS | MRMS | MRMS | MRMS | | MSS | MRMS | MRMS | S | | S | S |
| Firefly(b) | MRMS | MRMS | MSS | S | MS | MSS | MSS | MSS (P) | MS | MSS (P) | MSS (P) | S |
| Genie(b) | MRMS (P) | MR (P) | S (P) | MRMS | RMR | S | S (P) | | MS (P) | R (P) | MSS (P) | MS (P) |
| Hammer CL Plus(b) | MRMS | MRMS | MRMS | MR | RMR | S | S | MSS | MSS | MS | MRMS | MSS |
| Illabo(b) | MS | MR | MR | MR | RMR | S | R | MR | MSS | RMR | MRMS | S |
| Jillaroo(b) | MS | MS | MS | MS | | S | S | MRMS (P) | S | | MS | S |
| Kinsei(b) | MS | MRMS | MRMS | MSS | MRMS | MS | S | MS | S | S | MSS | MSS |
| Lancelin(b) | MRMS | MRMS | S | MRMS | RMR | MSS | S | S (P) | SVS | | MRMS | S |
| Longsword(b) | MRMS | MRMS | MRMS | MR | RMR | MSS | MS | MRMS | MRMS | | MRMS | MSS |
| LRPB Anvil(b) CL Plus | MSS | MSS | MSS | MR | RMR | SVS | S | SVS | MSS | MSS (P) | MS | MSS |
| LRPB Avenger(b) | MS | MSS | MS | MS | MR | SVS | S | S | MSS | MS (P) | MRMS | S |
| LRPB Havoc(b) | MRMS | MS | MS | S | MR | S | MSS | MRMS | S | MRMS | S | MSS |
| LRPB Kittyhawk(b) | MRMS | MR (P) | | MRMS | | MR | MRMS | MR | S | | S | SVS |
| LRPB Matador(b) | MRMS | MRMS | MSS | MS | MR | MSS | MSS | MSS (P) | S | | MS (P) | S |
| LRPB Nighthawk(b) | MS | MRMS | MRMS | RMR | | MS | MSS | MR | MSS | MRMS (P) | MS | MSS |
| LRPB Nyala(b) | MS | MSS | MR | SVS | RMR | S | RMR | SVS | S | | MSS | MSS |
| LRPB Oryx(b) | MSS | S | MSS | MR | | RMR# | RMR | SVS | MSS | MSS (P) | S | MSS |
| LRPB Trojan(b) | MSS | MS | MS | MRMS | | MR | S | S | MSS | MS (P) | MS | MS |

Continued on next page

## Table 10: Wheat disease guide for Western Australia (continued).

| Variety | Yellow spot | Nodorum blotch (leaf) | Nodorum blotch (glume) | Stem rust | Stripe rust (west coast resistance) | Leaf rust | Powdery mildew | *Septoria tritici* blotch | RLN resistance (*Pratylenchus neglectus*) | RLN resistance (*Pratylenchus quasitereoides*) | CCN | Crown rot |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LRPB Vortex(Ф) | MRMS | MRMS | MS | MRMS | RMR | SVS | MS | MSS (P) | S | | MSS | MSS |
| Mace(Ф) | MRMS | MS | MS | MRMS | RMR | S | MSS | S | MS | MRMS | MRMS | S |
| Magenta(Ф) | MRMS | MRMS | MSS | MR | MSS | RMR | MRMS | MS | MSS | MSS | S | MSS |
| Mammoth(Ф) | MRMS | MRMS | MR | MR | MRMS | MRMS | S | MRMS | MSS | | MSS | S |
| Mowhawk(Ф) | MRMS (P) | | | RMR (P) | | MR (P) | | | | | | |
| Ninja(Ф) | MRMS | MRMS | MS | S | MS | S | S | MSS | S | S | MS | S |
| Razor CL Plus(Ф) | MSS | MS | MS | MRMS | | S | MSS | SVS | S | | MR | S |
| RGT Accroc(Ф) | MRMS | | | MRMS | RMR | S | RMR (P) | MRMS | MS | | S | SVS |
| RGT Zanzibar | MS | MR | | VS | RMR | SVS | R | MR | S | | MSS | S |
| RockStar(Ф) | MRMS | MRMS | MRMS | MRMS | RMR | S | MSS | S | MRMS | MS | MSS | S |
| Rottnest(Ф) | MRMS (P) | | | S (P) | MRMS | VS (P) | SVS (P) | | | | | |
| Scepter(Ф) | MRMS | MRMS | MSS | MRMS | RMR | MSS | S | S | S | MS | MRMS | MSS |
| Severn(Ф) | MRMS | MR | MR | MRMS | RMR | MR | R | MS (P) | S | | MSS (P) | S |
| Sheriff CL Plus(Ф) | MRMS | MRMS | MRMS | MS | | SVS | SVS | S | MRMS | MRMS | MS | S |
| Shotgun(Ф) | MRMS | MRMS (P) | MSS (P) | MRMS | RMR | MSS | MSS (P) | | MS (P) | | R (P) | MS (P) |
| Splendid(Ф) | MRMS (P) | | | MR (P) | RMR (P) | MSS (P) | SVS (P) | | | | | |
| Sting(Ф) | MRMS | MS | MS | MRMS | MR | SVS | MSS | S | MS | MSS | MS | MSS |
| Stockade(Ф) | MRMS | MR | MR | MS | RMR | MR | S | MS | S | | MRMS | S |
| Thumper(Ф) | MRMS | MRMS (P) | S (P) | MS | RMR | MSS | S (P) | | S | MSS (P) | MS (P) | MS (P) |
| Tomahawk CL Plus(Ф) | MRMS | MRMS | S | MR | RMR | S | S | MSS (P) | S | MS (P) | MRMS | MSS |
| Triple 2(Ф) | MR (P) | RMR (P) | MR (P) | MR (P) | R (P) | MRMS | RMR (P) | | R (P) | | MS (P) | MRMS (P) |
| Valiant(Ф) CL Plus | MRMS | MR | MRMS | MRMS | RMR | S | SVS | MRMS | S | MSS | MSS (P) | MSS |
| Vixen(Ф) | MRMS | MS | MSS | MRMS | MR | SVS | SVS | MSS | MRMS | MSS | MSS | S |
| Wallaroo(Ф) | MRMS | MR | MR | RMR | RMR | RMR | MSS | MRMS (P) | MS | | R | MSS |
| Willaura(Ф) | MS | MRMS | MRMS | MR | R | MRMS | SVS | MRMS | MSS | | MS | S |
| Yitpi | SVS | MS | MRMS | S | MRMS | MSS | MS | MS | MSS | MS | MR | S |
| Zen(Ф) | MRMS | MS | MRMS | S (MRMS) | MR | S | S | S | MRMS | MRMS | S | S |

Learn more via the NVT Disease Ratings.
R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible,
T = tolerant, MT = moderately tolerant, MI = moderately intolerant, I = intolerant, VI = very intolerant,
(P) = provisional rating, - hyphen indicates a range, / indicates pathotype differences, # warning, may be more susceptible to alternate pathotypes,
^ line contains a few susceptible off types, ( ) show outlier.

# Wheat variety maturity

The wheat-breeding members of Australian Crop Breeders have developed a consistent approach to the description of wheat variety maturity (relative heading date).

**Table 11: An industry guide for wheat variety maturity description.**

| Maturity description | Abbreviation | Quick wheat boundary | Slow wheat boundary |
|---|---|---|---|
| **SPRING WHEAT** | | | |
| Very quick | VQ | | Axe[Ф] |
| Very quick-quick | VQ-Q | > Axe[Ф] | Vixen[Ф] |
| Quick | Q | > Vixen[Ф] | Corack[Ф]/LRPB Mustang[Ф] |
| Quick-mid | Q-M | > Corack[Ф]/LRPB Mustang[Ф] | Mace[Ф]/Suntop[Ф] |
| Mid | M | > Mace[Ф]/Suntop[Ф] | LRPB Reliant[Ф]/Sheriff CL Plus[Ф]/LRPB Trojan[Ф] |
| Mid-slow | M-S | > LRPB Reliant[Ф]/Sheriff CL Plus[Ф]/LRPB Trojan[Ф] | Yitpi/EGA Gregory[Ф] |
| Slow | S | > Yitpi/EGA Gregory[Ф] | Sunzell |
| Slow-very slow | S-VS | > Sunzell | Sunmax[Ф] |
| Very slow | VS | > Sunmax[Ф] | |
| **WINTER WHEAT** | | | |
| Quick | Q | | Illabo[Ф] |
| Mid | M | > Illabo[Ф] | RGT Accroc[Ф] |
| Slow | S | > RGT Accroc[Ф] | |

Source: Australian Crop Breeders Ltd

## Wheat optimum time of sowing – an example for Esperance

To achieve flowering in the ideal window and maximise yield, the optimum time of sowing is based on a combination of variety maturity and environment.

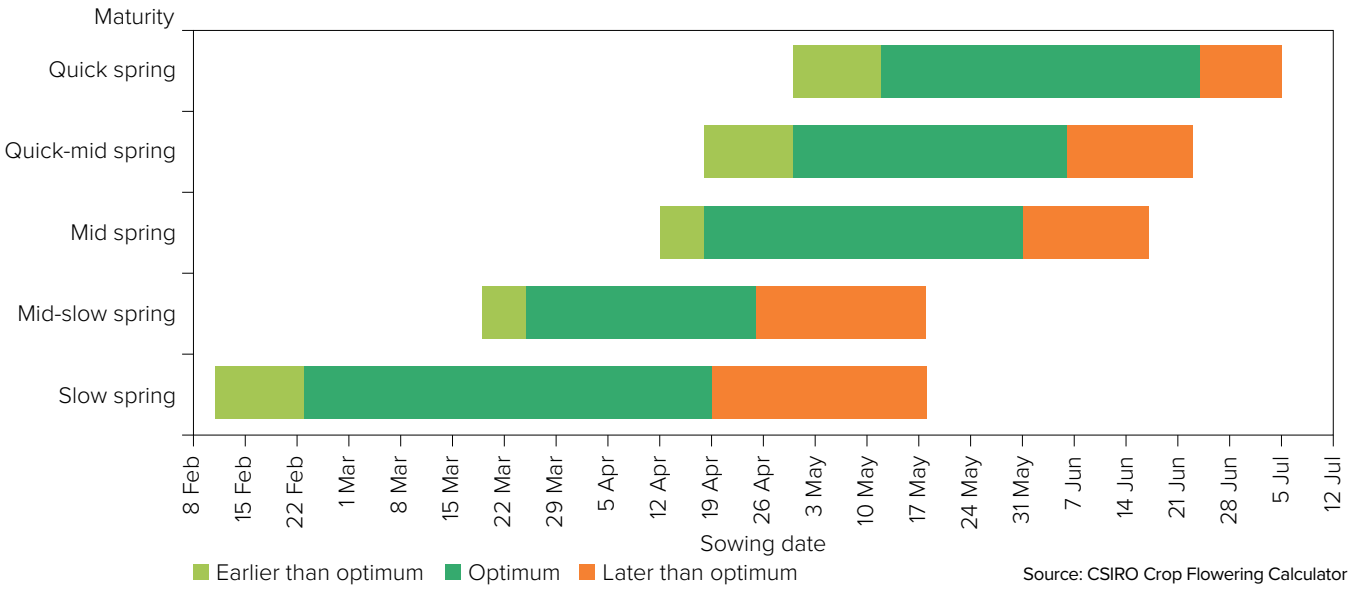
Growers and advisers are encouraged to use the Crop Flowering Calculator to compare the impact of specific variety selection and sowing date for the ideal flowering window at their own location. The Crop Flowering Calculator is a simple phenology (maturity) model that uses 60 years of local weather data to calculate a range of possible flowering dates for a specific environment for wheat, barley and canola.

The Crop Flowering Calculator helps optimise sowing programs by finding the variety or sowing time that best matches the optimal flowering window for a specific location. Select a location and crop type and then either 'Find a Variety' (to match a fixed sowing date), or find 'When to Sow' (to match a fixed variety).

This time of sowing guide (Figure 13) is automatically generated from the database that underpins the Crop Flowering Calculator. The guide presents the optimal sowing windows for generic varieties for a single location.

The Crop Flowering Calculator integrates the scientific outputs from several GRDC projects and Initiatives (CSP00187, CSP1901-002RTX, UOM1806-001RTX and CSP2206-012RTX) and brings together the diverse aspects of crop phenology (genetics, physiology and agronomy). This tool has been supported by CSIRO in partnership with GRDC through CSP2206-012RTX.

**Figure 13: Optimum time of sowing by variety maturity for Gibson as an example for Esperance.**




Source: CSIRO Crop Flowering Calculator

**Disclaimer:** This Crop Flowering Calculator is a work in progress and is still undergoing development. The results provided have not yet been fully validated and should be interpreted with caution and used at your own discretion.

# BARLEY

## New barley varieties

The following information is for barley varieties released in the 12 months to the date when the MET analysis was published on NVT online. Please go to nvt.grdc.com.au to find trial results for any new varieties released since the publication of this harvest report.

| Variety | Breeding company | Grain classification | End point royalty* ($) | Comments supplied by breeding company[1] |
|---|---|---|---|---|
| Bigfoot CL$^{\Phi}$ | Australian Grain Technologies Pty Ltd | FEED | 4.35 | Bigfoot CL$^{\Phi}$ is very similar to popular northern variety Yeti$^{\Phi}$ but tolerant to Clearfield® Intervix® herbicide. It has good grain size and test weight, having a short stature and lower risk of lodging. It is feed quality only. Bigfoot CL$^{\Phi}$ has a quick-mid spring maturity. |
| Granite$^{\Phi}$ CL | InterGrain Pty Ltd | FEED | 3.90 | Granite$^{\Phi}$ CL is a new Clearfield® feed barley for low to medium rainfall barley producing areas across Australia. Granite$^{\Phi}$ CL provides a significant yield improvement over Rosalind$^{\Phi}$ with the added benefit of herbicide tolerance. Granite$^{\Phi}$ CL has a quick-mid spring maturity. |
| PegasusAX$^{\Phi}$ | Australian Grain Technologies Pty Ltd | FEED | 4.15 | PegasusAX$^{\Phi}$ carries CoAXium herbicide tolerance (Aggressor® AX herbicide) and is a derivative of Rosalind$^{\Phi}$, with a similar plant type. It has similar grain size as some other high-yielding feed varieties and is feed quality only. PegasusAX$^{\Phi}$ has a quick-mid spring maturity. |
| RGT Atlantis$^{\Phi}$ | RAGT | Under malt evaluation | 4.25 | RGT Atlantis$^{\Phi}$ is a new waterlogging-tolerant barley with high yield potential in the medium to high-rainfall zones. It is bred from RGT Planet$^{\Phi}$ and has a similar maturity. It is the same plant structure and height as RGT Planet$^{\Phi}$. RGT Atlantis$^{\Phi}$ has a quick-mid spring maturity. |
| Spinnaker$^{\Phi}$ | Secobra Recherches | Under malt evaluation | 4.00 | Spinnaker$^{\Phi}$ has (Fathom$^{\Phi}$ x RGT Planet$^{\Phi}$) x European malt breeding line heritage. It is two to three days earlier maturing than RGT Planet$^{\Phi}$ with a May planting and has slightly shorter plant height than RGT Planet$^{\Phi}$. |

*EPR amount is ex-GST , $^{\Phi}$denotes Plant Breeder's Rights apply. [1]All data in the table was provided by breeders. Readers should raise any issues with the displayed data directly with the breeder. Grain classification downloaded from Grains Australia on 14/3/2025.

Refer to the latest *Crop Sowing Guide* for further information at nvt.grdc.com.au/resources/crop-sowing-guides

# Barley variety yield performance – Esperance

Yield results are presented from the top-performing varieties within each NVT location in the region for the past five seasons. Results are presented (as a percentage) for each variety relative to the mean trial yield for the location within each year. Varieties are listed in descending order of average yield over the period.

The Long Term Yield Reporter provides additional information on varieties not listed and can be viewed as a table or chart with error bars. Rainfall is provided for January to March (J–M) and April to October (A–O) and, where relevant, irrigation from April to October.

## Table 1: Cascade main season barley.

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| **Mean yield (t/ha)** | | | | | **4.16** |
| PegasusAX(ɗ)* | No trial | No trial | No trial | No trial | 107 |
| Rosalind(ɗ) | | | | | 107 |
| Combat(ɗ) | | | | | 105 |
| Neo(ɗ) CL* | | | | | 104 |
| Maximus(ɗ) CL* | | | | | 104 |
| Beast(ɗ) | | | | | 104 |
| Minotaur(ɗ) | | | | | 103 |
| La Trobe(ɗ) | | | | | 103 |
| Spartacus CL(ɗ)* | | | | | 102 |
| Bigfoot CL(ɗ)* | | | | | 102 |
| Buff(ɗ) | | | | | 101 |
| Granite(ɗ) CL* | | | | | 101 |
| Compass(ɗ) | | | | | 101 |
| Leabrook(ɗ) | | | | | 101 |
| Fathom(ɗ) | | | | | 101 |
| **Sowing date** | | | | | **23 May** |
| **Rainfall J–M (mm)** | | | | | **57** |
| **Rainfall A–O (mm)** | | | | | **296** |

Special thanks to 2024 trial cooperator, Scott Welke.
* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

## Table 2: Gibson main season barley.

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| **Mean yield (t/ha)** | **5.50** | **6.14** | **5.72** | **2.68** | **4.45** |
| Neo(ɗ) CL* | | | | 102 | 109 |
| Combat(ɗ) | | 105 | 110 | 96 | 105 |
| Cyclops(ɗ) | 107 | 106 | 106 | 114 | 105 |
| PegasusAX(ɗ)* | | | | | 105 |
| Granite(ɗ) CL* | | | | | 105 |
| Minotaur(ɗ) | 109 | 103 | 108 | 102 | 104 |
| RGT Planet(ɗ) | 110 | 107 | 109 | 92 | 100 |
| Spinnaker(ɗ) | | 106 | 109 | 94 | 101 |
| Rosalind(ɗ) | 103 | 103 | 107 | 107 | 105 |
| Zena(ɗ) CL* | | 106 | 108 | 88 | 99 |
| Laperouse(ɗ) | 103 | 102 | 102 | 111 | 103 |
| Maximus(ɗ) CL* | 99 | 99 | 103 | 117 | 105 |
| Fandaga(ɗ) | | | 106 | 92 | 100 |
| Leabrook(ɗ) | 100 | 104 | 98 | 108 | 102 |
| Bigfoot CL(ɗ)* | | | | | 103 |
| **Sowing date** | **12 May** | **14 May** | **17 May** | **21 May** | **4 Jun** |
| **Rainfall J–M (mm)** | **82** | **51** | **44** | **44** | **126** |
| **Rainfall A–O (mm)** | **346** | **510** | **521** | **451** | **279** |

Special thanks to 2024 trial cooperator, Kogody Farming.
* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

## Table 3: Mt Madden main season barley.

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| **Mean yield (t/ha)** | **3.10** | **4.28** | **3.97** | | **4.50** |
| Beast(ɗ) | 121 | 105 | 102 | Trial failed | 109 |
| Leabrook(ɗ) | 113 | 107 | 103 | | 110 |
| Compass(ɗ) | 113 | 106 | 103 | | 110 |
| Bigfoot CL(ɗ)* | | | | | 109 |
| Cyclops(ɗ) | 119 | 104 | 97 | | 109 |
| Titan AX(ɗ)* | | 105 | 103 | | 112 |
| PegasusAX(ɗ)* | | | | | 97 |
| Combat(ɗ) | | 103 | 109 | | 105 |
| Neo(ɗ) CL* | | | | | 97 |
| Laperouse(ɗ) | 115 | 100 | 95 | | 106 |
| Granite(ɗ) CL* | | | | | 106 |
| Commodus(ɗ) CL* | 108 | 100 | 99 | | 105 |
| Rosalind(ɗ) | 109 | 105 | 106 | | 93 |
| Maximus(ɗ) CL* | 122 | 98 | 94 | | 99 |
| Minotaur(ɗ) | 103 | 100 | 101 | | 100 |
| **Sowing date** | **13 May** | **20 May** | **22 May** | **3 Jun** | **8 May** |
| **Rainfall J–M (mm)** | **76** | **89** | **37** | **20** | **61** |
| **Rainfall A–O (mm)** | **196** | **338** | **354** | **181** | **189** |

Special thanks to 2024 trial cooperator, Chidnup Farms.
* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

## Table 4: Munglinup main season barley.

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| **Mean yield (t/ha)** | **2.58** | | **4.41** | **3.29** | |
| Neo(ɗ) CL* | | Trial failed | | 107 | No trial |
| Cyclops(ɗ) | 121 | | 104 | 112 | |
| Combat(ɗ) | | | 118 | 103 | |
| Minotaur(ɗ) | 108 | | 109 | 104 | |
| Laperouse(ɗ) | 116 | | 99 | 109 | |
| Maximus(ɗ) CL* | 116 | | 94 | 113 | |
| Rosalind(ɗ) | 102 | | 103 | 108 | |
| Beast(ɗ) | 112 | | 94 | 112 | |
| Leabrook(ɗ) | 109 | | 99 | 107 | |
| Titan AX(ɗ)* | | | 103 | 102 | |
| Spinnaker(ɗ) | | | 111 | 97 | |
| RGT Planet(ɗ) | 93 | | 112 | 94 | |
| Fandaga(ɗ) | | | 109 | 95 | |
| Zena(ɗ) CL* | | | 113 | 91 | |
| Spartacus CL(ɗ)* | 108 | | 89 | 108 | |
| **Sowing date** | **7 May** | **17 May** | **17 May** | **24 May** | |
| **Rainfall J–M (mm)** | **83** | **68** | **50** | **31** | |
| **Rainfall A–O (mm)** | **314** | **431** | **584** | **357** | |

No 2024 trial cooperator.
* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

## Table 5: Salmon Gums main season barley.

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 1.15 | | 3.60 | 2.05 | 3.26 |
| Beast(ɗ) | 153 | Compromised trial | 111 | 124 | 109 |
| Compass(ɗ) | 142 | | 104 | 121 | 104 |
| Bigfoot CL(ɗ)* | | | | 119 | 104 |
| Maximus(ɗ) CL* | 138 | | 110 | 106 | 106 |
| PegasusAX(ɗ)* | | | | 103 | 107 |
| Leabrook(ɗ) | 123 | | 107 | 120 | 104 |
| Rosalind(ɗ) | 133 | | 112 | 99 | 108 |
| Combat(ɗ) | | | 110 | 116 | 109 |
| Cyclops(ɗ) | 108 | | 109 | 117 | 103 |
| Commodus(ɗ) CL* | 133 | | 101 | 112 | 103 |
| La Trobe(ɗ) | 135 | | 104 | 102 | 105 |
| Fathom(ɗ) | 121 | | 100 | 113 | 106 |
| Granite(ɗ) CL* | | | | | 103 |
| Spartacus CL(ɗ)* | 135 | | 104 | 99 | 103 |
| Laperouse(ɗ) | 110 | | 105 | 111 | 102 |
| **Sowing date** | **20 May** | **25 May** | **20 May** | **5 Jun** | **1 Jun** |
| **Rainfall J–M (mm)** | **92** | **99** | **38** | **40** | **53** |
| **Rainfall A–O (mm)** | **158** | **269** | **299** | **168** | **171** |

Special thanks to 2024 trial cooperator, Digby Graham.
* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

## Table 6: Scaddan main season barley.

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 2.10 | 4.64 | 4.45 | 3.34 | 4.67 |
| Beast(ɗ) | 129 | 112 | 106 | 113 | 114 |
| Cyclops(ɗ) | 119 | 106 | 113 | 111 | 113 |
| Bigfoot CL(ɗ)* | | | | 112 | 115 |
| Leabrook(ɗ) | 117 | 110 | 107 | 110 | 111 |
| Compass(ɗ) | 117 | 110 | 101 | 110 | 111 |
| Maximus(ɗ) CL* | 123 | 103 | 104 | 109 | 113 |
| Granite(ɗ) CL* | | | | | 109 |
| PegasusAX(ɗ)* | | | | 107 | 109 |
| Laperouse(ɗ) | 114 | 103 | 108 | 108 | 110 |
| Titan AX(ɗ)* | | 107 | 108 | 106 | 104 |
| Rosalind(ɗ) | 116 | 106 | 101 | 105 | 107 |
| Combat(ɗ) | | 108 | 112 | 102 | 96 |
| Neo(ɗ) CL* | | | | 102 | 103 |
| Commodus(ɗ) CL* | 112 | 104 | 98 | 105 | 105 |
| Spartacus CL(ɗ)* | 114 | 99 | 98 | 104 | 109 |
| **Sowing date** | **3 Jun** | **18 May** | **4 May** | **22 May** | **5 Jun** |
| **Rainfall J–M (mm)** | **48** | **51** | **44** | **36** | **126** |
| **Rainfall A–O (mm)** | **250** | **510** | **521** | **225** | **279** |

Special thanks to 2024 trial cooperator, Greg Shipley.
* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

# Barley variety quality – Esperance

Grain quality for individual varieties varies from site to site and from year to year. However, long-term and across-site trends highlight varieties that can consistently achieve high protein percentage, high test weight or low grain screenings under a wider range of environments.

The following figures show the grain quality trends as histograms from 2023 and 2024 NVT averaged for trials in the Esperance region. Only the varieties evaluated at every site are included. These are plotted in order of performance, up to a maximum of 20.

## Protein and yield comparisons

**Figure 1: Protein (%) and yield (t/ha) comparisons for main season barley varieties from four NVT sites in Esperance in 2023.**

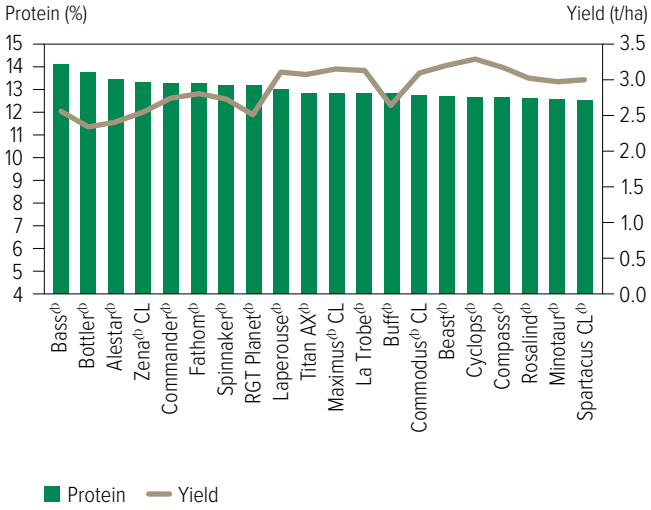
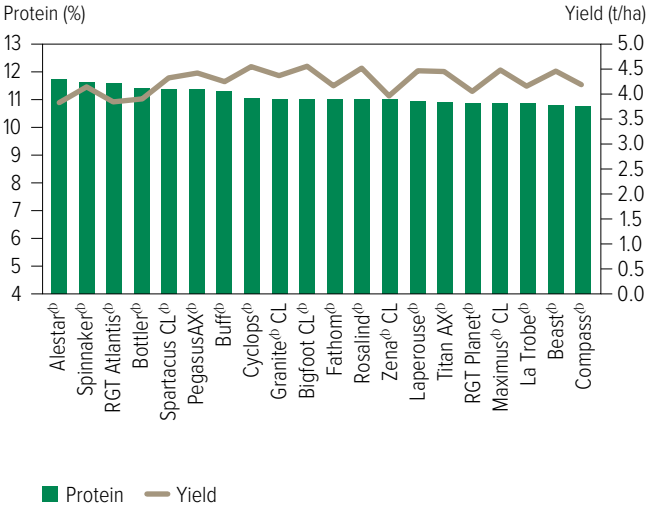



**Figure 2: Protein (%) and yield (t/ha) comparisons for main season barley varieties from five NVT sites in Esperance in 2024.**




## Test weight comparisons

**Figure 3: Test weight (kg/hL) comparisons for main season barley varieties from four NVT sites in Esperance in 2023.**

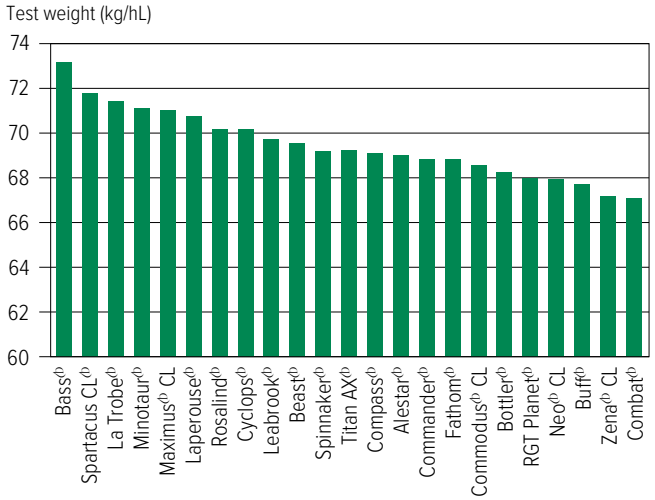
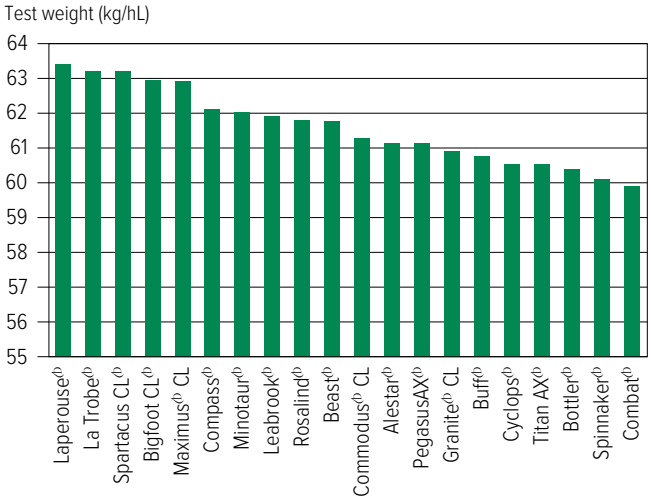



**Figure 4: Test weight (kg/hL) comparisons for main season barley varieties from five NVT sites in Esperance in 2024.**



## Screenings comparisons

**Figure 5: Screenings (<2.5mm) comparisons for main season barley varieties from four NVT sites in Esperance in 2023.**

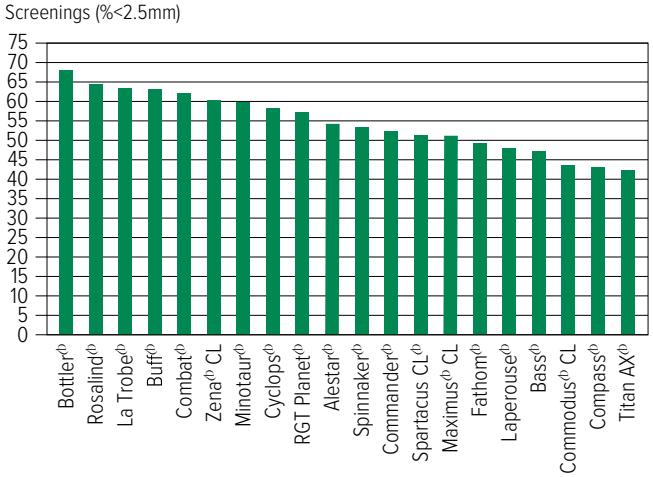
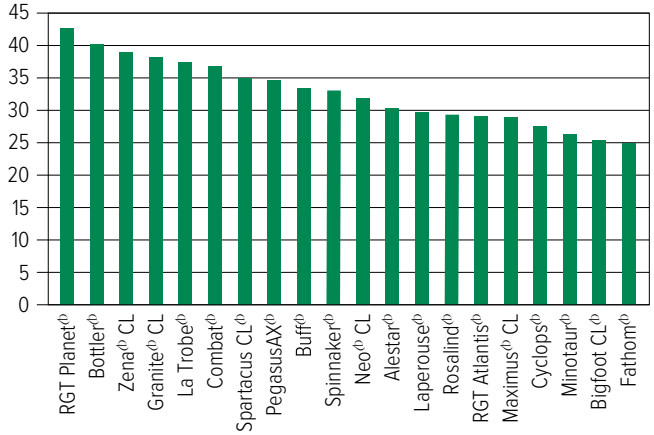



**Figure 6: Screenings (<2.5mm) comparisons for main season barley varieties from five NVT sites in Esperance in 2024.**




## Retention comparisons

**Figure 7: Retention (>2.5mm) comparisons for main season barley varieties from four NVT sites in Esperance in 2023.**

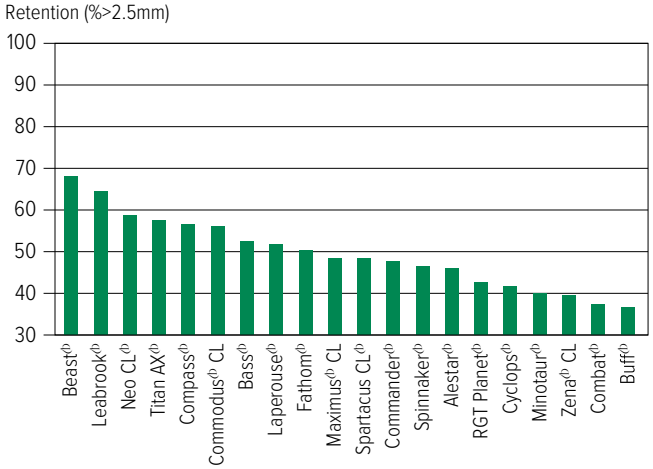
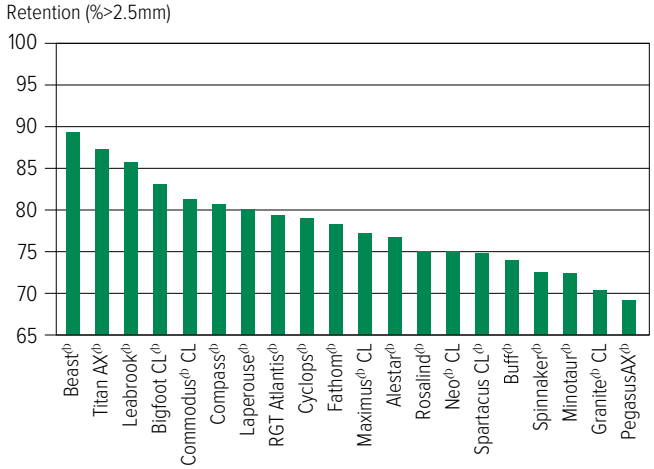



**Figure 8: Retention (>2.5mm) comparisons for main season barley varieties from five NVT sites in Esperance in 2024.**



# Barley variety disease ratings – Western Australia

The following tables contain varietal ratings for the predominant diseases of barley in Western Australia. These ratings are updated annually by crop pathologists and were released in March 2025.

Selected varieties of most relevance to Western Australian growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and tolerance ratings.

**Table 7: Barley disease guide for Western Australia.**

| Variety | Scald | Net form net blotch | Spot form net blotch | Powdery mildew | Leaf rust | Crown rot | Black point | Barley yellow dwarf virus | RLN resistance (*Pratylenchus neglectus*) | RLN resistance (*Pratylenchus quasitereoides*) | CCN | Ramularia |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alestar(ɸ) | S | MRMS-S | S | RMR | MRMS | S | MRMS | MRMS | MR | | R^ (P) | SVS |
| Beast(ɸ) | S | MRMS-S | S | RMR | S | S | MSS | MS | MRMS | MSS | MR | SVS |
| Bigfoot CL(ɸ) | S (P) | MRMS | MS | RMR | S | MSS (P) | S (P) | MS | MR | MSS (P) | R | SVS |
| Bottler(ɸ) | S | MRMS-MSS | MSS | RMR | MRMS | SVS | MRMS | MRMS-MS | MS | | | SVS |
| Buff(ɸ) | MSS | MRMS-MSS | S | MSS | SVS | S | MS | MRMS | MRMS | S | | SVS |
| Combat(ɸ) | S | MRMS-S | MRMS | R | MS | MSS | MSS | MRMS | MRMS | S (P) | MR | SVS |
| Commander(ɸ) | MS | MRMS-S | MSS | RMR | S | S | MSS | MRMS | MRMS | | R | SVS |
| Commodus(ɸ) CL | MSS | MRMS-S | MSS | RMR | SVS | S | MS | MRMS | MRMS | MS | R | SVS |
| Compass(ɸ) | MSS | MRMS-S | MS | R | SVS | MSS | MSS | MS | MRMS | S | R | SVS |
| Cyclops(ɸ) | MRMS | MR-MS | S | R | S | MSS | MSS | MSS | MRMS | MSS | S | SVS |
| Fandaga(ɸ) | S | R-MRMS | MS | RMR | MRMS | MS | MRMS | MS | MR | MS (P) | R | SVS |
| Fathom(ɸ) | MR | MS-S | MR | MR | MRMS | SVS | MSS | MS | MRMS | MSS | R | SVS |
| Flinders(ɸ) | MSS | MR-S | MSS | RMR | MRMS | MSS | MRMS | MRMS | MRMS | MSS (P) | S | SVS |
| Granite(ɸ) CL | MS (P) | R-MRMS (P) | MS (P) | R (P) | S (P) | SVS (P) | | MR (P) | | | | SVS (P) |
| Kiwi | S | MRMS-MS | MSS | RMR | MS | MSS | MS | MRMS | MRMS | | S | SVS |
| La Trobe(ɸ) | MR | MRMS-S | MSS | MS | MS | S | MSS | MS | MRMS | S | R | SVS |
| Laperouse(ɸ) | S | MRMS-S | MS | RMR | S | S | MSS | MRMS | MRMS | MS | S | SVS |
| Leabrook(ɸ) | S | MRMS-S | MS | RMR | S | S | MS | MS | MRMS | MS | RMR | SVS |
| Litmus(ɸ) | S | MRMS-S | S | R | S | S | MS | MSS | MS | MSS (P) | MS | SVS |
| Maximus(ɸ) CL | MR | MRMS-S | MSS | RMR/S | S | S | MSS | MRMS | MRMS | S | R | SVS |
| Minotaur(ɸ) | VS | MRMS-MS | S | S | S | MSS | MRMS | MS | MRMS | MS | R | SVS |
| Neo(ɸ) CL | MRMS | MRMS-MSS | MRMS | R (P) | MS | VS (P) | MRMS (P) | MRMS | MR | S (P) | R | SVS |
| Newton | MR | MRMS | MS | R | MR | MSS (P) | MRMS (P) | MS | MRMS | | MSS | S |
| PegasusAX(ɸ) | MS | MRMS | MSS | MS | MR | MSS (P) | MSS (P) | MS | MR | MSS (P) | R | SVS |
| RGT Atlantis(ɸ) | MR | MS | MSS | R | MRMS | SVS (P) | MRMS (P) | MRMS | MR | S (P) | R | SVS |
| RGT Planet(ɸ) | MR | MRMS-SVS | S | R | MRMS | MSS | MRMS | MRMS | MRMS | MS | R | SVS |
| Rosalind(ɸ) | MSS | MR-S | S | MSS | MR | S | MS | MRMS | MRMS | MSS | R | SVS |
| Scope CL(ɸ) | MS | MRMS-MSS | MSS | RMR | MS | S | MS | MRMS | MRMS | MRMS | S | SVS |
| Spartacus CL(ɸ) | MR | MRMS-S | SVS | MS | MS | S | MSS | MSS | MRMS | MSS | R | SVS |
| Spinnaker(ɸ) | MRMS | MRMS-S | S | R | MS | MSS | MRMS | MRMS | MR | MS (P) | S | SVS |
| Titan AX(ɸ) | S | MRMS-S | MS | RMR | S | MSS | MSS | MS | MR | MS (P) | MR (P) | SVS |
| Urambie | MR | MRMS | MS | MRMS-MSS | MSS | MSS | MRMS | MRMS | MRMS | | | SVS |
| Westminster(ɸ) | MRMS | MRMS-MSS | MSS | RMR | MRMS | MSS | MRMS | MRMS | MRMS | | | SVS |
| Yeti(ɸ) | S | MR-S | MSS | MR | S | S | MSS | MS | MR | | RMR | SVS |
| Zena(ɸ) CL | MR | MRMS-S | S | R | MRMS | S | MRMS (P) | MRMS | MRMS | MS (P) | R | SVS |

Learn more via the NVT Disease Ratings.
R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible,
T = tolerant, MT = moderately tolerant, MI = moderately intolerant, I = intolerant, VI = very intolerant,
(P) = provisional rating, - hyphen indicates a range, / indicates pathotype differences, # warning, may be more susceptible to alternate pathotypes,
^ line contains a few susceptible off types, ( ) show outlier.

# OAT

## New oat varieties

The following information is for oat varieties released in the 12 months to the date when the MET analysis was published on NVT online. Please go to nvt.grdc.com.au to find trial results for any new varieties released since the publication of this harvest report.

| Variety | Breeding company | End point royalty* ($) | Comments supplied by breeding company[1] |
|---|---|---|---|
| Goldie(Φ) | InterGrain Pty Ltd | 3.50 | Goldie(Φ) is a new high-yielding milling oat and is suited to all oat growing regions of southern NSW, Victoria, SA and WA. Goldie(Φ) is a mid-spring maturing oat and is well suited for the second week of April to mid-May sowing window. Goldie(Φ) has a medium-tall plant height and has excellent panicle emergence. It has good test weight and low screenings. Along with excellent grain yield and quality attributes, early hay yield and quality data looks promising for export hay. Goldie(Φ) has a mid-spring maturity. |
| Minnie(Φ) | InterGrain Pty Ltd | 3.50 | Minnie(Φ) provides excellent yield potential for medium to high rainfall oat growing regions of southern NSW, Victoria, SA and WA. Its short-medium plant height allows improved lodging and harvestability in higher yielding situations. Minnie(Φ) has a mid-slow spring maturity. |

*EPR amount is ex-GST, (Φ)denotes Plant Breeder's Rights apply. [1]All data in the table was provided by breeders. Readers should raise any issues with the displayed data directly with the breeder.



Refer to the latest *Crop Sowing Guide* for further information at nvt.grdc.com.au/resources/crop-sowing-guides

# Oat variety yield performance – Esperance

Yield results are presented from the top-performing varieties within each NVT location in the region for the past five seasons. Results are presented (as a percentage) for each variety relative to the mean trial yield for the location within each year. Varieties are listed in descending order of average yield over the period.

The Long Term Yield Reporter provides additional information on varieties not listed and can be viewed as a table or chart with error bars. Rainfall is provided for January to March (J–M) and April to October (A–O) and, where relevant, irrigation from April to October.

**Table 1: Gibson oat.**

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 3.55 | 4.84 | 5.37 | 2.00 | |
| Archer(ф)* | | | | 106 | No trial |
| Koala(ф) | 124 | 111 | 116 | 83 | |
| Goldie(ф) | | 114 | 110 | 108 | |
| Wallaby(ф) | | | | 70 | |
| Bannister(ф) | 117 | 110 | 111 | 94 | |
| Kojonup(ф) | 124 | 105 | 111 | 87 | |
| Williams(ф) | 122 | 103 | 107 | 99 | |
| Minnie(ф) | | | 108 | 101 | |
| Wandering | 109 | 109 | 106 | 106 | |
| Bilby(ф) | 110 | 105 | 102 | 116 | |
| **Sowing date** | **12 May** | **14 May** | **17 May** | **21 May** | |
| **Rainfall J–M (mm)** | **82** | **51** | **44** | **44** | |
| **Rainfall A–O (mm)** | **346** | **510** | **521** | **451** | |

No 2024 trial cooperator.
* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

**Table 2: Holt Rock oat.**

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 2.92 | 1.99 | 5.42 | 2.55 | 3.68 |
| Goldie(ф) | | 106 | 108 | 113 | 109 |
| Wandering | 111 | 104 | 106 | 110 | 107 |
| Minnie(ф) | | | 103 | 107 | 104 |
| Bannister(ф) | 108 | 104 | 112 | 102 | 97 |
| Archer(ф)* | | | | 98 | 103 |
| Bilby(ф) | 106 | 102 | 97 | 108 | 113 |
| Koala(ф) | 106 | 104 | 119 | 95 | 87 |
| Williams(ф) | 99 | 102 | 108 | 98 | 98 |
| Kojonup(ф) | 96 | 100 | 108 | 87 | 88 |
| Wallaby(ф) | | | | 79 | 76 |
| **Sowing date** | **4 May** | **21 May** | **27 Apr** | **7 May** | **4 Jun** |
| **Rainfall J–M (mm)** | **75** | **98** | **100** | **13** | **128** |
| **Rainfall A–O (mm)** | **155** | **287** | **331** | **185** | **191** |

Special thanks to 2024 trial cooperator, Gavin and Hayley Hill.
* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

# Oat variety disease ratings – Western Australia

The following tables contain varietal ratings for the predominant diseases of oat in Western Australia. These ratings are updated annually by crop pathologists and were released in March 2025.

Selected varieties of most relevance to Western Australian growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and tolerance ratings.

**Table 3: Oat disease guide for Western Australia.**

| Variety | Septoria blotch | Leaf rust (crown rust) | Stem rust | Barley yellow dwarf virus (BYDV) | Bacterial blight | RLN resistance (*Pratylenchus neglectus*) | CCN |
|---|---|---|---|---|---|---|---|
| Archer(Φ) | MSS | MR | MSS | MSS | MSS | MS (P) | VS |
| Bannister(Φ) | MSS | RMR | MS | MSS | S | MS | MRMS |
| Bilby(Φ) | S | MR | SVS | S | SVS | MS (P) | VS |
| Brusher | MSS | MR | S | S | SVS | MS (P) | MR |
| Carrolup | S | VS | MSS | SVS | MSS | MR | VS |
| Durack(Φ) | S | MSS | S | S | S | MRMS | MRMS |
| Echidna | SVS | SVS | S | MSS | S | MS (P) | MRMS |
| Goldie(Φ) | MSS | RMR | MSS | MS | MSS | MS (P) | MR |
| Kingbale(Φ) | MS | SVS | MSS | MS | MSS | MRMS | R |
| Koala(Φ) | MSS | MR | MRMS | MSS | S | MRMS | R |
| Kojonup(Φ) | S | SVS | MSS | MSS | SVS | MS (P) | VS |
| Kowari(Φ) | S | MR | S | S | S | MS (P) | S |
| Kultarr(Φ) | MS | MR | SVS | MSS | MSS | MS (P) | MRMS |
| Minnie(Φ) | S | RMR | MSS | S | S | MS (P) | RMR |
| Mitika(Φ) | SVS | MSS | S | SVS | S | MS (P) | VS |
| Mulgara(Φ) | S/MS | MR | MR | MSS | MSS | MS (P) | R |
| Tungoo(Φ) | MRMS# | MR | MRMS | MSS | MSS | MS (P) | MR |
| Wallaby(Φ) | MSS | MR | MRMS | MSS | MSS | MS | MR |
| Wandering | S | VS | SVS | S | S | MS (P) | VS |
| Williams(Φ) | MSS | MR | MSS | MSS | MSS | MRMS | VS |
| Wintaroo | MS# | S | MS | MS | MSS | MS (P) | R |
| Yallara(Φ) | MSS | RMR | S | MSS | S | MR | R |

Learn more via the NVT Disease Ratings.
R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, T = tolerant, MT = moderately tolerant, MI = moderately intolerant, I = intolerant, VI = very intolerant, (P) = provisional rating, - hyphen indicates a range, / indicates pathotype differences, # warning, may be more susceptible to alternate pathotypes, ^ line contains a few susceptible off types, ( ) show outlier.

# CANOLA

## New canola varieties

The following information is for canola varieties released in the 12 months to the date when the MET analysis was published on NVT online. Please go to nvt.grdc.com.au to find trial results for any new varieties released since the publication of this harvest report.

| Variety | Breeding company | End point royalty* ($) | Comments supplied by breeding company[1] |
|---|---|---|---|
| DG Buller G | Nutrien Ag Solutions Ltd | N/A | DG Buller G will be available to growers in 2025. It is a 5 series, Optimum GLY® hybrid. DG Buller G is medium height with good standability. It has good oil content. |
| InVigor® LR 3540P | BASF Australia Ltd | N/A | InVigor® LR 3540P is an early maturing hybrid with PodGuard®. InVigor® LR 3540P contains dual herbicide tolerance to Liberty® and Truflex®. InVigor® LR 3540P combines the flexibility of PodGuard® and dual herbicide tolerance with early maturity. InVigor® LR 3540P is suited to lower-rainfall and shorter-season areas. |
| InVigor® LR 5040P | BASF Australia Ltd | N/A | InVigor® LR5040P is a mid-season hybrid with PodGuard®. InVigor® LR5040P contains dual herbicide tolerance to Liberty® and Truflex®. InVigor® LR5040P combines the flexibility of PodGuard® and dual herbicide tolerance with high yield and oil results. InVigor® LR5040P is suited to mid-season growing regions. |
| Monola® H524TT | Nuseed Pty Ltd | N/A | Monola® H524TT is an early-mid maturing Monola® TT hybrid with excellent early vigour. It is Nuseed's second Monola® TT hybrid with improved yield and oil profile. It has demonstrated competitive yield and oil content to commercial canola TT hybrids during trials and exhibits strong early vigour and good early biomass. Suited to medium to slow canola growing regions, Monola® H524TT demonstrates good harvestability. Limited commercial release in 2024. |
| Nuseed® Griffon TTI | Nuseed Pty Ltd | N/A | Nuseed® Griffon TTI is Nuseed's first dual-herbicide hybrid canola, with triazine and IMI tolerance for flexible, effective crop protection. It is an early-mid maturing variety ideal for target yield environments of 0.5 to 3t/ha, which ensures fast pod development to safeguard yield. Commercial release in 2025. Rapid pod development for higher yields and a shorter growing season. |
| Pioneer® PY323G | Pioneer | N/A | Pioneer® PY323G (coded AA1421G) is an early maturing Optimum GLY® hybrid variety. Suited to early and early-mid season growing regions, it is medium in height. First tested in NVT 2023. Marketed by Pioneer Seeds. |
| Pioneer® PY327C | Pioneer | N/A | Pioneer® PY327C (coded AA0424I) is an early maturing Clearfield® hybrid suited to medium to high rainfall zones. It has mid-fast phenology and a medium-tall plant height. First tested in NVT 2023. Marketed by Pioneer Seeds. |
| Pioneer® PY422G | Pioneer | N/A | Pioneer® PY422G (coded AA1418G) is an early-mid maturing Optimum GLY® hybrid suited to early-mid and mid-season growing regions with medium height. First tested in NVT 2023. Marketed by Pioneer Seeds. |

Continued on next page



Refer to the latest *Crop Sowing Guide* for further information at nvt.grdc.com.au/resources/crop-sowing-guides

| Variety | Breeding company | End point royalty* ($) | Comments supplied by breeding company[1] |
|---|---|---|---|
| Pioneer® PY424GC | Pioneer | N/A | Pioneer® PY424GC (coded WW1958W) is an early-mid maturing combination Optimum GLY® and Clearfield® hybrid suited to early and early-mid season growing regions. It has medium height. First tested in NVT 2023. Marketed by Pioneer Seeds. |
| Pioneer® PY428R | Pioneer | N/A | Pioneer® PY428R (coded D257-18) is an early-mid maturing Roundup Ready® hybrid suited to early and early-mid season growing regions and is medium in height. First tested in NVT 2023. Marketed by Pioneer Seeds. |
| Pioneer® PY429T | Pioneer | N/A | Pioneer® PY429T (coded AA902T) is a widely adapted early-mid maturing triazine-tolerant hybrid. Best suited to medium to medium-high rainfall zones. Medium plant height. First tested in NVT 2023. Marketed by Pioneer Seeds. |
| Pioneer® PY432T | Pioneer | N/A | Variety description not supplied. |
| Pioneer® PY525G | Pioneer | N/A | Pioneer® PY525G (coded AA1409G) is a mid-maturing Optimum GLY® hybrid variety suited to mid-season growing regions with medium-tall height. First tested in NVT 2023. Marketed by Pioneer Seeds. |

*EPR amount is ex-GST, ⓟdenotes Plant Breeder's Rights apply. [1]All data in the table was provided by breeders. Readers should raise any issues with the displayed data directly with the breeder.

# Canola variety yield performance – Esperance

Yield results are presented from the top-performing varieties within each NVT location in the region for the past five seasons. Results are presented (as a percentage) for each variety relative to the mean trial yield for the location within each year. Varieties are listed in descending order of average yield over the period.

The Long Term Yield Reporter provides additional information on varieties not listed and can be viewed as a table or chart with error bars. Rainfall is provided for January to March (J–M) and April to October (A–O) and, where relevant, irrigation from April to October.

## Table 1: Cascade med-high rainfall GLY.

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | | | | | 2.68 |
| Nuseed® Hunter TF | No trial | No trial | No trial | No trial | 111 |
| InVigor® LR 4540P | | | | | 111 |
| InVigor® LR 5040P | | | | | 110 |
| Nuseed® Eagle TF | | | | | 109 |
| InVigor® R 4520P | | | | | 108 |
| DG Buller G | | | | | 106 |
| Pioneer® 44Y27 RR | | | | | 105 |
| Nuseed® Raptor TF | | | | | 104 |
| Pioneer® PY424GC | | | | | 103 |
| Pioneer® PY323G | | | | | 103 |
| **Sowing date** | | | | | **30 Apr** |
| **Rainfall J–M (mm)** | | | | | **57** |
| **Rainfall A–O (mm)** | | | | | **296** |

Special thanks to 2024 trial cooperator, Scott Welke.
Yield performance of 'stacked' varieties with tolerances to multiple herbicide systems should not be compared to varieties in trials where the variety has not specifically been tested, even for the same location. The following varieties were included in this trial, but have not been tested in other herbicide trials at this location: Hyola® Regiment XC, Pioneer® PY424GC.
Learn more via the NVT Long Term Yield Reporter

## Table 2: Gibson med-high rainfall GLY.

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 2.97 | 3.32 | | | |
| Pioneer® 45Y28 RR | 106 | 113 | Compromised trial | Trial failed | Compromised trial |
| Nuseed® Eagle TF | | 113 | | | |
| Nuseed® Condor TF | 107 | 111 | | | |
| Hyola® Regiment XC | | 109 | | | |
| Nuseed® Raptor TF | 103 | 106 | | | |
| DG Drummond TF | | 106 | | | |
| Pioneer® 44Y30 RR | 105 | 100 | | | |
| InVigor® R 4520P | 107 | 98 | | | |
| DG Hotham TF | | 102 | | | |
| Hyola® Garrison XC | 95 | 99 | | | |
| **Sowing date** | **22 Apr** | **3 May** | **30 Apr** | **28 Apr** | **2 May** |
| **Rainfall J–M (mm)** | **82** | **51** | **44** | **44** | **126** |
| **Rainfall A–O (mm)** | **346** | **510** | **521** | **451** | **279** |

Special thanks to 2024 trial cooperator, Christian Seimer.
Yield performance of 'stacked' varieties with tolerances to multiple herbicide systems should not be compared to varieties in trials where the variety has not specifically been tested, even for the same location. The following varieties were included in this trial, but have not been tested in other herbicide trials at this location: Hyola® Regiment XC.
Learn more via the NVT Long Term Yield Reporter

## Table 3: Grass Patch med-high rainfall GLY.

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | | | | | 1.46 |
| Nuseed® Emu TF | No trial | No trial | No trial | No trial | 125 |
| InVigor® LR 4540P | | | | | 121 |
| Nuseed® Hunter TF | | | | | 118 |
| Pioneer® 44Y27 RR | | | | | 115 |
| InVigor® LR 5040P | | | | | 112 |
| Pioneer® PY424GC | | | | | 111 |
| InVigor® R 4520P | | | | | 111 |
| Pioneer® PY323G | | | | | 110 |
| Nuseed® Raptor TF | | | | | 105 |
| Hyola® Regiment XC | | | | | 103 |
| **Sowing date** | | | | | **11 May** |
| **Rainfall J–M (mm)** | | | | | **53** |
| **Rainfall A–O (mm)** | | | | | **171** |

Special thanks to 2024 trial cooperator, Sam Defrenne.
Yield performance of 'stacked' varietie with tolerances to multiple herbicide systems should not be compared to varieties in trials where the variety has not specifically been tested, even for the same location. The following varieties were included in this trial, but have not been tested in other herbicide trials at this location: Hyola® Regiment XC, Pioneer® PY424GC.
Learn more via the NVT Long Term Yield Reporter

## Table 4: Munglinup med-high rainfall GLY.

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 3.13 | 2.78 | | 2.22 | |
| Pioneer® PY428R | | | Trial failed | 107 | No trial |
| Nuseed® Hunter TF | | | | 107 | |
| InVigor® LR 4540P | | | | 107 | |
| InVigor® LR 5040P | | | | 106 | |
| Pioneer® 45Y28 RR | 108 | 103 | | 104 | |
| Pioneer® 44Y30 RR | 101 | 110 | | 105 | |
| InVigor® R 4520P | 101 | 109 | | 105 | |
| Nuseed® Eagle TF | | 102 | | 103 | |
| Nuseed® Raptor TF | 103 | 102 | | 103 | |
| Hyola® Regiment XC | | 98 | | 101 | |
| **Sowing date** | **30 Apr** | **23 Apr** | **28 Apr** | **30 Apr** | |
| **Rainfall J–M (mm)** | **83** | **68** | **50** | **31** | |
| **Rainfall A–O (mm)** | **314** | **431** | **584** | **357** | |

No 2024 trial cooperator.
Learn more via the NVT Long Term Yield Reporter

## Table 5: Scaddan med-high rainfall GLY.

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 2.64 | 2.86 | 2.77 | 1.63 | |
| InVigor® LR 4540P | | | 105 | 113 | No trial |
| Nuseed® Hunter TF | | | 105 | 111 | |
| InVigor® LR 5040P | | | 106 | 109 | |
| Pioneer® 44Y30 RR | | 103 | 105 | 107 | |
| InVigor® R 4520P | 103 | 104 | 105 | 108 | |
| Pioneer® 44Y27 RR | 105 | 102 | 102 | 108 | |
| Pioneer® 45Y28 RR | | | | 100 | |
| Pioneer® PY323G | | | | 105 | |
| Pioneer® PY424GC | | | | 106 | |
| Nuseed® Emu TF | | | 98 | 113 | |
| **Sowing date** | **23 Apr** | **26 Apr** | **14 Apr** | **25 Apr** | |
| **Rainfall J–M (mm)** | **48** | **51** | **27** | **36** | |
| **Rainfall A–O (mm)** | **250** | **510** | **322** | **225** | |

No 2024 trial cooperator.
Learn more via the NVT Long Term Yield Reporter

## Table 6: Mt Madden low-med rainfall GLY.

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | | | | | |
| | No trial | No trial | No trial | No trial | Compromised trial |
| **Sowing date** | | | | | **7 May** |
| **Rainfall J–M (mm)** | | | | | **61** |
| **Rainfall A–O (mm)** | | | | | **189** |

Special thanks to 2024 trial cooperator, Chidnup Farms.
Yield performance of 'stacked' varieties with tolerances to multiple herbicide systems should not be compared to varieties in trials where the variety has not specifically been tested, even for the same location. The following varieties were included in this trial, but have not been tested in other herbicide trials at this location: Hyola® Regiment XC, Pioneer® PY424GC.

## Table 7: Gibson med-high rainfall IMI.

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 3.07 | 3.28 | | | |
| Pioneer® 45Y95 CL | | 121 | Compromised trial | Trial failed | Compromised trial |
| Pioneer® 44Y94 CL | 114 | 114 | | | |
| Pioneer® 45Y93 CL | 108 | 116 | | | |
| Hyola® Solstice CL | | 110 | | | |
| Pioneer® 44Y90 CL | 105 | | | | |
| Pioneer® 43Y92 CL | 104 | | | | |
| Hyola® Equinox CL | 101 | 100 | | | |
| Pioneer® 45Y91 CL | 99 | | | | |
| VICTORY® V75-03CL | 93 | 96 | | | |
| VICTORY® V7002CL | 86 | | | | |
| **Sowing date** | **22 Apr** | **3 May** | **30 Apr** | **28 Apr** | **2 May** |
| **Rainfall J–M (mm)** | **82** | **51** | **44** | **44** | **126** |
| **Rainfall A–O (mm)** | **346** | **510** | **521** | **451** | **279** |

Special thanks to 2024 trial cooperator, Christian Seimer.
Learn more via the NVT Long Term Yield Reporter

## Table 8: Cascade med-high rainfall TT.

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | | | | | |
| | No trial | No trial | No trial | No trial | Compromised trial |
| **Sowing date** | | | | | **30 Apr** |
| **Rainfall J–M (mm)** | | | | | **57** |
| **Rainfall A–O (mm)** | | | | | **296** |

Special thanks to 2024 trial cooperator, Scott Welke.
Yield performance of 'stacked' varieties with tolerances to multiple herbicide systems should not be compared to varieties in trials where the variety has not specifically been tested, even for the same location. The following varieties were included in this trial, but have not been tested in other herbicide trials at this location: Hyola® Defender CT, Nuseed® Griffon TTI, Pioneer® PY520TC.

## Table 9: Gibson med-high rainfall TT.

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 2.94 | 3.26 | | | |
| HyTTec® Trifecta | 113 | 119 | Compromised trial | Trial failed | Compromised trial |
| Hyola® Blazer TT | 112 | 116 | | | |
| Pioneer® PY520TC | | 115 | | | |
| HyTTec® Trophy | 110 | 110 | | | |
| SF Dynatron TT® | | 106 | | | |
| DG Bidgee TT(ϕ) | | 112 | | | |
| InVigor® T 4511 | | 104 | | | |
| SF Ignite TT | 100 | 107 | | | |
| InVigor® T 6010 | 101 | 106 | | | |
| RGT Capacity TT | | 103 | | | |
| **Sowing date** | **22 Apr** | **3 May** | **30 Apr** | **28 Apr** | **2 May** |
| **Rainfall J–M (mm)** | **82** | **51** | **44** | **44** | **126** |
| **Rainfall A–O (mm)** | **346** | **510** | **521** | **451** | **279** |

Special thanks to 2024 trial cooperator, Christian Seimer.
Yield performance of 'stacked' varieties with tolerances to multiple herbicide systems should not be compared to varieties in trials where the variety has not specifically been tested, even for the same location. The following varieties were included in this trial, but have not been tested in other herbicide trials at this location: Hyola® Defender CT, Nuseed® Griffon TTI, Pioneer® PY520TC.
Learn more via the NVT Long Term Yield Reporter

## Table 10: Grass Patch med-high rainfall TT.

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | | | | | 1.29 |
| HyTTec® Trident | No trial | No trial | No trial | No trial | 124 |
| HyTTec® Velocity | | | | | 122 |
| Nuseed® Griffon TTI | | | | | 113 |
| HyTTec® Trophy | | | | | 112 |
| InVigor® LT 4530P | | | | | 110 |
| SF Dynatron TT® | | | | | 109 |
| InVigor® T 4511 | | | | | 109 |
| HyTTec® Trifecta | | | | | 104 |
| Pioneer® PY520TC | | | | | 103 |
| Hyola® Blazer TT | | | | | 103 |
| **Sowing date** | | | | | **11 May** |
| **Rainfall J–M (mm)** | | | | | **53** |
| **Rainfall A–O (mm)** | | | | | **171** |

Special thanks to 2024 trial cooperator, Sam Defrenne.
Yield performance of 'stacked' varieties with tolerances to multiple herbicide systems should not be compared to varieties in trials where the variety has not specifically been tested, even for the same location. The following varieties were included in this trial, but have not been tested in other herbicide trials at this location: Hyola® Defender CT, Nuseed® Griffon TTI, Pioneer® PY520TC.
Learn more via the NVT Long Term Yield Reporter

## Table 11: Munglinup med-high rainfall TT.

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 2.85 | 2.44 | 2.66 | 1.98 | |
| Pioneer® PY429T | | | | 112 | No trial |
| HyTTec® Trifecta | 114 | 109 | 109 | 109 | |
| Hyola® Blazer TT | 112 | 113 | 106 | 110 | |
| Pioneer® PY520TC | | 111 | 104 | 109 | |
| HyTTec® Trophy | 108 | 112 | 106 | 109 | |
| SF Dynatron TT® | | 113 | 102 | 108 | |
| Hyola® Defender CT | | | 100 | 107 | |
| RGT Baseline® TT | | 101 | 104 | 103 | |
| InVigor® T 4511 | | 106 | 104 | 104 | |
| InVigor® T 4510 | 101 | 109 | 101 | 105 | |
| **Sowing date** | **30 Apr** | **23 Apr** | **28 Apr** | **30 Apr** | |
| **Rainfall J–M (mm)** | **83** | **68** | **50** | **31** | |
| **Rainfall A–O (mm)** | **314** | **431** | **584** | **357** | |

No 2024 trial cooperator.
Learn more via the NVT Long Term Yield Reporter

## Table 12: Scaddan med-high rainfall TT.

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 2.41 | 2.72 | 2.50 | 1.49 | |
| Pioneer® PY429T | | | | 107 | No trial |
| HyTTec® Trident | 113 | 103 | 105 | 113 | |
| HyTTec® Trophy | 110 | 104 | 107 | 108 | |
| HyTTec® Trifecta | | | 108 | 104 | |
| Hyola® Blazer TT | 109 | 105 | 110 | 102 | |
| Pioneer® PY520TC | | | | 102 | |
| SF Dynatron TT® | 107 | 104 | 108 | 105 | |
| HyTTec® Velocity | | | 102 | 114 | |
| Hyola® Defender CT | | | 109 | 99 | |
| Nuseed® Griffon TTI | | | | 107 | |
| **Sowing date** | **23 Apr** | **26 Apr** | **14 Apr** | **25 Apr** | |
| **Rainfall J–M (mm)** | **48** | **51** | **27** | **36** | |
| **Rainfall A–O (mm)** | **250** | **510** | **322** | **225** | |

No 2024 trial cooperator.
Learn more via the NVT Long Term Yield Reporter

## Table 13: Mt Madden low-med rainfall TT.

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| **Mean yield (t/ha)** | | **1.91** | **3.18** | | |
| HyTTec® Velocity | Trial failed | | 104 | Trial failed | Compromised trial |
| HyTTec® Trident | | 131 | 109 | | |
| Hyola® Blazer TT | | | 116 | | |
| SF Dynatron TT® | | | 112 | | |
| HyTTec® Trophy | | | 110 | | |
| Hyola® Defender CT | | | 112 | | |
| InVigor® T 4510 | | 114 | 105 | | |
| InVigor® LT 4530P | | | 109 | | |
| RGT Capacity TT | | | 100 | | |
| Renegade TT(1) | | 105 | 106 | | |
| **Sowing date** | **1 May** | **23 Apr** | **19 Apr** | **6 May** | **7 May** |
| **Rainfall J–M (mm)** | **76** | **89** | **37** | **20** | **61** |
| **Rainfall A–O (mm)** | **196** | **338** | **354** | **181** | **189** |

Special thanks to 2024 trial cooperator, Chidnup Farms.
Yield performance of 'stacked' varieties with tolerances to multiple herbicide systems should not be compared to varieties in trials where the variety has not specifically been tested, even for the same location. The following varieties were included in this trial, but have not been tested in other herbicide trials at this location: Hyola® Defender CT, Nuseed® Griffon TTI.
Learn more via the NVT Long Term Yield Reporter

# Australian canola variety disease ratings

The following table contains varietal ratings for blackleg disease of canola.
These ratings are updated twice a year by crop pathologists and were released in autumn 2025.

**Table 14: Canola disease guide – autumn 2025 ratings and resistance groups.**

| Variety | 2025 autumn blackleg rating | | | 2025 upper canopy infection blackleg rating | Type | Major gene resistance group of cultivar |
|---|---|---|---|---|---|---|
| | Bare | Fluopyram (e.g. ILeVo®) | Pydiflumetofen (e.g. Saltro®) | | | |
| **CONVENTIONAL VARIETIES** | | | | | | |
| Outlaw(ф) | RMR | R | R | MR-UCI | Open pollinated | A |
| Nuseed® Diamond | RMR | R | R | MR-UCI | Hybrid | ABF |
| Nuseed® Quartz | MR | | | MR-UCI | Hybrid | ABD |
| **TRIAZINE-TOLERANT VARIETIES** | | | | | | |
| Pioneer® PY429T | R | | R | R-UCI | Hybrid, Triazine | ABH |
| HyTTec® Trifecta | R | | | MR-UCI | Hybrid, Triazine | ABD |
| DG Bidgee TT(ф) | R | R | R | R-UCI | Open pollinated, Triazine | H |
| HyTTec® Trident | R | | | MR-UCI | Hybrid, Triazine | AD |
| HyTTec® Trophy | R | R | R | MR-UCI | Hybrid, Triazine | AD |
| DG Torrens TT(ф) | RMR | | | R-UCI | Open pollinated, Triazine | H |
| *Monola*® H524TT | RMR | | | MR-UCI | High stability oil, hybrid, Triazine | AD |
| Hyola® Blazer TT | RMR | | R | MR-UCI | Hybrid, Triazine | ADF |
| *Monola*® H421TT | RMR | | | MR-UCI | High stability oil, hybrid, Triazine | BC |
| InVigor® T 4511 | RMR | R | | MR-UCI | Hybrid, Triazine | Unknown |
| ATR-Bluefin(ф) | RMR | | | MR-UCI | Open pollinated, Triazine | AB |
| Renegade TT(ф) | MR | R | R | MR-UCI | Open pollinated, Triazine | A |
| SF Spark™ TT | MR | R | R | MR-UCI | Hybrid, Triazine | ABDS |
| HyTTec® Velocity | MR | | | MR-UCI | Hybrid, Triazine | AB |
| *Monola*® 422TT | MR | | | MR-UCI | High stability oil, open pollinated, Triazine | BC |
| DG Avon TT(ф) | MR | | R | MR-UCI | Open pollinated, Triazine | AC |
| SF Dynatron™ TT | MRMS | R | R | MRMS-UCI | Hybrid, Triazine | BC |
| ATR-Swordfish(ф) | MRMS | | | MRMS-UCI | Open pollinated, Triazine | AB |
| RGT Baseline™ TT | MRMS | RMR | R | MRMS-UCI | Hybrid, Triazine | B |
| Bandit TT(ф) | MRMS | RMR | R | MRMS-UCI | Open pollinated, Triazine | A |
| RGT Capacity™ TT | MRMS | RMR | R | MRMS-UCI | Hybrid, Triazine | B |
| ATR-Bonito(ф) | MS | MR | RMR | MS-UCI | Open pollinated, Triazine | A |
| **IMIDAZOLINONE-TOLERANT VARIETIES** | | | | | | |
| Captain CL | R | | | R-UCI | Winter, hybrid, Clearfield® | AH |
| Hyola® Solstice CL | R | | R | R-UCI | Hybrid, Clearfield® | ADFH |
| Hyola® Feast CL | R | | R | R-UCI | Winter, hybrid, Clearfield® | H |
| Phoenix CL | R | | | MR-UCI | Winter, hybrid, Clearfield® | B |
| Hyola® 970CL | R | | R | R-UCI | Winter, hybrid, Clearfield® | H |
| RGT Nizza™ CL | R | | | MR-UCI | Winter, hybrid, Clearfield® | B |
| Pioneer® PN526C | R | | R | MR-UCI | High stability oil, hybrid, Clearfield® | ABD |
| Pioneer® PY327C | R | | R | MR-UCI | Hybrid, Clearfield® | AB |
| RGT Clavier™ CL | R | | | R-UCI | Winter, hybrid, Clearfield® | ACH |
| Pioneer® 45Y95 CL | RMR | | | MR-UCI | Hybrid, Clearfield® | C |
| Pioneer® PY421C | RMR | | R | MR-UCI | Hybrid, Clearfield® | A |
| Nuseed® Ceres IMI | RMR | | | MR-UCI | Hybrid, Imidazolinone | AD |
| Pioneer® 43Y92 CL | RMR | R | R | MR-UCI | Hybrid, Clearfield® | B |
| VICTORY® V75-03CL | RMR | R | | MR-UCI | High stability oil, hybrid, Clearfield® | AB |
| Pioneer® 44Y94 CL | RMR | | | MR-UCI | Hybrid, Clearfield® | BC |

Continued on next page

## Table 14: Canola disease guide – autumn 2025 ratings and resistance groups (continued).

| Variety | 2025 autumn blackleg rating | | | 2025 upper canopy infection blackleg rating | Type | Major gene resistance group of cultivar |
|---|---|---|---|---|---|---|
| | Bare | Fluopyram (e.g. ILeVo®) | Pydiflumetofen (e.g. Saltro®) | | | |
| **IMIDAZOLINONE AND TRIAZINE-TOLERANT VARIETIES** | | | | | | |
| Hyola® Defender CT | R | | R | MR-UCI | Hybrid, Clearfield®, Triazine | ADF |
| Pioneer® PY520 TC | RMR | | R | MR-UCI | Hybrid, Clearfield®, Triazine | BC |
| Nuseed® Griffon TTI | RMR | | | MR-UCI | Hybrid, Imidazolinone, Triazine | AC |
| **GLYPHOSATE-TOLERANT VARIETIES** | | | | | | |
| DG Hotham TF | R | | | R-UCI | Hybrid, TruFlex® | ABH |
| Nuseed® Raptor TF | R | | | MR-UCI | Hybrid, TruFlex® | AD |
| Nuseed® Eagle TF | R | | | MR-UCI | Hybrid, TruFlex® | ABD |
| VICTORY® V55-04TF | R | R | | MR-UCI | High stability oil, hybrid, TruFlex® | AB |
| DG Lofty TF | R | | | R-UCI | Hybrid, TruFlex® | ABH |
| Nuseed® Hunter TF | RMR | | | MR-UCI | Hybrid, TruFlex® | AB |
| Pioneer® PY422G | RMR | | R | MR-UCI | Hybrid, Optimum GLY® | AB |
| Pioneer® 44Y27 RR | RMR | R | R | MR-UCI | Hybrid, Roundup Ready® | B |
| DG Buller G | RMR | | | R-UCI | Hybrid, Optimum GLY® | H |
| Nuseed® Emu TF | MR | | | MR-UCI | Hybrid, TruFlex® | AB |
| Pioneer® PY525G | MR | | R | MR-UCI | Hybrid, Optimum GLY® | AB |
| Pioneer® PY323G | MR | | R | MR-UCI | Hybrid, Optimum GLY® | BC |
| Pioneer® PY428R | MR | | R | MR-UCI | Hybrid, Roundup Ready® | B |
| InVigor® R 4520P | MRMS | R | | MRMS-UCI | Hybrid, Truflex® | B |
| **GLYPHOSATE AND IMIDAZOLINONE-TOLERANT VARIETIES** | | | | | | |
| Hyola® Regiment XC | R | R | R | R-UCI | Hybrid, TruFlex®, Clearfield® | ADFH |
| Pioneer® PY424GC | MR | | R | MR-UCI | Hybrid, TruFlex®, Clearfield® | BC |
| **GLUFOSINATE AND TRIAZINE-TOLERANT VARIETIES** | | | | | | |
| InVigor® LT 4530P | RMR | R | | MR-UCI | Hybrid, LibertyLink®, Triazine | BF |
| **GLUFOSINATE AND GLYPHOSATE-TOLERANT VARIETIES** | | | | | | |
| InVigor® LR 4540P | RMR | R | | MR-UCI | Hybrid, LibertyLink®, TruFlex® | B |
| InVigor® LR 5040P | RMR | R | | MR-UCI | Hybrid, LibertyLink®, TruFlex® | AB |
| InVigor® LR 3540P | MR | R | | MR-UCI | Hybrid, LibertyLink®, TruFlex® | AB |

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, UCI = upper canopy infection.
Please check updated ratings using the Blackleg Management Guide or the NVT Disease Ratings.

# CHICKPEA

## Chickpea variety yield performance – Esperance

Yield results are presented from the top-performing varieties within each NVT location in the region for the past five seasons. Results are presented (as a percentage) for each variety relative to the mean trial yield for the location within each year. Varieties are listed in descending order of average yield over the period.

The Long Term Yield Reporter provides additional information on varieties not listed and can be viewed as a table or chart with error bars. Rainfall is provided for January to March (J–M) and April to October (A–O) and, where relevant, irrigation from April to October.

**Table 1: Scaddan desi chickpea.**

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| **Mean yield (t/ha)** | **1.22** | **0.83** | **1.17** | **0.94** | **1.12** |
| PBA Slasher(Ф) | 102 | 109 | 103 | 94 | 97 |
| PBA Striker(Ф) | 104 | 119 | 95 | 93 | 94 |
| Neelam(Ф) | 97 | 120 | 98 | 97 | 94 |
| CBA Captain(Ф) | 107 | 99 | 85 | 100 | 100 |
| PBA Maiden | 91 | 101 | 93 | 96 | 88 |
| Genesis® 836 | 89 | 84 | 87 | 106 | 93 |
| Genesis® 090 | 76 | 78 | 93 | | 85 |
| PBA Seamer(Ф) | | | 86 | | |
| **Sowing date** | **3 Jun** | **13 May** | **18 May** | **29 May** | **21 May** |
| **Rainfall J–M (mm)** | **48** | **51** | **44** | **36** | **126** |
| **Rainfall A–O (mm)** | **250** | **510** | **521** | **225** | **279** |

Special thanks to 2024 trial cooperator, Kim Jones.
Learn more via the NVT Long Term Yield Reporter



Refer to the latest *Crop Sowing Guide* for further information at
nvt.grdc.com.au/resources/crop-sowing-guides

# Chickpea variety disease ratings – Western Australia

The following table contains varietal ratings for the predominant diseases of chickpea in Western Australia. These ratings are updated annually by crop pathologists and were released in March 2025.

Selected varieties of most relevance to Western Australian growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and tolerance ratings.

**Table 2: Chickpea disease guide for Western Australia.**

| Variety | Ascochyta blight (pathogen group 2 – north) | 2022-23 Phytophthora root rot | RLN resistance (*Pratylenchus neglectus*)* | RLN tolerance (*Pratylenchus neglectus*) |
|---|---|---|---|---|
| **DESI** | | | | |
| CBA Captain(b) | MS (P) | S | | MT |
| Genesis® 836 | S | | | MII |
| Kyabra(b) | VS | VS | | MT |
| Neelam(b) | S | | | MI |
| PBA Boundary(b) | S | VS | | MTMI |
| PBA Drummond(b) | VS | VS | | TMT |
| PBA HatTrick(b) | S | S | | MT |
| PBA Maiden | S | | | MI |
| PBA Pistol(b) | VS | | | T |
| PBA Seamer(b) | MS | S | | MTMI |
| PBA Slasher(b) | S | | | MI |
| PBA Striker(b) | S | | | MI |
| **KABULI** | | | | |
| Almaz(b) | MS | | | MI |
| Genesis® 090 | MS | | | IVI |
| Genesis® Kalkee | S | | | VI |
| PBA Magnus(b) | MS | | | MI |
| PBA Monarch(b) | MS (P) | | | IVI |
| PBA Royal(b) | MS | | | MII |

* ratings will be updated when available.
Learn more via the NVT Disease Ratings.
R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, T = tolerant, MT = moderately tolerant, MI = moderately intolerant, I = intolerant, VI = very intolerant, (P) = provisional rating, - hyphen indicates a range, / indicates pathotype differences, # warning, may be more susceptible to alternate pathotypes, ^ line contains a few susceptible off types, ( ) show outlier.

# FABA BEAN

## Faba bean variety yield performance – Esperance

Yield results are presented from the top-performing varieties within each NVT location in the region for the past five seasons. Results are presented (as a percentage) for each variety relative to the mean trial yield for the location within each year. Varieties are listed in descending order of average yield over the period.

The Long Term Yield Reporter provides additional information on varieties not listed and can be viewed as a table or chart with error bars. Rainfall is provided for January to March (J–M) and April to October (A–O) and, where relevant, irrigation from April to October.

**Table 1: Scaddan faba bean.**

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 2.00 | 2.54 | 2.32 | 1.50 | 1.50 |
| PBA Marne(ф) | 109 | 102 | 102 | 90 | 110 |
| PBA Bendoc(ф)* | 98 | 101 | 98 | 100 | 102 |
| Nura | 93 | 97 | 93 | 102 | 96 |
| Fiesta VF | 97 | 95 | 92 | 96 | 95 |
| PBA Amberley(ф) | 90 | 97 | 92 | 101 | 95 |
| PBA Zahra(ф) | 90 | 96 | 89 | 95 | 97 |
| PBA Samira(ф) | 89 | 95 | 89 | 98 | 92 |
| Farah | 92 | 94 | 88 | 94 | 94 |
| PBA Rana | | 85 | 82 | 111 | 67 |
| **Sowing date** | **23 Apr** | **29 Apr** | **2 May** | **29 May** | **21 May** |
| **Rainfall J–M (mm)** | **48** | **51** | **44** | **36** | **126** |
| **Rainfall A–O (mm)** | **250** | **510** | **521** | **225** | **279** |

Special thanks to 2024 trial cooperator, Kim Jones.
* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter



Refer to the latest *Crop Sowing Guide* for further information at nvt.grdc.com.au/resources/crop-sowing-guides

# Faba bean variety disease ratings – Western Australia

The following table contains varietal ratings for the predominant diseases of faba bean in Western Australia. These ratings are updated annually by crop pathologists and were released in March 2025.

Selected varieties of most relevance to Western Australian growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and tolerance ratings.

**Table 2: Faba bean disease guide for Western Australia.**

| Variety | Ascochyta blight | Cercospora leaf spot | Chocolate spot (Botrytis) | RLN resistance (*Pratylenchus thornei*) | Leaf rust |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

TO BE UPDATED

Learn more via the NVT Disease Ratings.
R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, (P) = provisional rating.

# FIELD PEA

## Field pea variety yield performance – Esperance

Yield results are presented from the top-performing varieties within each NVT location in the region for the past five seasons. Results are presented (as a percentage) for each variety relative to the mean trial yield for the location within each year. Varieties are listed in descending order of average yield over the period.

The Long Term Yield Reporter provides additional information on varieties not listed and can be viewed as a table or chart with error bars. Rainfall is provided for January to March (J–M) and April to October (A–O) and, where relevant, irrigation from April to October.

**Table 1: Grass Patch field pea.**

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 0.47 | 1.99 | 1.73 | 1.27 | 1.08 |
| APB Bondi[Ф] | 113 | 109 | 113 | 99 | 100 |
| PBA Butler[Ф] | 107 | 112 | 107 | 103 | 87 |
| PBA Oura[Ф] | 99 | 101 | 100 | 105 | 109 |
| PBA Taylor[Ф] | 104 | 101 | 101 | 99 | 105 |
| PBA Gunyah[Ф] | 97 | 100 | 97 | 102 | 102 |
| PBA Wharton[Ф] | 99 | 93 | 98 | 95 | 105 |
| PBA Twilight[Ф] | 96 | 92 | 97 | 96 | 101 |
| Kaspa | 97 | 98 | 94 | 97 | 92 |
| GIA Ourstar[Ф]* | 90 | 88 | 94 | 97 | 96 |
| GIA Kastar[Ф]* | 86 | 70 | 86 | 75 | 71 |
| **Sowing date** | **27 May** | **25 May** | **20 May** | **4 Jun** | **11 Jun** |
| **Rainfall J–M (mm)** | **92** | **99** | **38** | **40** | **53** |
| **Rainfall A–O (mm)** | **158** | **269** | **299** | **168** | **171** |

Special thanks to 2024 trial cooperator, Ron Longbottom.
* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

**Table 2: Holt Rock field pea.**

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 1.24 | 0.87 | 1.27 | | |
| APB Bondi[Ф] | 109 | 126 | 107 | | |
| PBA Butler[Ф] | 95 | 121 | 117 | | |
| PBA Taylor[Ф] | 106 | 108 | 97 | | |
| PBA Oura[Ф] | 104 | 95 | 100 | | |
| PBA Gunyah[Ф] | 99 | 96 | 100 | Trial failed | Trial failed |
| Kaspa | 94 | 98 | 99 | | |
| PBA Wharton[Ф] | 104 | 96 | 90 | | |
| PBA Twilight[Ф] | 99 | 89 | 92 | | |
| GIA Ourstar[Ф]* | 92 | 74 | 92 | | |
| GIA Kastar[Ф]* | 80 | 67 | 77 | | |
| **Sowing date** | **4 Jun** | **28 May** | **22 May** | **4 Jun** | **5 Jun** |
| **Rainfall J–M (mm)** | **75** | **98** | **100** | **13** | **128** |
| **Rainfall A–O (mm)** | **155** | **287** | **331** | **185** | **191** |

Special thanks to 2024 trial cooperator, Tristan Cornwall.
* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter



Refer to the latest *Crop Sowing Guide* for further information at nvt.grdc.com.au/resources/crop-sowing-guides

**Table 3: Mt Madden field pea.**

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | | | | | 2.66 |
| APB Bondi(ф) | No trial | No trial | No trial | No trial | 116 |
| PBA Taylor(ф) | | | | | 115 |
| PBA Wharton(ф) | | | | | 106 |
| Kaspa | | | | | 105 |
| PBA Butler(ф) | | | | | 104 |
| PBA Gunyah(ф) | | | | | 98 |
| PBA Twilight(ф) | | | | | 95 |
| PBA Oura(ф) | | | | | 94 |
| GIA Kastar(ф)* | | | | | 86 |
| GIA Ourstar(ф)* | | | | | 75 |
| **Sowing date** | | | | | **4 Jun** |
| **Rainfall J–M (mm)** | | | | | **61** |
| **Rainfall A–O (mm)** | | | | | **189** |

Special thanks to 2024 trial cooperator, Chidnup Farms.
* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

**Table 4: Scaddan field pea.**

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 1.61 | 1.82 | 1.24 | 1.71 | 0.96 |
| PBA Butler(ф) | 116 | 116 | 132 | 106 | 94 |
| APB Bondi(ф) | 115 | 117 | 125 | 98 | 107 |
| PBA Taylor(ф) | 102 | 107 | 104 | 99 | 108 |
| Kaspa | 99 | 102 | 102 | 99 | 96 |
| PBA Gunyah(ф) | 97 | 98 | 97 | 103 | 101 |
| PBA Oura(ф) | 96 | 95 | 93 | 104 | 104 |
| PBA Wharton(ф) | 95 | 97 | 89 | 93 | 105 |
| PBA Twilight(ф) | 93 | 91 | 85 | 94 | 99 |
| GIA Ourstar(ф)* | 88 | 79 | 74 | 94 | 88 |
| GIA Kastar(ф)* | 88 | 79 | 68 | 71 | 74 |
| **Sowing date** | **3 Jun** | **27 May** | **18 May** | **29 May** | **14 Jun** |
| **Rainfall J–M (mm)** | **48** | **51** | **44** | **36** | **126** |
| **Rainfall A–O (mm)** | **250** | **510** | **521** | **225** | **279** |

Special thanks to 2024 trial cooperator.
* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

## Field pea variety disease ratings – Western Australia

The following table contains varietal ratings for the predominant diseases of field pea in Western Australia. These ratings are updated annually by crop pathologists and were released in March 2025.

Selected varieties of most relevance to Western Australian growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and tolerance ratings.

**Table 5: Field pea disease guide for Western Australia.**

| Variety | | | | | |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

**TO BE UPDATED**

Learn more via the NVT Disease Ratings.
R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, (P) = provisional rating, ( ) show outlier.

# LENTIL

## Lentil variety yield performance – Esperance

Yield results are presented from the top-performing varieties within each NVT location in the region for the past five seasons. Results are presented (as a percentage) for each variety relative to the mean trial yield for the location within each year. Varieties are listed in descending order of average yield over the period.

The Long Term Yield Reporter provides additional information on varieties not listed and can be viewed as a table or chart with error bars. Rainfall is provided for January to March (J–M) and April to October (A–O) and, where relevant, irrigation from April to October.

**Table 1: Scaddan lentil.**

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 0.52 | 1.77 | 1.13 | 0.78 | 0.83 |
| GIA Lightning(Φ)* | 113 | 110 | 111 | 114 | 101 |
| GIA Thunder(Φ)* | 97 | 110 | 92 | 116 | 109 |
| PBA HighlandXT(Φ)* | 108 | 101 | 109 | 107 | 104 |
| PBA Bolt(Φ) | 110 | 98 | 118 | 104 | 98 |
| PBA Hallmark XT(Φ)* | 103 | 104 | 94 | 97 | 99 |
| ALB Terrier(Φ)* | | 109 | 83 | 103 | 101 |
| PBA Jumbo2(Φ) | 89 | 100 | 90 | 106 | 108 |
| GIA Sire(Φ)* | | 92 | 112 | 83 | 95 |
| PBA Hurricane XT(Φ)* | 93 | 97 | 94 | 96 | 99 |
| PBA KelpieXT(Φ)* | 84 | 87 | 98 | 100 | 110 |
| **Sowing date** | **11 May** | **13 May** | **18 May** | **29 May** | **21 May** |
| **Rainfall J–M (mm)** | **48** | **51** | **44** | **36** | **126** |
| **Rainfall A–O (mm)** | **250** | **510** | **521** | **225** | **279** |

Special thanks to 2024 trial cooperator, Kim Jones.

* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

Refer to the latest *Crop Sowing Guide* for further information at nvt.grdc.com.au/resources/crop-sowing-guides

# Lentil variety disease ratings – Western Australia

The following table contains varietal ratings for the predominant diseases of lentil in Western Australia. These ratings are updated annually by crop pathologists and were released in March 2025.

Selected varieties of most relevance to Western Australian growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and tolerance ratings.

**Table 2: Lentil disease guide for Western Australia.**

| Variety | Ascochyta blight (Pathotype 2 PBA Hurricane XT(P) virulent) | Ascochyta blight (Pathotype 1 Nipper(P) virulent) | Botrytis grey mould | RLN resistance (*Pratylenchus neglectus*) | RLN resistance (*Pratylenchus thornei*) |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

TO BE UPDATED

Learn more via the NVT Disease Ratings.
R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, (P) = provisional rating.

# LUPIN

## Lupin variety yield performance – Esperance

Yield results are presented from the top-performing varieties within each NVT location in the region for the past five seasons. Results are presented (as a percentage) for each variety relative to the mean trial yield for the location within each year. Varieties are listed in descending order of average yield over the period.

The Long Term Yield Reporter provides additional information on varieties not listed and can be viewed as a table or chart with error bars. Rainfall is provided for January to March (J–M) and April to October (A–O) and, where relevant, irrigation from April to October.

**Table 1: Gibson narrow-leaf lupin.**

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 2.16 | 1.75 | | | 3.11 |
| Rosemont(Φ) | | | Trial failed | Compromised trial | 102 |
| Gidgee(Φ) | | 114 | | | 99 |
| Coyote(Φ) | 112 | 105 | | | 105 |
| Lawler(Φ) | 114 | 109 | | | 100 |
| PBA Jurien(Φ) | 105 | | | | 104 |
| Mandelup(Φ) | 103 | 103 | | | 100 |
| PBA Barlock(Φ) | 94 | 98 | | | 104 |
| PBA Gunyidi(Φ) | 94 | 96 | | | 104 |
| PBA Bateman(Φ) | 92 | 94 | | | 106 |
| PBA Leeman(Φ) | 93 | 92 | | | 98 |
| **Sowing date** | **23 Apr** | **3 May** | **29 Apr** | **20 May** | **28 May** |
| **Rainfall J–M (mm)** | **82** | **51** | **44** | **44** | **126** |
| **Rainfall A–O (mm)** | **346** | **510** | **521** | **451** | **279** |

Special thanks to 2024 trial cooperator, Christian Seimer.
Learn more via the NVT Long Term Yield Reporter

**Table 2: Holt Rock narrow-leaf lupin.**

| Year | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 1.22 | 1.88 | 2.73 | 0.93 | 1.94 |
| Rosemont(Φ) | | | 116 | 95 | 108 |
| PBA Jurien(Φ) | 106 | | 111 | 102 | 109 |
| Gidgee(Φ) | | 113 | 111 | 95 | 103 |
| Lawler(Φ) | 104 | 108 | 106 | 96 | 102 |
| Coyote(Φ) | 113 | 105 | 98 | 96 | 110 |
| PBA Barlock(Φ) | 103 | 99 | 105 | 105 | 107 |
| Mandelup(Φ) | 101 | 103 | 104 | 100 | 101 |
| PBA Gunyidi(Φ) | 103 | 96 | 98 | 103 | 105 |
| PBA Bateman(Φ) | 106 | 95 | 94 | 102 | 108 |
| PBA Leeman(Φ) | 96 | 92 | 83 | 97 | 92 |
| **Sowing date** | **1 May** | **24 Apr** | **6 May** | **8 May** | **10 May** |
| **Rainfall J–M (mm)** | **75** | **98** | **100** | **13** | **128** |
| **Rainfall A–O (mm)** | **155** | **287** | **331** | **185** | **191** |

Special thanks to 2024 trial cooperator, Tristan Cornwall.
Learn more via the NVT Long Term Yield Reporter



Refer to the latest *Crop Sowing Guide* for further information at nvt.grdc.com.au/resources/crop-sowing-guides

# Lupin variety disease ratings – Western Australia

The following table contains varietal ratings for the predominant diseases of lupin in Western Australia. These ratings are updated annually by crop pathologists and were released in March 2025.

Selected varieties of most relevance to Western Australian growers are listed in alphabetical order and disease ratings are colour-coded to match resistance and tolerance ratings.

**Table 3: Lupin disease guide for Western Australia.**

| Variety | Anthracnose resistance | Cucumber mosaic virus (CMV) | Phomopsis pod infection | Phomopsis stem infection | Sclerotinia stem rot |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

TO BE UPDATED

Learn more via the NVT Disease Ratings.
R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, (P) = provisional rating.

GRDC
NATIONAL VARIETY TRIALS™

# NVT tools

**Trial results**

**Long term yield reporter**

**NVT disease ratings**

**Harvest Reports & Crop Sowing Guide**


## nvt.grdc.com.au

Subscribe to NVT notifications that are sent the moment results for your local NVT trials are available.

Subscribe to receive the latest NVT publications (Harvest Reports and Crop Sowing Guides), and other NVT communications.

@GRDC_NVT