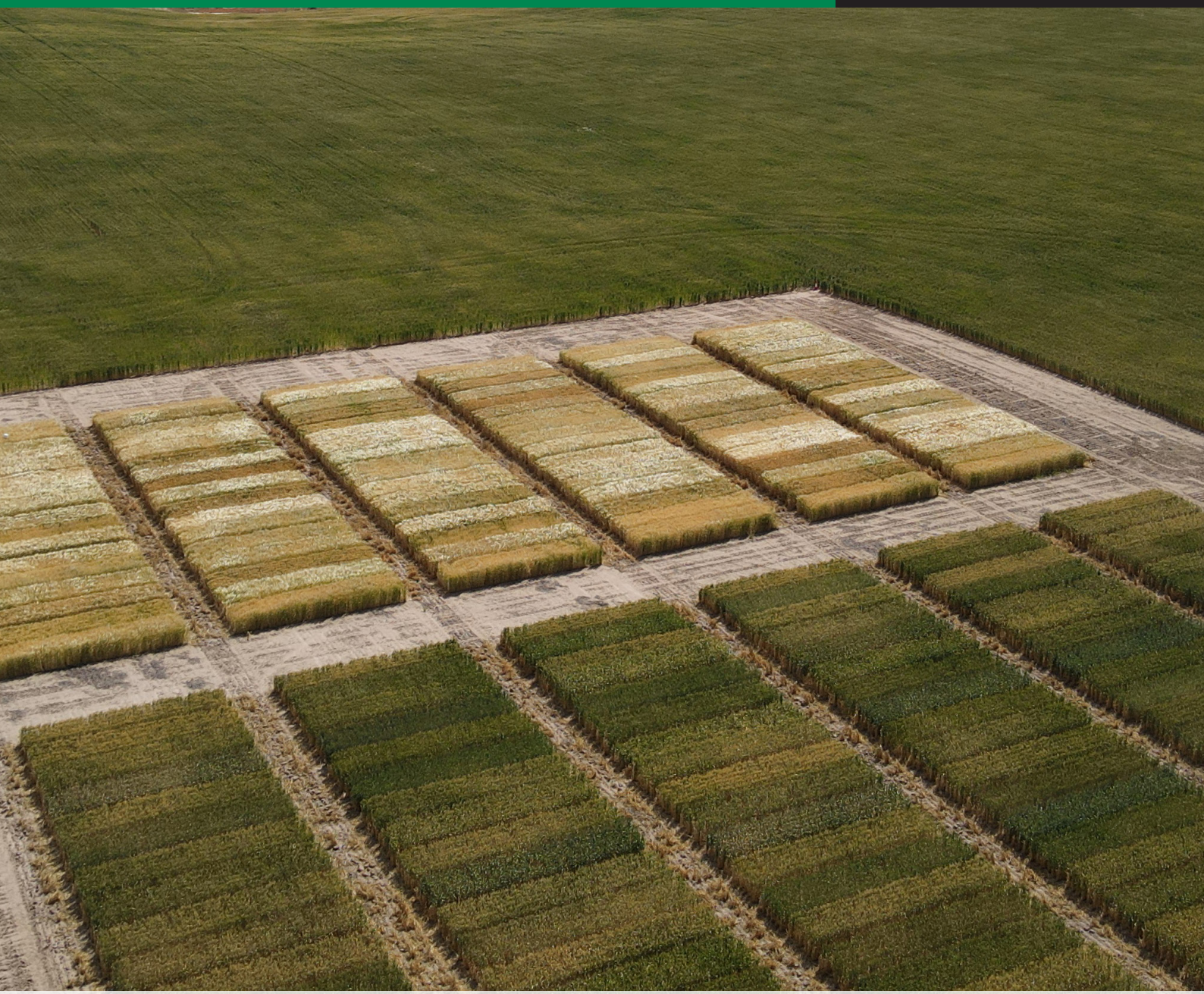
# NVT
# HARVEST REPORT

GRDC NATIONAL VARIETY TRIALS™

REVISED MAY 2023



## Central South Australia
## Southern Region

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**COVER:** NVT barley and wheat, Lake Grace, WA in 2022.
**PHOTO:** Isabelle Rogers

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## LEGEND: MEAN VARIETY YIELD PERFORMANCE

**LOW** **HIGH**

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

## DISEASE RATING COLOUR RANGE

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

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

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
grdc.com.au/nvt-crop-sowing-guides

# INTRODUCTION

This ***NVT Harvest Report*** provides information to support growers and advisers with decisions on variety selection for **Central South Australia**. 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 2022 and long-term yield performance of varieties of crop species suitable for production in **Central South Australia** 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 acknowledges that an ongoing project of this type would not be possible without the cooperation of growers prepared to contribute sites and who often assist with the management of trials on their property.

## 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 Statistics for the Australian Grains Industry (SAGI) program.

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 this **Central South Australia** Harvest Report, 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 **Central South Australia**.

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.

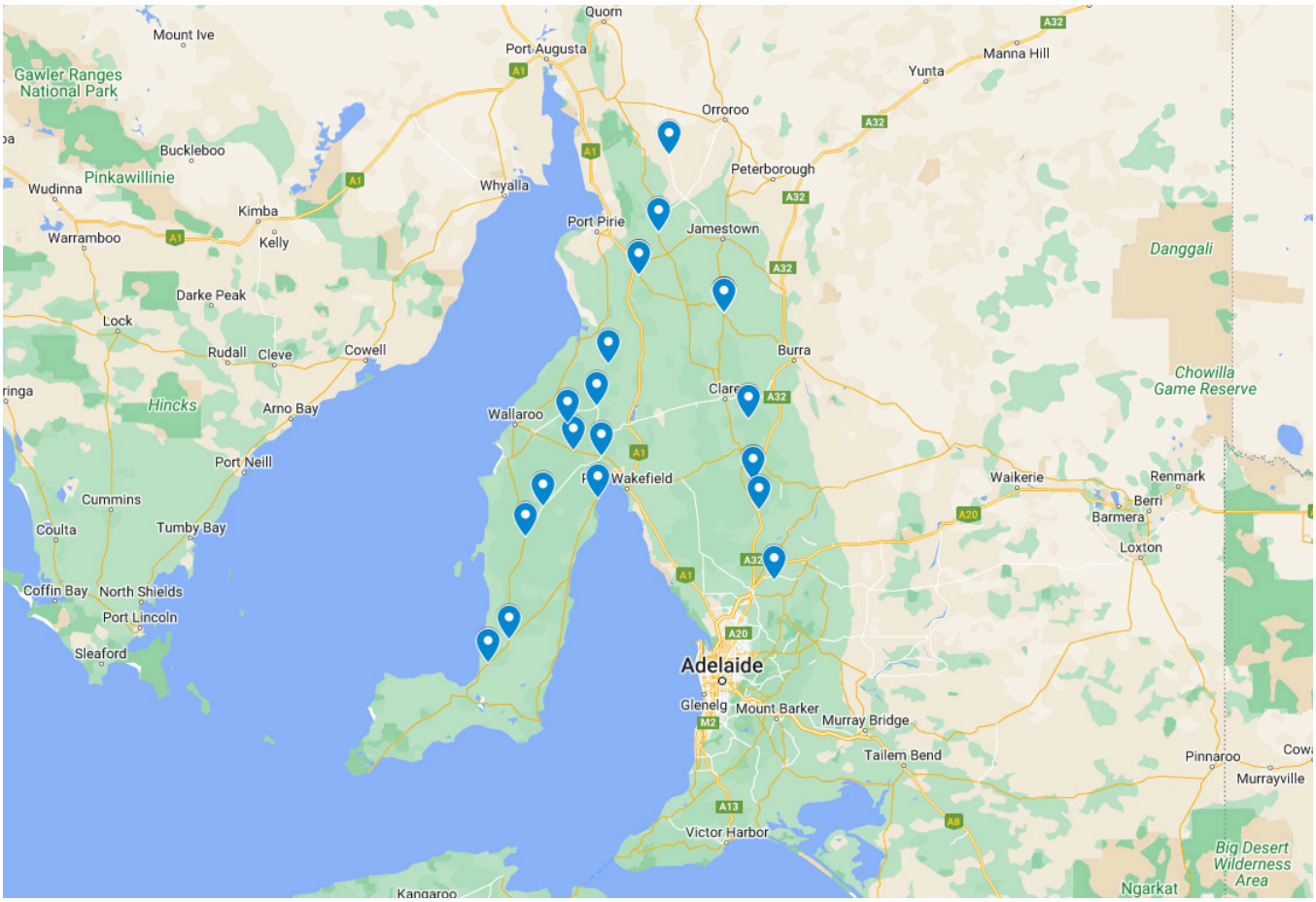
Trials listed as compromised are not suitable for making variety decisions. Results can be found in the Quarantined trial reports.

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

# NVT SITE LOCATIONS – Central South Australia

**Figure 1: Locality of NVT trial sites in Central South Australia from 2018 to 2022.**

SOURCE: NVT Online




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.

| Variety | Variety owner | Grain classification | End point royalty* ($) | Comments supplied by variety owner |
|---|---|---|---|---|
| Brumby(Φ) | InterGrain | Milling | 3.50 | Mid-maturing, with a slightly later time of flowering than Scepter(Φ), although earlier than RockStar(Φ). Well-suited to May sowing. |
| Kingston(Φ) | BASF Australia | Milling | 3.55 | Exhibits outstanding lodging resistance with a plant type that produces low residue to manage the following year. |
| LRPB Anvil(Φ) | LongReach Plant Breeders Pty Ltd | Milling | 4.25 | Clearfield® Plus wheat with two-gene tolerance to label rates of Intervix® herbicide with quick maturity and bold early growth. Fast grain fill with large grain, suited to low to medium-rainfall areas. Bred by Grains Innovation Australia, developed by LongReach Plant Breeders and marketed by Pacific Seeds. |
| Patron(Φ) | Australian Grain Technologies | Durum | 4.00 | Mid-season maturity durum wheat, similar to DBA-Aurora(Φ). |
| Reilly(Φ) | BASF Australia | Milling | 3.55 | Shows yield stability in tough conditions. Provides new genetics for Australian growers. |

* EPR amount is ex-GST, (Φ) denotes Plant Breeder's Rights apply.



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

# Wheat variety yield performance – Central South Australia

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: Booleroo Centre main season wheat.**

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | | 0.50 | 3.12 | 2.18 | 3.04 |
| Calibre(Ф) | Trial failed | | 112 | 115 | 103 |
| RockStar(Ф) | | 109 | 110 | 108 | 106 |
| Ballista(Ф) | | 129 | 111 | 109 | 101 |
| Reilly(Ф) | | | 112 | 106 | 101 |
| Denison(Ф) | | | 107 | 108 | 105 |
| Vixen(Ф) | | 132 | 111 | 106 | 93 |
| Catapult(Ф) | | 107 | 104 | 107 | 102 |
| Brumby(Ф) | | | | 107 | 103 |
| EG Titanium | | | 107 | 102 | 106 |
| Devil(Ф) | | 115 | 104 | 106 | 100 |
| **IMI-TOLERANT** | | | | | |
| Sunblade CL Plus(Ф) | | 106 | 108 | 103 | 105 |
| Razor CL Plus(Ф) | | 126 | 102 | 104 | 93 |
| Valiant(Ф) CL Plus | | | 99 | 98 | 106 |
| **Sowing date** | **30 May** | **15 May** | **11 May** | **26 May** | **1 Jun** |
| **Rainfall J–M (mm)** | **40** | **20** | **96** | **29** | **62** |
| **Rainfall A–O (mm)** | **117** | **123** | **344** | **213** | **251** |

Special thanks to 2022 trial cooperator, Wayne Roocke.
Learn more via the NVT Long Term Yield Reporter

**Table 2: Brentwood main season wheat.**

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 2.42 | 3.35 | 3.37 | 4.81 | 5.91 |
| Vixen(Ф) | 88 | 115 | 115 | 116 | 110 |
| Ballista(Ф) | | 115 | 111 | 110 | 107 |
| RockStar(Ф) | | 113 | 108 | 107 | 108 |
| Calibre(Ф) | | | 109 | 110 | 105 |
| Kingston(Ф) | | | 106 | 107 | 110 |
| Devil(Ф) | | 108 | 109 | 108 | 106 |
| Brumby(Ф) | | | | 106 | 105 |
| Boree(Ф) | | | 108 | 107 | 105 |
| Denison(Ф) | | | 104 | 104 | 104 |
| Scepter(Ф) | 97 | 106 | 109 | 108 | 104 |
| **IMI-TOLERANT** | | | | | |
| Sunblade CL Plus(Ф) | | 110 | 105 | 103 | 105 |
| Razor CL Plus(Ф) | 92 | 103 | 106 | 108 | 101 |
| Sheriff CL Plus(Ф) | 102 | 100 | 103 | 103 | 102 |
| **Sowing date** | **11 May** | **7 May** | **12 May** | **25 May** | **9 Jun** |
| **Rainfall J–M (mm)** | **14** | **5** | **51** | **51** | **92** |
| **Rainfall A–O (mm)** | **285** | **243** | **285** | **291** | **286** |

Special thanks to 2022 trial cooperator, Peter Klopp.
Learn more via the NVT Long Term Yield Reporter

**Table 3: Maitland main season wheat.**

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 5.81 | 3.95 | 4.70 | 5.16 | 5.91 |
| RockStar(Ф) | 111 | 111 | 110 | 112 | 110 |
| Calibre(Ф) | | | 106 | 113 | 103 |
| Vixen(Ф) | 111 | 115 | 113 | 113 | 95 |
| Ballista(Ф) | | 112 | 109 | 112 | 103 |
| Kingston(Ф) | | | 112 | 108 | 106 |
| Denison(Ф) | | | 106 | 110 | 109 |
| Brumby(Ф) | | | | 110 | 106 |
| Devil(Ф) | | 110 | 108 | 109 | 103 |
| Boree(Ф) | | | 107 | 109 | 102 |
| Scepter(Ф) | 106 | 110 | 107 | 108 | 100 |
| **IMI-TOLERANT** | | | | | |
| Sunblade CL Plus(Ф) | | 106 | 106 | 106 | 107 |
| Sheriff CL Plus(Ф) | 105 | 103 | 104 | 104 | 100 |
| Valiant(Ф) CL Plus | | | 101 | 100 | 108 |
| **Sowing date** | **18 May** | **10 May** | **11 May** | **14 May** | **19 May** |
| **Rainfall J–M (mm)** | **35** | **0** | **47** | **71** | **97** |
| **Rainfall A–O (mm)** | **314** | **190** | **344** | **219** | **417** |

Special thanks to 2022 trial cooperator, Peter Klopp.
Learn more via the NVT Long Term Yield Reporter

**Table 4: Mintaro main season wheat.**

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 3.85 | 4.13 | 6.53 | 6.38 | 7.15 |
| Ballista(Ф) | | 108 | 108 | 111 | 109 |
| RockStar(Ф) | 109 | 108 | 108 | 112 | 107 |
| Calibre(Ф) | | | 107 | 113 | 104 |
| Vixen(Ф) | 109 | 110 | 111 | 107 | 104 |
| Brumby(Ф) | | | | 109 | 105 |
| Devil(Ф) | | 108 | 106 | 108 | 104 |
| RGT Zanzibar | 94 | 95 | 101 | 107 | 124 |
| Denison(Ф) | | | 105 | 109 | 101 |
| Scepter(Ф) | 109 | 108 | 105 | 106 | 102 |
| Boree(Ф) | | | 106 | 106 | 102 |
| **IMI-TOLERANT** | | | | | |
| Sunblade CL Plus(Ф) | | 103 | 104 | 107 | 110 |
| Valiant(Ф) CL Plus | | | 99 | 102 | 105 |
| Sheriff CL Plus(Ф) | 104 | 104 | 103 | 100 | 95 |
| **Sowing date** | **21 May** | **3 Jun** | **11 May** | **31 May** | **3 Jun** |
| **Rainfall J–M (mm)** | **31** | **20** | **82** | **34** | **71** |
| **Rainfall A–O (mm)** | **297** | **311** | **436** | **429** | **563** |

Special thanks to 2022 trial cooperator, David Mitchell.
Learn more via the NVT Long Term Yield Reporter

## Table 5: Paskeville main season wheat.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 3.71 | 2.13 | | 2.38 | |
| Vixen(Ф) | 115 | 113 | Compromised trial | 117 | Compromised trial |
| Calibre(Ф) | | | | 101 | |
| Ballista(Ф) | | 116 | | 104 | |
| Scepter(Ф) | 108 | 107 | | 107 | |
| Devil(Ф) | | 107 | | 106 | |
| Boree(Ф) | | | | 106 | |
| Emu Rock(Ф) | 105 | 106 | | 109 | |
| Brumby(Ф) | | | | 103 | |
| Jillaroo(Ф) | | | | 112 | |
| RockStar(Ф) | 107 | 108 | | 100 | |
| **IMI-TOLERANT** | | | | | |
| Razor CL Plus(Ф) | 107 | 108 | | 111 | |
| LRPB Anvil(Ф) | | | | 112 | |
| Sunblade CL Plus(Ф) | | 107 | | 97 | |
| **Sowing date** | **17 May** | **18 May** | **7 May** | **12 May** | **14 Jun** |
| **Rainfall J–M (mm)** | **29** | **7** | **39** | **33** | **113** |
| **Rainfall A–O (mm)** | **206** | **184** | **268** | **229** | **285** |

Special thanks to 2022 trial cooperator, Grant Pontifex.
Learn more via the NVT Long Term Yield Reporter

## Table 6: Spalding main season wheat.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | | 3.47 | 5.44 | 4.00 | 8.41 |
| Vixen(Ф) | Compromised trial | 115 | 115 | 111 | 114 |
| Ballista(Ф) | | 112 | 111 | 108 | 113 |
| Calibre(Ф) | | | 110 | 109 | 106 |
| RockStar(Ф) | | 110 | 108 | 107 | 109 |
| Devil(Ф) | | 111 | 107 | 107 | 109 |
| Brumby(Ф) | | | | 107 | 108 |
| Scepter(Ф) | | 111 | 106 | 107 | 107 |
| Beckom(Ф) | | 103 | | | |
| Boree(Ф) | | | 107 | 107 | 106 |
| Sunmaster(Ф) | | | | 99 | 116 |
| **IMI-TOLERANT** | | | | | |
| Sunblade CL Plus(Ф) | | 104 | 105 | 102 | 111 |
| Razor CL Plus(Ф) | | 107 | 106 | 105 | 100 |
| LRPB Anvil(Ф) | | | | 101 | 101 |
| **Sowing date** | **16 May** | **14 May** | **8 May** | **31 May** | **2 Jun** |
| **Rainfall J–M (mm)** | **25** | **17** | **67** | **31** | **52** |
| **Rainfall A–O (mm)** | **226** | **229** | **425** | **318** | **396** |

Special thanks to 2022 trial cooperator, Andrew Cootes.
Learn more via the NVT Long Term Yield Reporter

## Table 7: Turretfield main season wheat.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 1.59 | 3.08 | 5.18 | 5.65 | 7.48 |
| Vixen(Ф) | 130 | 124 | 113 | 109 | 101 |
| Ballista(Ф) | | 115 | 110 | 108 | 107 |
| RockStar(Ф) | 104 | 108 | 109 | 111 | 111 |
| Calibre(Ф) | | | 109 | 110 | 106 |
| Brumby(Ф) | | | | 109 | 108 |
| Devil(Ф) | | 113 | 108 | 108 | 105 |
| Boree(Ф) | | | 108 | 108 | 104 |
| Scepter(Ф) | 114 | 115 | 108 | 106 | 103 |
| Denison(Ф) | | | 106 | 111 | 108 |
| Kingston(Ф) | | | 107 | 110 | 105 |
| **IMI-TOLERANT** | | | | | |
| Sunblade CL Plus(Ф) | | 104 | 105 | 103 | 108 |
| Sheriff CL Plus(Ф) | 101 | 104 | 103 | 106 | 100 |
| Razor CL Plus(Ф) | 120 | 112 | 104 | 102 | 94 |
| **Sowing date** | **25 May** | **22 May** | **15 May** | **26 May** | **23 May** |
| **Rainfall J–M (mm)** | **31** | **11** | **32** | **43** | **82** |
| **Rainfall A–O (mm)** | **238** | **209** | **285** | **298** | **370** |

Special thanks to 2022 trial cooperator, Josh Krieg.
Learn more via the NVT Long Term Yield Reporter

## Table 8: Wokurna main season wheat.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | | 3.21 | 2.47 | 4.11 | 6.89 |
| RockStar(Ф) | Compromised trial | 112 | 113 | 112 | 109 |
| Brumby(Ф) | | | | 112 | 106 |
| Vixen(Ф) | | 117 | 102 | 114 | 106 |
| Calibre(Ф) | | | 110 | 113 | 104 |
| Ballista(Ф) | | 114 | 108 | 110 | 107 |
| Devil(Ф) | | 113 | 108 | 111 | 106 |
| Denison(Ф) | | | 111 | 111 | 105 |
| Boree(Ф) | | | 106 | 111 | 104 |
| Scepter(Ф) | | 114 | 106 | 111 | 103 |
| Sunmaster(Ф) | | | | 101 | 109 |
| **IMI-TOLERANT** | | | | | |
| Sunblade CL Plus(Ф) | | 104 | 107 | 103 | 108 |
| Sheriff CL Plus(Ф) | | 104 | 102 | 107 | 100 |
| Valiant(Ф) CL Plus | | | 106 | 99 | 105 |
| **Sowing date** | **10 May** | **17 May** | **7 May** | **26 May** | **13 May** |
| **Rainfall J–M (mm)** | **20** | **0** | **66** | **36** | **47** |
| **Rainfall A–O (mm)** | **190** | **181** | **250** | **234** | **283** |

Special thanks to 2022 trial cooperator, Daniel Harris.
Learn more via the NVT Long Term Yield Reporter

## Table 9: Maitland durum wheat.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 5.72 | 3.02 | 5.31 | 4.33 | 5.54 |
| Patron(ф) | | | | 117 | 122 |
| Bitalli(ф) | 110 | 118 | 103 | 109 | 108 |
| Westcourt(ф) | 105 | 113 | 103 | 101 | 113 |
| DBA Mataroi(ф) | | | | 107 | 102 |
| DBA-Artemis(ф) | 100 | 98 | 105 | 103 | 109 |
| WID802(ф) | 105 | 108 | 101 | 105 | 100 |
| DBA-Aurora(ф) | 103 | 101 | 103 | 108 | 101 |
| Hyperno(ф) | 99 | 96 | 103 | 102 | 104 |
| DBA Spes(ф) | 100 | 96 | 102 | 105 | 100 |
| Tjilkuri | 98 | 94 | 102 | 101 | 101 |
| **Sowing date** | **18 May** | **10 May** | **11 May** | **14 May** | **19 May** |
| **Rainfall J–M (mm)** | **35** | **0** | **47** | **71** | **97** |
| **Rainfall A–O (mm)** | **314** | **190** | **344** | **219** | **417** |

Special thanks to 2022 trial cooperator, Peter Klopp.
Learn more via the NVT Long Term Yield Reporter

## Table 10: Mintaro durum season wheat.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 2.80 | 3.72 | 5.60 | 6.53 | 6.85 |
| Patron(ф) | | | | 118 | 122 |
| DBA-Aurora(ф) | 108 | 97 | 110 | 111 | 112 |
| Bitalli(ф) | 111 | 103 | 107 | 107 | 109 |
| DBA Spes(ф) | 104 | 97 | 107 | 109 | 109 |
| DBA Mataroi(ф) | | | | 104 | 105 |
| WID802(ф) | 108 | 100 | 106 | 104 | 105 |
| DBA-Artemis(ф) | 98 | 101 | 102 | 107 | 108 |
| Hyperno(ф) | 99 | 100 | 102 | 106 | 106 |
| DBA Vittaroi(ф) | 108 | 96 | 107 | 103 | 103 |
| Tjilkuri | 99 | 98 | 102 | 104 | 104 |
| **Sowing date** | **21 May** | **3 Jun** | **11 May** | **31 May** | **3 Jun** |
| **Rainfall J–M (mm)** | **31** | **20** | **82** | **34** | **71** |
| **Rainfall A–O (mm)** | **297** | **311** | **436** | **429** | **563** |

Special thanks to 2022 trial cooperator, David Mitchell.
Learn more via the NVT Long Term Yield Reporter

## Table 11: Paskeville durum wheat.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 3.03 | 2.02 | | 1.80 | |
| Bitalli(ф) | 109 | 116 | Compromised trial | 110 | Compromised trial |
| Patron(ф) | | | | 98 | |
| DBA Mataroi(ф) | | | | 113 | |
| DBA Vittaroi(ф) | 105 | 106 | | 116 | |
| WID802(ф) | 106 | 109 | | 110 | |
| DBA-Aurora(ф) | 107 | 108 | | 106 | |
| Saintly(ф) | 102 | 104 | | 113 | |
| DBA Spes(ф) | 103 | 103 | | 101 | |
| Westcourt(ф) | 100 | 104 | | 92 | |
| DBA Bindaroi(ф) | 98 | 96 | | 103 | |
| **Sowing date** | **17 May** | **18 May** | **7 May** | **13 May** | **14 Jun** |
| **Rainfall J–M (mm)** | **29** | **7** | **39** | **33** | **113** |
| **Rainfall A–O (mm)** | **206** | **184** | **268** | **229** | **285** |

Special thanks to 2022 trial cooperator, Grant Pontifex.
Learn more via the NVT Long Term Yield Reporter

## Table 12: Spalding durum wheat.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | | 3.21 | 4.90 | 3.03 | 7.99 |
| Patron(ф) | Compromised trial | | | 101 | 127 |
| Bitalli(ф) | | 107 | 105 | 100 | 114 |
| DBA-Aurora(ф) | | 103 | 111 | 107 | 107 |
| DBA Mataroi(ф) | | | | 101 | 109 |
| DBA Spes(ф) | | 101 | 108 | 106 | 104 |
| WID802(ф) | | 103 | 104 | 102 | 106 |
| DBA-Artemis(ф) | | 101 | 104 | 100 | 106 |
| DBA Vittaroi(ф) | | 100 | 106 | 107 | 100 |
| Hyperno(ф) | | 100 | 104 | 102 | 103 |
| Westcourt(ф) | | 104 | 95 | 92 | 109 |
| **Sowing date** | **16 May** | **14 May** | **8 May** | **31 May** | **2 Jun** |
| **Rainfall J–M (mm)** | **25** | **17** | **67** | **31** | **52** |
| **Rainfall A–O (mm)** | **226** | **229** | **425** | **318** | **396** |

Special thanks to 2022 trial cooperator, Andrew Cootes.
Learn more via the NVT Long Term Yield Reporter

## Table 13: Turretfield durum wheat.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 0.88 | 2.08 | 4.54 | 5.47 | 6.59 |
| Patron(ф) | | | | 106 | 129 |
| Bitalli(ф) | 130 | 124 | 103 | 101 | 111 |
| DBA-Aurora(ф) | 128 | 104 | 105 | 102 | 108 |
| DBA Mataroi(ф) | | | | 100 | 105 |
| DBA-Artemis(ф) | 97 | 95 | 104 | 104 | 112 |
| Westcourt(ф) | 92 | 112 | 100 | 102 | 109 |
| DBA Spes(ф) | 115 | 97 | 104 | 102 | 106 |
| WID802(ф) | 122 | 113 | 102 | 100 | 103 |
| Hyperno(ф) | 99 | 94 | 103 | 102 | 107 |
| Tjilkuri | 99 | 92 | 102 | 102 | 104 |
| **Sowing date** | **5 May** | **15 Apr** | **10 Apr** | **7 Apr** | **5 Apr** |
| **Rainfall J–M (mm)** | **31** | **11** | **32** | **43** | **82** |
| **Rainfall A–O (mm)** | **238** | **209** | **285** | **298** | **370** |

Special thanks to 2022 trial cooperator, Josh Krieg.
Learn more via the NVT Long Term Yield Reporter

## Table 14: Wokurna durum wheat.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | | 2.84 | 2.10 | 2.81 | 6.06 |
| Patron(ф) | Compromised trial | | | 110 | 110 |
| Bitalli(ф) | | 107 | 107 | 106 | 104 |
| DBA Mataroi(ф) | | | | 105 | 102 |
| DBA-Aurora(ф) | | 104 | 109 | 104 | 101 |
| WID802(ф) | | 105 | 104 | 103 | 101 |
| Westcourt(ф) | | 99 | 100 | 102 | 105 |
| DBA-Artemis(ф) | | 97 | 106 | 101 | 104 |
| DBA Spes(ф) | | 101 | 107 | 102 | 101 |
| Hyperno(ф) | | 98 | 105 | 101 | 102 |
| DBA Vittaroi(ф) | | 106 | 102 | 102 | 97 |
| **Sowing date** | **10 May** | **17 May** | **7 May** | **26 May** | **13 May** |
| **Rainfall J–M (mm)** | **20** | **0** | **66** | **36** | **47** |
| **Rainfall A–O (mm)** | **190** | **181** | **250** | **234** | **283** |

Special thanks to 2022 trial cooperator, David Harris.
Learn more via the NVT Long Term Yield Reporter

# Wheat variety quality – Central South Australia

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 2021 and 2022 NVT averaged for trials in the Central South Australia 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 eight NVT sites in Central SA in 2021.**

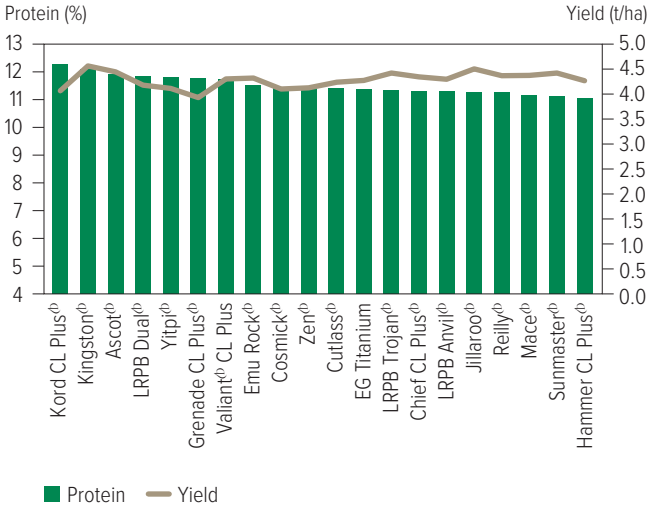



**Figure 2: Protein (%) and yield (t/ha) comparisons for main season wheat varieties from seven NVT sites in Central SA in 2022.**

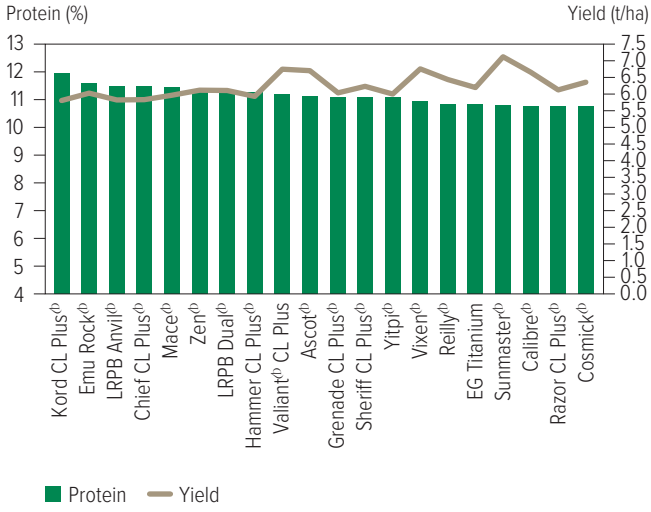



**Figure 3: Protein (%) and yield (t/ha) comparisons for durum wheat varieties from six NVT sites in Central SA in 2021.**

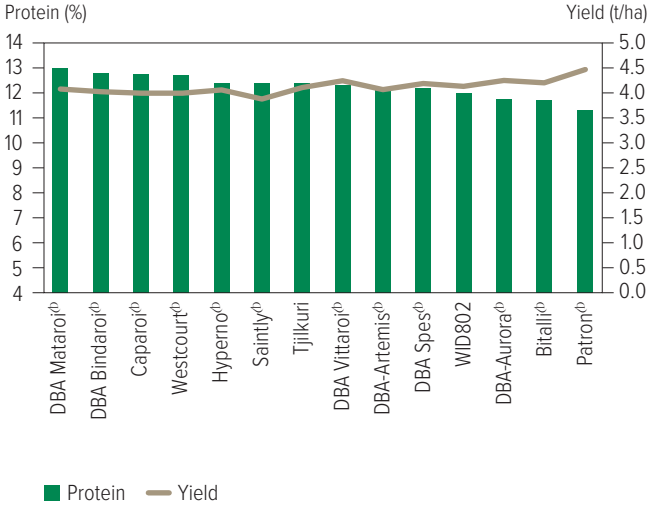
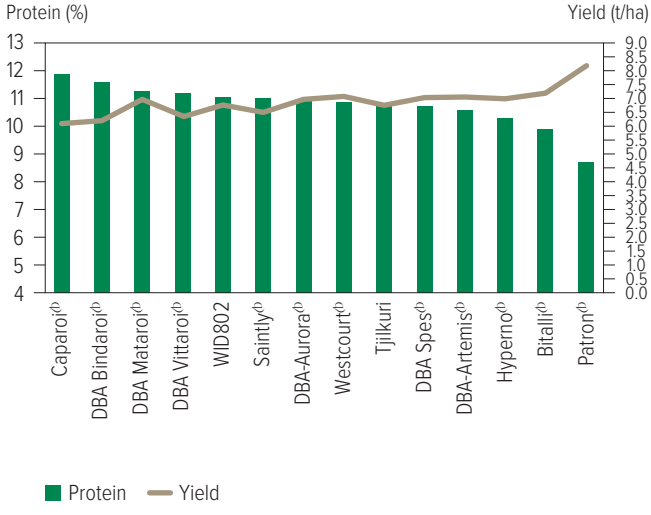



**Figure 4: Protein (%) and yield (t/ha) comparisons for durum wheat varieties from five NVT sites in Central SA in 2022.**



## Test weight comparisons

**Figure 5: Test weight (kg/hL) comparisons for main season wheat varieties from eight NVT sites in Central SA in 2021.**

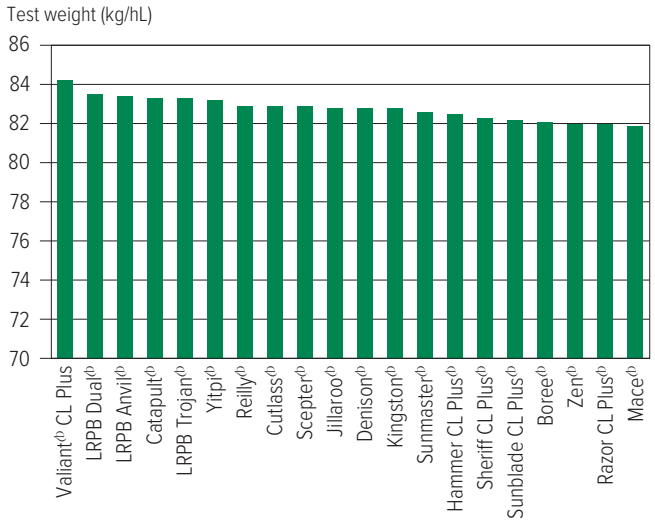



**Figure 6: Test weight (kg/hL) comparisons for main season wheat varieties from seven NVT sites in Central SA in 2022.**

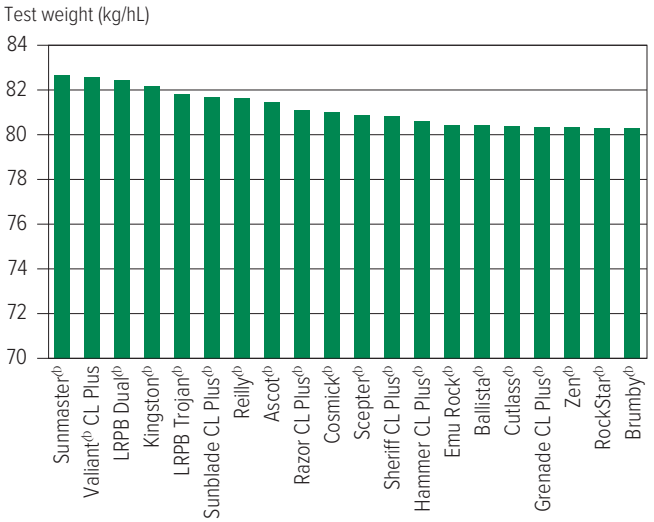



**Figure 7: Test weight (kg/hL) comparisons for durum wheat varieties from six NVT sites in Central SA in 2021.**

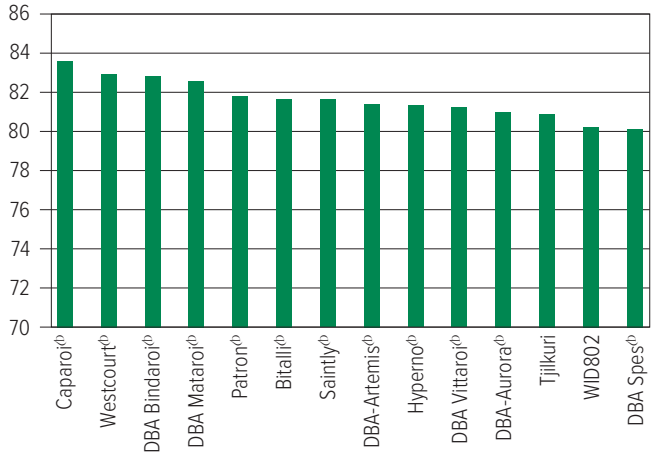
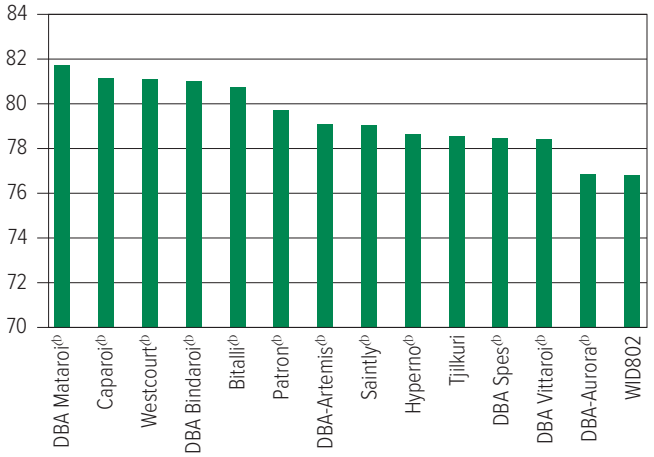



**Figure 8: Test weight (kg/hL) comparisons for durum wheat varieties from five NVT sites in Central SA in 2022.**



## Screenings comparisons

**Figure 9: Screenings (<2.0mm) comparisons for main season wheat varieties from eight NVT sites in Central SA in 2021.**

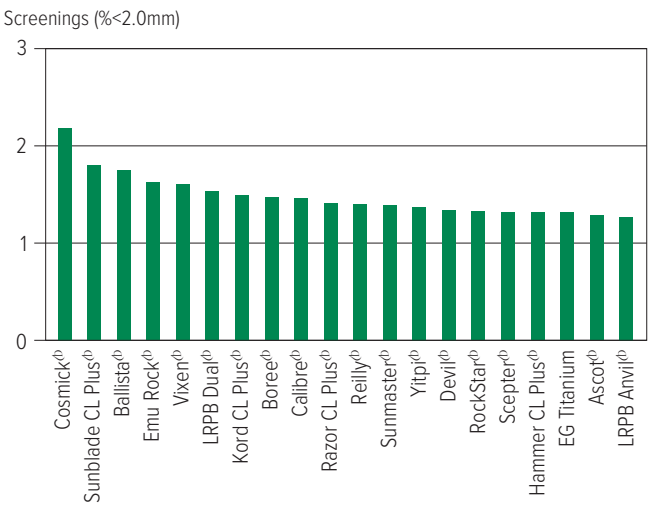



**Figure 10: Screenings (<2.0mm) comparisons for main season wheat varieties from seven NVT sites in Central SA in 2022.**

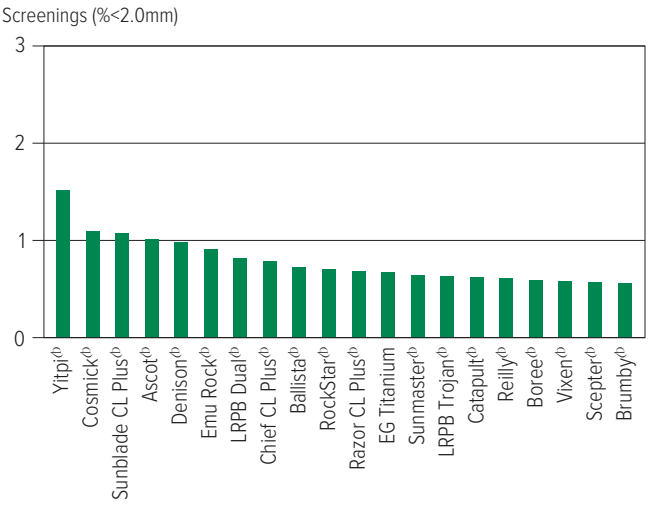



**Figure 11: Screenings (<2.0mm) comparisons for durum wheat varieties from six NVT sites in Central SA in 2021.**

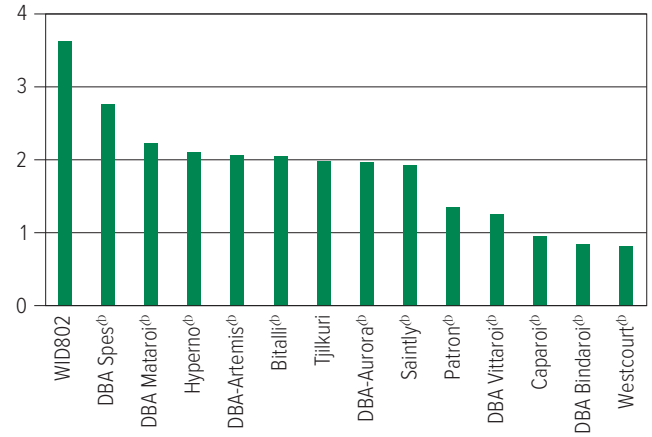
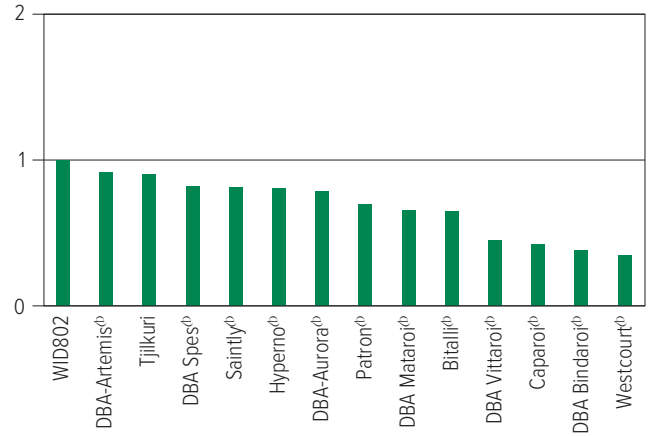



**Figure 12: Screenings (<2.0mm) comparisons for durum wheat varieties from five NVT sites in Central SA in 2022.**



# Wheat variety disease ratings – South Australia

The following table contains varietal ratings for the predominant diseases of wheat in South Australia. These ratings are updated annually by crop pathologists and were released in March 2023.

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

**Table 15: Wheat disease guide for South Australia.**

| Variety | Stem rust | Stripe rust (east coast resistance) | Leaf rust | Septoria tritici blotch | Yellow leaf spot | Powdery mildew | Black point | CCN | RLN resistance (*Pratylenchus neglectus*) | RLN resistance (*Pratylenchus thornei*) | Crown rot |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Anapurna | MSS | RMR | MS | MRMS | MRMS | RMR | MSS | MRMS | MS | S (P) | SVS |
| Ascot(Φ) | MRMS | MSS | RMR | S | MRMS | S | S | MR | S | S | S |
| Ballista(Φ) | MR | MSS | S | SVS | MS | SVS | MS | MRMS | S | MRMS | S |
| Beckom(Φ) | MRMS | MRMS | MSS | S | MSS | MSS | MRMS | R | S | MSS | S |
| BigRed(Φ) | S | RMR | MRMS | MR | MR | RMR | MR (P) | S | MS | MS | S (P) |
| Boree(Φ) | MR | SVS | S | SVS | MRMS | SVS | S | MSS | S | MSS | S |
| Brumby(Φ) | MR | MS | SVS | S | MRMS | R/S | MS (P) | MRMS | MRMS | MS | S |
| Calibre(Φ) | MR | S | S | S | MRMS | S | MS (P) | MRMS | S | MSS | S |
| Catapult(Φ) | MR | S | S | MSS | MRMS | S | S | R | S | MS | MSS |
| Chief CL Plus(Φ) | MR | SVS | MR | S | MRMS | SVS | MS | MS | MRMS | MSS | MSS |
| Coolah(Φ) | MR | MSS | RMR | MSS | MSS | S | S | S | S | MS | MSS |
| Coota(Φ) | RMR | S | MR | S | MSS | S | MS | MR | MR | MS | MSS |
| Cutlass(Φ) | R | MSS | RMR | MSS | MSS | MSS | MS | MR | MSS | MSS | S |
| Denison(Φ) | MS | S | S | MSS | MRMS | S | MS | MS | S | S | MSS |
| Devil(Φ) | S | SVS | SVS | SVS | MRMS | S | MSS | MSS | MSS | S | MSS |
| DS Bennett(Φ) | MS | S | SVS | MSS | MRMS | R | MSS | S | S | S | VS |
| DS Pascal(Φ) | MSS | MRMS | MS | MSS | MS | RMR | MS | S | S | S | S |
| EG Jet(Φ) | S | MRMS | S | MSS | MRMS | SVS | MS | MRMS | S | S | S |
| EG Titanium | MS | MR | MS | MSS | MSS | S | MSS | R | MSS | MSS | MSS |
| EGA Wedgetail(Φ) | MRMS | MS | MSS | MSS | MSS | MSS | MS | S | S | VS | S |
| Emu Rock(Φ) | MS | SVS | SVS | S | MS | MSS | MSS | S | MSS | S | MSS |
| Grenade CL Plus(Φ) | MR | MRMS | SVS | S | S | MSS | MSS | R | MSS | S | S |
| Hammer CL Plus(Φ) | MR | MS | S | MSS | MRMS | S | MRMS | MRMS | MSS | S | MSS |
| Illabo(Φ) | MRMS | MRMS | S | MSS | MS | R | MRMS | MRMS | MSS | MSS | S |
| Kingston(Φ) | S | MSS | S | S | MSS | S | S | R | S | MRMS | S |
| Longsword(Φ) | MR | R/S | MR# | MS | MRMS | S | MS | MRMS | MRMS | MRMS | MSS |
| LRPB Anvil(Φ) | MR | S | SVS | VS | MSS | VS | S (P) | MRMS | MSS | S | MSS |
| LRPB Bale(Φ) | MRMS | MRMS | MSS | MSS | SVS | MSS | MSS (P) | R | S | S | S |
| LRPB Beaufort(Φ) | SVS | RMR | MSS | S | MRMS | RMR | MRMS | MS | MS | MSS | S |
| LRPB Cobra(Φ) | MR | S | MR# | MSS | MRMS | MSS | MSS | MS | MSS | MSS | S |
| LRPB Dual(Φ) | MRMS | MS | MSS | MSS | S | S | S (P) | R | MSS | MSS | S |
| LRPB Impala(Φ) | MR | MRMS | SVS | SVS | MSS | R | MS | MSS | SVS | S | MSS |
| LRPB Kittyhawk(Φ) | MRMS (S) | MR | MR | MRMS | MRMS | MS | MRMS | S | S | S | SVS |
| LRPB Nighthawk(Φ) | RMR | MRMS | MSS | MS | MS | SVS | MS | MS | MSS | MS | MSS |
| LRPB Oryx(Φ) | MR | MS | RMR# | SVS | MSS | RMR | MS | S | MSS | MSS | MSS |
| LRPB Parakeet(Φ) | MR | MR | R | SVS | MSS | SVS | MS | MS | MRMS | S | MSS |
| LRPB Scotch(Φ) | MSS | MRMS (P) | MR (P) | S (P) | MRMS | MR | MS (P) | MS | MS | S | S |
| LRPB Trojan(Φ) | MRMS | S | MR# | S | MSS | S | MS | MS | MSS | MSS | MS |
| Mace(Φ) | MRMS | SVS | S | SVS | MRMS | MSS | MRMS | MRMS | MS | MS | S |
| Manning(Φ) | MR | RMR | MSS | MRMS/S | MRMS | MS | S | S | MSS | S | VS |
| Mowhawk(Φ) | RMR (P) | MRMS (P) | MR (P) | MSS (P) | MRMS (P) | MR | | | | | |

## Table 15: Wheat disease guide for South Australia (continued).

| Variety | Stem rust | Stripe rust (east coast resistance) | Leaf rust | Septoria tritici blotch | Yellow leaf spot | Powdery mildew | Black point | CCN | RLN resistance (*Pratylenchus neglectus*) | RLN resistance (*Pratylenchus thornei*) | Crown rot |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Razor CL Plus[Ф] | MRMS | MS | S | SVS | MSS | S | MS | MR | S | MS | S |
| Reilly[Ф] | MR | MS | MSS | S | S | S | MSS (P) | R | MS | MSS | S |
| RGT Accroc[Ф] | MS | RMR | SVS | MS | MRMS | MSS | MRMS | S | S | MSS | SVS |
| RGT Calabro | MS | RMR | MSS | MRMS | MR | RMR | MS | S | S | MS | SVS |
| RGT Cesario[Ф] | R | RMR | RMR | MRMS | MR | RMR | | MSS (P) | MRMS | MSS | VS |
| RGT Ivory | SVS | MR | MR# | MRMS | MR | RMR | MS | S | MSS | MRMS | SVS |
| RGT Waugh[Ф] | MS | RMR | S | MRMS | MRMS | R | MRMS (P) | MS | MS | MSS | S |
| RGT Zanzibar | VS | MRMS | SVS | MSS | MS | MR | MRMS | MSS | S | MS (P) | S |
| RockStar[Ф] | MRMS | S | S | S | MRMS | SVS | MSS | MSS | MRMS | MS | S |
| Scepter[Ф] | MRMS | MSS | MSS | S | MRMS | SVS | MS | MRMS | S | MSS | MSS |
| Severn[Ф] | MS | RMR | MRMS | MSS | MRMS | RMR | MR | MSS (P) | S | MRMS | S |
| Sheriff CL Plus[Ф] | MS | S | SVS | S | MRMS | SVS | MS | MS | MRMS | MRMS | S |
| SQP Revenue[Ф] | RMR | RMR | VS | MSS | MRMS | R | MS | S | S | S | S |
| Stockade[Ф] | MS | MR | MR (P) | MS | MRMS | SVS | MRMS (P) | MRMS | S | MSS | S |
| Sunblade CL Plus[Ф] | MS | MRMS | MSS | S | MSS | SVS | MRMS | MSS | MSS | MRMS | S |
| Sunflex[Ф] | MR | MRMS | RMR/S | SVS | MS | S | MSS | MS | S | MSS | MSS |
| Sunmaster[Ф] | MS | MRMS | RMR# | S | MSS | S | MR | MSS | MRMS | MS | S |
| Valiant[Ф] CL Plus | MR | MSS | S | MSS | MRMS | VS | MS (P) | MSS (P) | S | S (P) | S |
| Vixen[Ф] | MRMS | SVS | SVS | S | MRMS | SVS | MSS | MSS | MRMS | MS | S |
| Willaura[Ф] | MR | S | MRMS | S | MS | S | MRMS (P) | MS | MS | MS | S |
| Yitpi[Ф] | S | MS | S | S | SVS | MS | MS | MR | MSS | S | S |
| **DURUM** | | | | | | | | | | | |
| Bitalli[Ф] | RMR | MRMS | MR | MSS | MRMS | S | MS | MSS | MSS | RMR | SVS |
| Caparoi[Ф] | MR | MS | RMR | MRMS/S | MR | S | MSS | MRMS (P) | MS | MR | VS |
| DBA Bindaroi[Ф] | MR | MS | MR | MS | MRMS | SVS | MRMS | MS | MRMS | MR | SVS |
| DBA Mataroi[Ф] | MR | MS | MR | MSS | MRMS | S | MS | MRMS | MS | RMR | SVS |
| DBA Spes[Ф] | R | MS | RMR | S | MRMS | S | MS | MS | MRMS | RMR | VS |
| DBA Vittaroi[Ф] | MR | MS | RMR | MSS | MRMS | MRMS | MSS | S | MS | MR | SVS |
| DBA-Artemis[Ф] | MR | MRMS | RMR | MRMS/S | MRMS | SVS | MS | MS | MS | MR | VS |
| Patron[Ф] | RMR | MRMS | MR (P) | MRMS | MRMS | SVS | S (P) | S | MS | MR | SVS (P) |
| Westcourt[Ф] | RMR | MR | RMR | S | MRMS | S | MSS | MSS | MS | MR | VS |

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, / indicates pathotype differences, # warning, may be more susceptible to alternate pathotypes, ( ) show outlier.

# 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.

| Variety | Variety owner | Grain classification# | End point royalty* ($) | Comments supplied by variety owner |
|---|---|---|---|---|
| Combat(Φ) | InterGrain | Feed | 3.50 | Mid-maturity suited to all regions. Semi-prostrate growth habit that will provide more weed competition than Rosalind(Φ). A potential variety replacement for Rosalind(Φ) with a more competitive plant type. |
| Fandaga(Φ) | AGF Seeds | Feed | None provided. | Slower maturity than RGT Planet(Φ). |
| Titan AX(Φ) | Australian Grain Technologies | Under malt evaluation | 4.55 | The world's first CoAXium® barley variety. Mid-season maturity, slightly later than Compass(Φ), similar to RGT Planet(Φ). Agronomically similar to Compass(Φ). |
| Zena(Φ) CL | InterGrain | Under malt evaluation | 4.25 | Zena(Φ) CL is an imidazolinone-tolerant barley variety best-suited to medium-high rainfall environments. |

* EPR amount is ex-GST, (Φ) denotes Plant Breeder's Rights apply, # barley malting quality accreditation correct at time of download (10 March 2023).



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

# Barley variety yield performance – Central South Australia

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: Brentwood main season barley.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | | 4.37 | 3.17 | 5.19 | 5.84 |
| Combat[Ф] | Trial results below standard | | | 115 | 109 |
| Cyclops[Ф] | | | 117 | 115 | 111 |
| Minotaur[Ф] | | | 117 | 108 | 110 |
| Rosalind[Ф] | | 104 | 105 | 107 | 108 |
| Leabrook[Ф] | | 103 | 107 | 111 | 104 |
| Fandaga[Ф] | | | | 105 | 106 |
| Beast[Ф] | | 101 | 106 | 111 | 104 |
| Laperouse[Ф] | | 94 | 117 | 107 | 105 |
| RGT Planet[Ф] | | 110 | 100 | 101 | 106 |
| Yeti[Ф] | | 95 | 113 | 105 | 106 |
| **HERBICIDE TOLERANT (GROUP 1 AND IMIDAZOLINONE)** | | | | | |
| Titan AX[Ф] | | | | | 104 |
| Zena[Ф] CL | | | | 103 | 106 |
| Maximus[Ф] CL | | 92 | 109 | 104 | 104 |
| Commodus[Ф] CL | | | 100 | 107 | 99 |
| **Sowing date** | **11 May** | **7 May** | **12 May** | **25 May** | **9 Jun** |
| **Rainfall J–M (mm)** | **14** | **5** | **51** | **51** | **92** |
| **Rainfall A–O (mm)** | **285** | **243** | **285** | **291** | **286** |

Special thanks to 2022 trial cooperator, Peter Klopp.
Learn more via the NVT Long Term Yield Reporter

## Table 2: Bute main season barley.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 4.54 | 4.39 | 3.24 | 4.11 | 4.15 |
| Cyclops[Ф] | | | 109 | 109 | 115 |
| Minotaur[Ф] | | | 111 | 103 | 118 |
| Yeti[Ф] | | 102 | 108 | 103 | 116 |
| Rosalind[Ф] | 107 | 106 | 109 | 98 | 112 |
| Laperouse[Ф] | 104 | 101 | 106 | 109 | 112 |
| Combat[Ф] | | | | 108 | 103 |
| Beast[Ф] | | 102 | 102 | 108 | 106 |
| Leabrook[Ф] | 105 | 100 | 101 | 109 | 105 |
| Fandaga[Ф] | | | | 96 | 105 |
| RGT Planet[Ф] | 102 | 103 | 106 | 94 | 106 |
| **HERBICIDE TOLERANT (GROUP 1 AND IMIDAZOLINONE)** | | | | | |
| Maximus[Ф] CL | 106 | 104 | 107 | 101 | 111 |
| Titan AX[Ф] | | | | | 104 |
| Zena[Ф] CL | | | | 93 | 108 |
| Spartacus CL[Ф] | 105 | 103 | 102 | 100 | 103 |
| **Sowing date** | **24 May** | **17 May** | **15 May** | **27 May** | **1 Jun** |
| **Rainfall J–M (mm)** | **28** | **6** | **63** | **36** | **70** |
| **Rainfall A–O (mm)** | **210** | **213** | **250** | **234** | **336** |

Special thanks to 2022 trial cooperator, James Venning.
Learn more via the NVT Long Term Yield Reporter

## Table 3: Crystal Brook main season barley.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | | 2.92 | 4.39 | 4.41 | 6.63 |
| Cyclops[Ф] | Trial failed | | 112 | 114 | 104 |
| Minotaur[Ф] | | | 113 | 109 | 109 |
| Rosalind[Ф] | | 116 | 107 | 104 | 109 |
| Fandaga[Ф] | | | | 99 | 110 |
| Combat[Ф] | | | | 110 | 104 |
| Yeti[Ф] | | 113 | 105 | 107 | 103 |
| RGT Planet[Ф] | | 99 | 107 | 98 | 113 |
| Beast[Ф] | | 121 | 101 | 109 | 96 |
| Leabrook[Ф] | | 116 | 102 | 109 | 97 |
| Laperouse[Ф] | | 100 | 107 | 110 | 99 |
| **HERBICIDE TOLERANT (GROUP 1 AND IMIDAZOLINONE)** | | | | | |
| Zena[Ф] CL | | | | 97 | 112 |
| Maximus[Ф] CL | | 110 | 104 | 106 | 101 |
| Titan AX[Ф] | | | | | 94 |
| Spartacus CL[Ф] | | 111 | 99 | 102 | 98 |
| **Sowing date** | **23 May** | **15 May** | **8 May** | **1 Jun** | **8 Jun** |
| **Rainfall J–M (mm)** | **21** | **16** | **89** | **27** | **47** |
| **Rainfall A–O (mm)** | **145** | **172** | **335** | **221** | **302** |

Special thanks to 2022 trial cooperator, Andrew Greig.
Learn more via the NVT Long Term Yield Reporter

## Table 4: Maitland main season barley.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 7.16 | | 5.73 | 6.20 | 6.23 |
| RGT Planet[Ф] | 112 | Compromised trial | 119 | 109 | 118 |
| Combat[Ф] | | | | 114 | 112 |
| Fandaga[Ф] | | | | 107 | 115 |
| Minotaur[Ф] | | | 110 | 109 | 108 |
| Rosalind[Ф] | 106 | | 104 | 107 | 104 |
| Bottler[Ф] | | | 107 | 100 | 108 |
| Cyclops[Ф] | | | 103 | 110 | 101 |
| LG Alestar[Ф] | 100 | | 103 | 95 | 102 |
| Leabrook[Ф] | 98 | | 93 | 102 | 98 |
| Buff[Ф] | 100 | | 94 | 100 | 94 |
| **HERBICIDE TOLERANT (GROUP 1 AND IMIDAZOLINONE)** | | | | | |
| Zena[Ф] CL | | | | 105 | 112 |
| Titan AX[Ф] | | | | | 96 |
| Maximus[Ф] CL | 95 | | 91 | 101 | 89 |
| Spartacus CL[Ф] | 95 | | 89 | 99 | 87 |
| **Sowing date** | **18 May** | **21 May** | **11 May** | **14 May** | **19 May** |
| **Rainfall J–M (mm)** | **35** | **9** | **47** | **71** | **97** |
| **Rainfall A–O (mm)** | **314** | **290** | **344** | **219** | **417** |

Special thanks to 2022 trial cooperator, Peter Klopp.
Learn more via the NVT Long Term Yield Reporter

## Table 5: Port Clinton main season barley.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 3.66 | 2.65 | 3.36 | 3.63 | 6.21 |
| Combat(ф) | | | | 118 | 110 |
| Cyclops(ф) | | | 114 | 120 | 102 |
| Leabrook(ф) | 106 | 119 | 109 | 121 | 101 |
| Beast(ф) | | 123 | 107 | 120 | 98 |
| Compass(ф) | 104 | 120 | 105 | 120 | 97 |
| Fandaga(ф) | | | | 100 | 112 |
| Minotaur(ф) | | | 110 | 109 | 105 |
| Fathom(ф) | 108 | 116 | 103 | 111 | 99 |
| Rosalind(ф) | 108 | 114 | 103 | 101 | 105 |
| Laperouse(ф) | 100 | 105 | 110 | 115 | 96 |
| **HERBICIDE TOLERANT (GROUP 1 AND IMIDAZOLINONE)** | | | | | |
| Titan AX(ф) | | | | | 99 |
| Zena(ф) CL | | | | 95 | 111 |
| Commodus(ф) CL | | | 104 | 117 | 96 |
| Maximus(ф) CL | 101 | 110 | 102 | 103 | 93 |
| **Sowing date** | **22 May** | **10 May** | **15 May** | **25 May** | **2 Jun** |
| **Rainfall J–M (mm)** | **28** | **1** | **9** | **42** | **115** |
| **Rainfall A–O (mm)** | **202** | **174** | **273** | **217** | **291** |

Special thanks to 2022 trial cooperator, Bronte Westbrook.
Learn more via the NVT Long Term Yield Reporter

## Table 6: Salter Springs main season barley.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 2.68 | 4.58 | 5.24 | | 6.35 |
| Combat(ф) | | | | Compromised trial | 112 |
| Fandaga(ф) | | | | | 123 |
| RGT Planet(ф) | 91 | 102 | 110 | | 125 |
| Rosalind(ф) | 115 | 115 | 104 | | 108 |
| Cyclops(ф) | | | 107 | | 95 |
| Minotaur(ф) | | | 107 | | 104 |
| Leabrook(ф) | 123 | 110 | 99 | | 96 |
| Beast(ф) | | 115 | 97 | | 90 |
| Fathom(ф) | 121 | 110 | 100 | | 94 |
| La Trobe(ф) | 118 | 111 | 100 | | 90 |
| **HERBICIDE TOLERANT (GROUP 1 AND IMIDAZOLINONE)** | | | | | |
| Zena(ф) CL | | | | | 123 |
| Titan AX(ф) | | | | | 89 |
| Maximus(ф) CL | 120 | 115 | 96 | | 85 |
| Spartacus CL(ф) | 117 | 111 | 96 | | 86 |
| **Sowing date** | **25 May** | **22 May** | **16 May** | **21 May** | **14 Jun** |
| **Rainfall J–M (mm)** | **31** | **17** | **44** | **42** | **75** |
| **Rainfall A–O (mm)** | **262** | **271** | **370** | **346** | **446** |

Special thanks to 2022 trial cooperator, Andrew Chapman.
Learn more via the NVT Long Term Yield Reporter

## Table 7: Spalding main season barley.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | | | 5.64 | 4.55 | 9.03 |
| RGT Planet(ф) | No trial | No trial | 117 | 104 | 111 |
| Combat(ф) | | | | 116 | 105 |
| Fandaga(ф) | | | | 105 | 112 |
| Minotaur(ф) | | | 105 | 111 | 108 |
| Cyclops(ф) | | | 100 | 117 | 101 |
| Rosalind(ф) | | | 101 | 109 | 102 |
| Leabrook(ф) | | | 94 | 107 | 105 |
| Laperouse(ф) | | | 93 | 108 | 100 |
| Yeti(ф) | | | 90 | 106 | 102 |
| Beast(ф) | | | 88 | 109 | 99 |
| **HERBICIDE TOLERANT (GROUP 1 AND IMIDAZOLINONE)** | | | | | |
| Zena(ф) CL | | | | 103 | 111 |
| Titan AX(ф) | | | | | 101 |
| Commodus(ф) CL | | | 88 | 102 | 99 |
| Maximus(ф) CL | | | 87 | 107 | 92 |
| **Sowing date** | | | **16 May** | **31 May** | **2 Jun** |
| **Rainfall J–M (mm)** | | | **67** | **31** | **52** |
| **Rainfall A–O (mm)** | | | **425** | **318** | **396** |

Special thanks to 2022 trial cooperator, Andrew Cootes.
Learn more via the NVT Long Term Yield Reporter

## Table 8: Turretfield main season barley.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 2.46 | 3.55 | 5.41 | 6.78 | 7.44 |
| Combat(ф) | | | | 107 | 112 |
| Cyclops(ф) | | | 109 | 106 | 104 |
| Fandaga(ф) | | | | 107 | 110 |
| Minotaur(ф) | | | 110 | 108 | 107 |
| RGT Planet(ф) | 99 | 98 | 110 | 107 | 111 |
| Rosalind(ф) | 111 | 113 | 107 | 104 | 103 |
| Leabrook(ф) | 112 | 118 | 101 | 104 | 102 |
| Beast(ф) | | 121 | 100 | 101 | 98 |
| Yeti(ф) | | 111 | 102 | 103 | 98 |
| Laperouse(ф) | 106 | 107 | 102 | 103 | 99 |
| **HERBICIDE TOLERANT (GROUP 1 AND IMIDAZOLINONE)** | | | | | |
| Zena(ф) CL | | | | 105 | 107 |
| Titan AX(ф) | | | | | 102 |
| Commodus(ф) CL | | | 95 | 98 | 97 |
| Maximus(ф) CL | 110 | 110 | 100 | 98 | 93 |
| **Sowing date** | **25 May** | **22 May** | **15 May** | **26 May** | **23 May** |
| **Rainfall J–M (mm)** | **31** | **11** | **32** | **43** | **82** |
| **Rainfall A–O (mm)** | **238** | **209** | **285** | **298** | **370** |

Special thanks to 2022 trial cooperator, Josh Krieg.
Learn more via the NVT Long Term Yield Reporter

# Barley variety quality – Central South Australia

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 2021 and 2022 NVT averaged for trials in the Central South Australia 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 seven NVT sites in Central SA in 2021.**

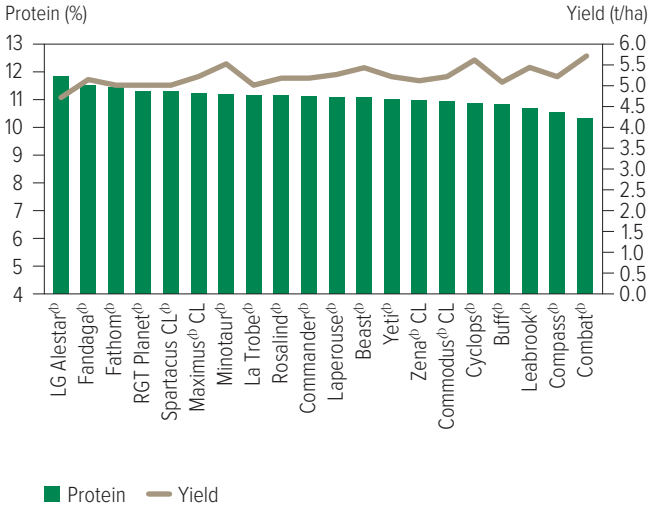
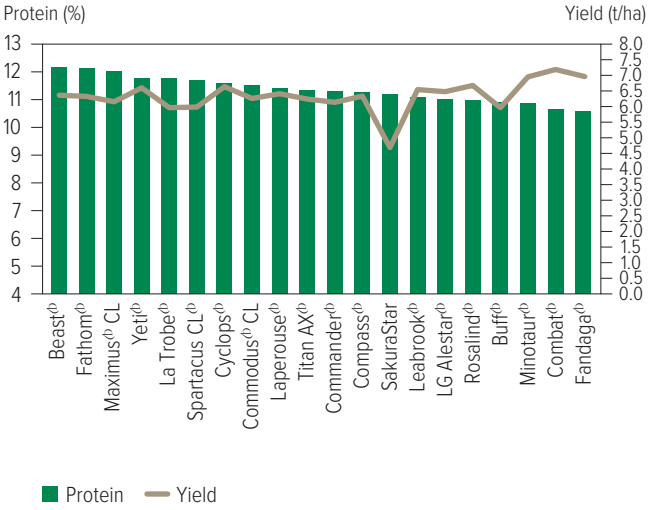



**Figure 2: Protein (%) and yield (t/ha) comparisons for main season barley varieties from eight NVT sites in Central SA in 2022.**




## Test weight comparisons

**Figure 3: Test weight (kg/hL) comparisons for main season barley varieties from seven NVT sites in Central SA in 2021.**

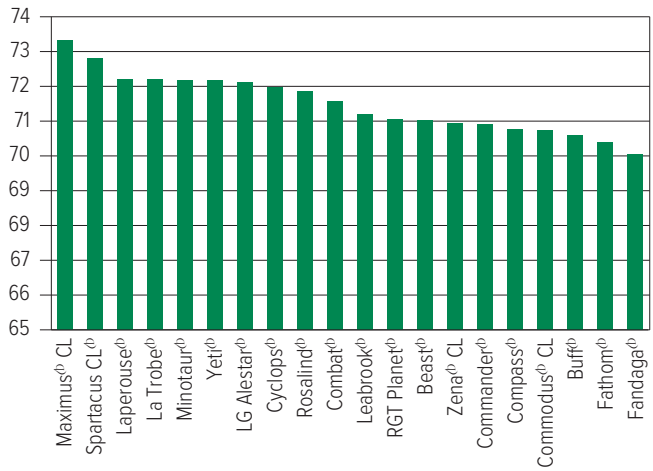
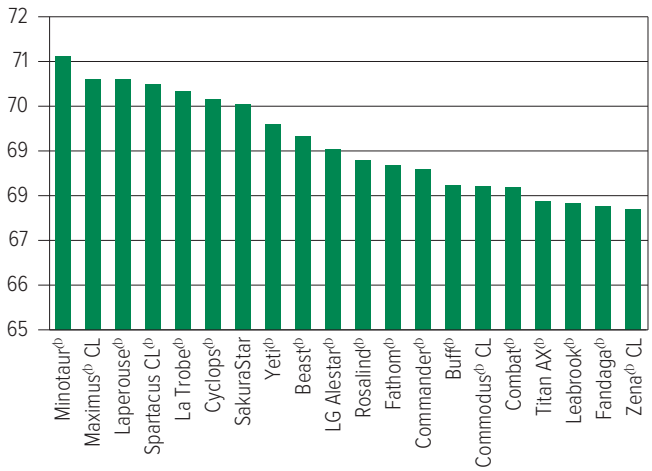



**Figure 4: Test weight (kg/hL) comparisons for main season barley varieties from eight NVT sites in Central SA in 2022.**



## Screenings comparisons

**Figure 5: Screenings (<2.2mm) comparisons for main season barley varieties from seven NVT sites in Central SA in 2021.**

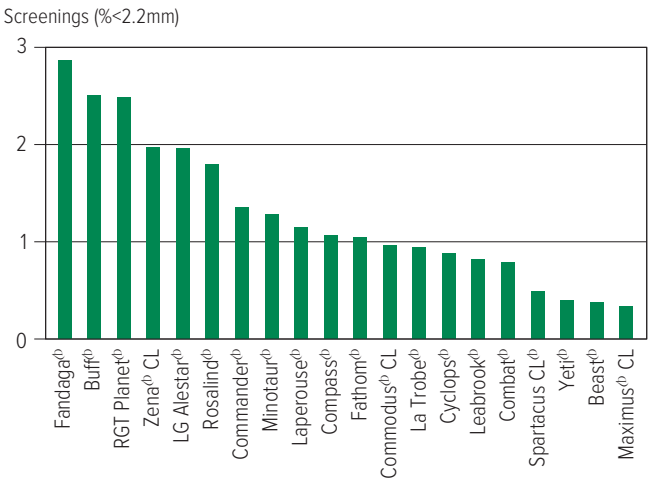
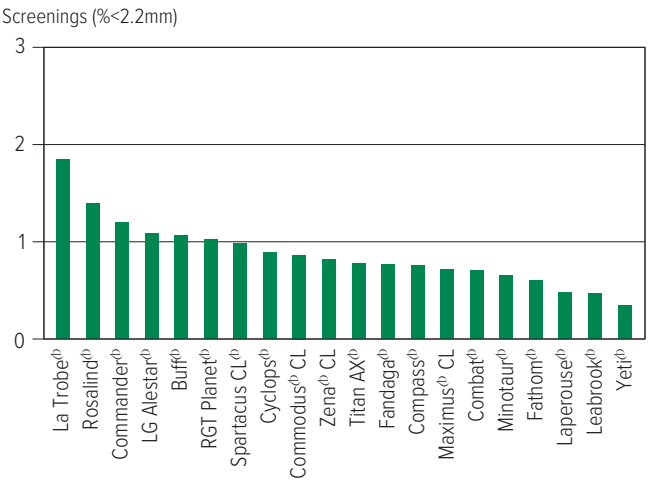



**Figure 6: Screenings (<2.2mm) comparisons for main season barley varieties from eight NVT sites in Central SA in 2022.**




## Retention comparisons

**Figure 7: Retention (>2.5mm) comparisons for main season barley varieties from seven NVT sites in Central SA in 2021.**

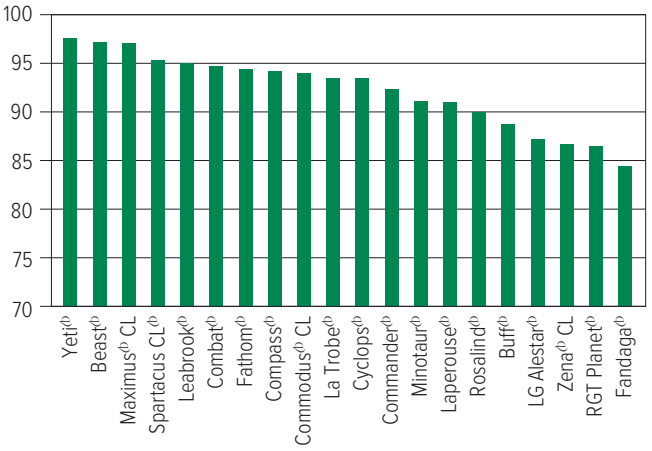
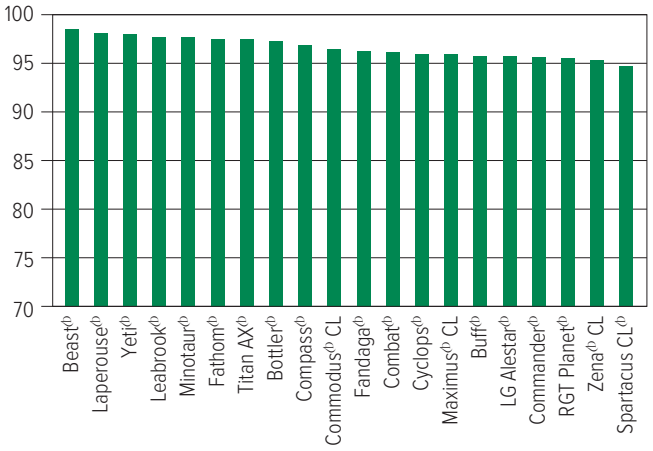



**Figure 8: Retention (>2.5mm) comparisons for main season barley varieties from eight NVT sites in Central SA in 2022.**



# Barley variety disease ratings – South Australia

The following table contains varietal ratings for the predominant diseases of barley in South Australia. These ratings are updated annually by crop pathologists and were released in March 2023.

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

**Table 9: Barley disease guide for South Australia.**

| Variety | CCN | Leaf rust | Net form net blotch | Spot form net blotch | Leaf scald | Powdery mildew | Black point | RLN resistance (*Pratylenchus neglectus*) | RLN resistance (*Pratylenchus thornei*) | Crown rot | Ramularia |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bass(ф) | S | SVS | MS-SVS | MSS | MSS | S | MRMS | MS | MRMS | MSS | VS (P) |
| Beast(ф) | MR | MS-SVS | MR-S | MS | SVS | S | MSS | MRMS | MRMS | S | SVS (P) |
| Bottler(ф) | | MS | R-MS | MSS | SVS | RMR | MRMS | MS | RMR | SVS | SVS (P) |
| Buff(ф) | | SVS | MR-MS | MSS | MS-VS | S | MS | MRMS | MS | S | SVS (P) |
| Combat(ф) | MRMS | MSS | MR-MSS | RMR | S | MS | MSS (P) | MR | MS | S (P) | SVS (P) |
| Commander(ф) | R | S | S-VS | MSS | SVS | MSS | MSS | MRMS | MRMS | S | SVS (P) |
| Commodus(ф) CL | R | S | MR-MSS | MSS | MSS-SVS | MS | MS | MRMS | MRMS | S (P) | SVS (P) |
| Compass(ф) | R | VS | MRMS-S | MS | MSS-SVS | MSS | MSS | MRMS | MR | S | SVS (P) |
| Cyclops(ф) | S | VS | MR-MS | MS | S | S | MS | MRMS | MRMS | S (P) | SVS (P) |
| Fandaga(ф) | R | MSS | MR-VS | S | SVS | R | MRMS (P) | MR | MR | MSS (P) | VS (P) |
| Fathom(ф) | R | MRMS-S | MSS-SVS | RMR | R-S | MRMS | MSS | MRMS | MR | SVS | SVS (P) |
| Kiwi(ф) | S | RMR-MS | R-MRMS | MSS | SVS | RMR | MS | MRMS | RMR | S | VS (P) |
| La Trobe(ф) | R | S | MS-S | S | R-SVS | MSS | MSS | MRMS | MRMS | S | SVS (P) |
| Laperouse(ф) | S | SVS | MR-MS | MRMS | SVS | MSS | MSS | MR | MR | S | VS (P) |
| Leabrook(ф) | RMR | SVS | MR-MSS | MS | MRMS-SVS | S | MS | MRMS | RMR | S | VS (P) |
| LG Alestar(ф) | R^ (P) | MS | MR-S | S | SVS | MR | MRMS | MR | MR | S | SVS (P) |
| Maximus(ф) CL | R | S | MR-MS | MS | R-SVS | MS | MSS | MRMS | MR | S | VS (P) |
| Minotaur(ф) | R | S-VS | MR-MS | S | VS | S | MS | MRMS | MR | MS | SVS (P) |
| RGT Planet(ф) | R (P) | MRMS-MS | MRMS-SVS | SVS | R-SVS | RMR | MRMS | MRMS | MR | MSS | VS (P) |
| Rosalind(ф) | R | MR-MS | R-MRMS | S | MR-S | MSS | MS | MRMS | MR | MSS | VS (P) |
| SakuraStar | R | S | S | MRMS | MS-SVS | MSS | MS | MR | MR | S | VS (P) |
| Scope CL(ф) | S | MS-SVS | R-MR | MSS | MRMS-SVS | MRMS | MS | MRMS | MRMS | S | SVS (P) |
| Spartacus CL(ф) | R | S | MS-VS | S | R-SVS | MSS | MSS | MRMS | MRMS | S | VS (P) |
| Titan AX(ф) | MR (P) | SVS | MRMS-MSS | MS | VS | MS | MSS (P) | R | MR | MSS (P) | VS (P) |
| Topstart | S | MRMS | MRMS-SVS | S-SVS | S | RMR | MRMS | RMR | RMR | MSS | VS (P) |
| Urambie | | S | R-MR | S | R-S | MS | MRMS | MRMS | MR | MSS | VS (P) |
| Westminster(ф) | | MRMS | R-S | S | R-S | RMR | MRMS | MRMS | MS | S | VS (P) |
| Yeti(ф) | RMR | MSS-VS | MR-MS | MS-MSS | VS | MSS | MSS | MR | MR | S | VS (P) |
| Zena(ф) CL | R | MS | MR-MSS | S | R-S | R | MRMS (P) | MRMS | MR | MSS (P) | VS (P) |

Learn more via the NVT Disease Ratings.

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible, (P) = provisional rating, - hyphen indicates a range, ^ line contains a few susceptible off types.

# 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.

| Variety | Variety owner | Grain classification | End point royalty* ($) | Comments supplied by variety owner |
|---|---|---|---|---|
| Koala(Φ) | National Oat Breeding Program | Grain | None provided. | High-yielding, tall dwarf variety with similar height to Bannister(Φ) and taller than Mitika(Φ), Bilby(Φ) or Kowari(Φ). Koala(Φ) has a mid-season maturity that can be seven days later to head compared with Bannister(Φ) and Williams(Φ). Early vigour is similar to Bannister(Φ)and slightly slower than Bilby(Φ) and Yallara(Φ). Commercialised by Seednet. |

* EPR amount is ex-GST, (Φ) denotes Plant Breeder's Rights apply.



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

# Oat variety yield performance – Central South Australia

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: Crystal Brook oat.**

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | | 2.20 | 3.56 | 3.38 | 6.28 |
| Koala[Ф] | Trial failed | 71 | 107 | 110 | 122 |
| Bannister[Ф] | | 94 | 109 | 107 | 111 |
| Williams[Ф] | | 88 | 97 | 103 | 105 |
| Bilby[Ф] | | 109 | 99 | 98 | 96 |
| Possum | | 95 | 92 | 95 | 97 |
| Yallara[Ф] | | 88 | 93 | 100 | 96 |
| Kowari[Ф] | | 107 | 93 | 94 | 91 |
| Koorabup[Ф] | | 75 | 86 | 98 | 98 |
| Mitika[Ф] | | 100 | 87 | 92 | 90 |
| Durack[Ф] | | 100 | 83 | 90 | 84 |
| **Sowing date** | **23 May** | **15 May** | **8 May** | **1 Jun** | **8 Jun** |
| **Rainfall J–M (mm)** | **21** | **16** | **89** | **27** | **47** |
| **Rainfall A–O (mm)** | **145** | **172** | **335** | **221** | **302** |

Special thanks to 2022 trial cooperator, Andrew Greig.
Learn more via the NVT Long Term Yield Reporter

**Table 2: Paskeville oat.**

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 3.21 | 2.28 | 0.86 | 1.70 | |
| Bilby[Ф] | 104 | 109 | 107 | 111 | Compromised trial |
| Kowari[Ф] | 98 | 104 | 100 | 108 | |
| Bannister[Ф] | 104 | 100 | 106 | 95 | |
| Williams[Ф] | 92 | 97 | 97 | 99 | |
| Mitika[Ф] | 91 | 96 | 91 | 100 | |
| Possum | 95 | 93 | 92 | 87 | |
| Durack[Ф] | 85 | 92 | 82 | 104 | |
| Yallara[Ф] | 82 | 83 | 76 | 97 | |
| Koala[Ф] | 97 | 81 | 93 | 60 | |
| Koorabup[Ф] | 74 | 72 | 67 | 81 | |
| **Sowing date** | **17 May** | **18 May** | **7 May** | **12 May** | **14 Jun** |
| **Rainfall J–M (mm)** | **29** | **7** | **39** | **33** | **113** |
| **Rainfall A–O (mm)** | **206** | **184** | **268** | **229** | **285** |

Special thanks to 2022 trial cooperator, Grant Pontifex.
Learn more via the NVT Long Term Yield Reporter

# Oat variety disease ratings – South Australia

The following table contains varietal ratings for the predominant diseases of oat in South Australia. These ratings are updated annually by crop pathologists and were released in March 2023.

Selected varieties of most relevance to South 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 South Australia.**

| Variety | Stem rust (east) | Leaf rust (crown rust) | Barley yellow dwarf virus (BYDV) | CCN | Stem nematode resistance | Stem nematode tolerance | Septoria | Bacterial blight | Red leather leaf |
|---|---|---|---|---|---|---|---|---|---|
| Bannister(Φ) | S | MSS | MS | MR | MRMS | MT | MSS | S | S |
| Bilby(Φ) | S | MS | S | S | S | MI | S | SVS | MS |
| Durack(Φ) | S | MSS | S | MRMS | S | MI (P) | S | S | SVS |
| Echidna | MS | SVS | MSS | MS | MRMS | MT (P) | SVS | S | S |
| Koala(Φ) | MSS | MSS | MSS | R | S | MT (P) | MSS | S | S |
| Koorabup(Φ) | S | MSS | MSS | MRMS | S | I | MRMS# | SVS | SVS |
| Kowari(Φ) | S | S | S | S | S | I | S | S | S |
| Mitika(Φ) | S | MSS | SVS | VS | S | MI (P) | SVS | S | SVS |
| Mulgara(Φ) | MRMS | MR | MS | R | MR | MT (P) | S/MRMS | MSS | SVS |
| Possum | SVS | MSS | S | MSS | MS | MT (P) | S | SVS | SVS |
| Tungoo(Φ) | MS | MR | MSS | MR | R | MT (P) | MRMS# | S | MRMS |
| Williams(Φ) | S | MRMS | MSS | S | S | MI (P) | MSS | MSS | MS |
| Wintaroo(Φ) | MSS | MSS | MS | R | MR | MT (P) | MSS | S | S |
| Yallara(Φ) | MSS | S | MSS | R | MS | MI (P) | MSS | S | VS |

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, / indicates pathotype differences, # warning, may be more susceptible to alternate pathotypes.

# 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.

| Variety | Variety owner | End point royalty* ($) | Comments supplied by variety owner |
|---|---|---|---|
| DG Hotham TF | Nutrien Ag Solutions Ltd | - | Mid-maturing glyphosate tolerant Truflex® hybrid. Medium to tall plant height. Suited to medium to high-rainfall zones. |
| DG Torrens TT(ф) | Nutrien Ag Solutions Ltd | 5.00 | Early-mid maturing, open-pollinated, triazine-tolerant variety. Short-medium plant height. Suited to low-medium rainfall zones. |
| Hyola® Regiment XC | Pacific Seeds | - | Mid-maturity dual-herbicide stacked TruFlex® and Clearfield® hybrid. Suitable for medium and high-rainfall zones, dryland and irrigation. Medium height, vigorous early growth and even flowering. |
| Hyola® Solstice CL | Pacific Seeds | - | Mid-maturity Clearfield® tolerant hybrid. Suitable for medium and high-rainfall zones, dryland and irrigation. Medium height, vigorous early growth and even flowering. |
| HyTTec® Velocity | Nuseed Pty Ltd | 5.00 | An early maturing variety that exhibits impressive early vigour, with a compact plant height and improved pod shatter tolerance built in to improve harvesting. |
| InVigor® T 4511 | BASF Australia | - | InVigor® T 4511 is an early-mid triazine-tolerant hybrid of medium height. With excellent early vigour InVigor® T 4511 is ideally suited to early and mid-season growing regions. With higher seedling vigour, higher oil and better blackleg tolerance InVigor® T 4511 is a replacement for InVigor® T 3510 and InVigor® T 4510. |
| Nuseed® Eagle TF | Nuseed Pty Ltd | - | A mid-maturity TruFlex® hybrid that performs well in mid to high-rainfall zones. Nuseed® Eagle TF gives growers confidence with extremely good early vigour and biomass, increasing integrated weed management options. |
| Nuseed® Hunter TF | Nuseed Pty Ltd | - | An early-mid maturity TruFlex® hybrid canola with adaptability from low to high-rainfall regions. It has improved pod shatter tolerance with a compact plant height, reducing head loss, and is suitable for medium to quick-growing regions. |
| PY520TC | Pioneer Hi-Bred Aust Pty Ltd | - | A mid-maturity hybrid suited to medium-long season environments. Triazine-tolerant and Clearfield®-tolerant variety. |
| Renegade TT(ф) | Australian Grain Technologies | 10.00 | Triazine-tolerant, open-pollinated variety. Quick to flower with best performance under medium yield potential conditions. |
| RGT Baseline TT | RAGT | 10.00 | Mid-maturing triazine-tolerant hybrid variety. Suited to medium to high-rainfall zones. Medium-tall height. Marketed by Seed Force, an RAGT Company. |
| VICTORY® V55-04TF | Cargill | - | First release TruFlex® high stability oil hybrid in Australia. Mid-maturity variety. Preferred growing regions Victoria, South Australia and southern NSW. Medium height, replacing VICTORY® V5003RR. Marketed by AWB under contract. |

* EPR amount is ex-GST, (ф) denotes Plant Breeder's Rights apply.



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

# Canola variety yield performance – Central South Australia

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: Arthurton med-high rainfall GLY.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | | | | 2.88 | 3.34 |
| InVigor® R 4520P | No trial | No trial | No trial | 109 | 111 |
| Nuseed® Hunter TF | | | | 110 | 107 |
| Pioneer® 44Y30 RR | | | | 109 | 107 |
| Pioneer® 45Y28 RR | | | | 103 | 108 |
| Pioneer® 44Y27 RR | | | | 109 | 100 |
| Hyola® Regiment XC | | | | 104 | 103 |
| InVigor® R 4022P | | | | 106 | 101 |
| Nuseed® Raptor TF | | | | 105 | 101 |
| Nuseed® Emu TF | | | | 107 | 90 |
| DG Bindo TF | | | | 96 | 97 |
| **Sowing date** | | | | **25 May** | **26 May** |
| **Rainfall J–M (mm)** | | | | **96** | **130** |
| **Rainfall A–O (mm)** | | | | **219** | **321** |

Special thanks to 2022 trial cooperator, Chris Maloney.
Learn more via the NVT Long Term Yield Reporter

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

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | | | | 3.20 | 3.84 |
| Nuseed® Eagle TF | No trial | No trial | No trial | | 107 |
| Hyola® Regiment XC | | | | 112 | 105 |
| Pioneer® 45Y28 RR | | | | 109 | 107 |
| Nuseed® Hunter TF | | | | | 106 |
| Nuseed® Raptor TF | | | | 110 | 103 |
| InVigor® R 4520P | | | | 101 | 107 |
| Pioneer® 44Y30 RR | | | | 103 | 104 |
| Pioneer® 44Y27 RR | | | | 106 | 100 |
| DG Hotham TF | | | | | 100 |
| Hyola® Garrison XC | | | | 103 | 97 |
| **Sowing date** | | | | **27 May** | **30 May** |
| **Rainfall J–M (mm)** | | | | **44** | **46** |
| **Rainfall A–O (mm)** | | | | **378** | **449** |

Special thanks to 2022 trial cooperator, David Parkinson.
Learn more via the NVT Long Term Yield Reporter

## Table 3: Arthurton med-high rainfall IMI.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | | 1.30 | 1.14 | 2.77 | 3.45 |
| Pioneer® 44Y94 CL | Compromised trial | 109 | 121 | 113 | 113 |
| Pioneer® 45Y95 CL | | 113 | | 110 | 116 |
| Hyola® Solstice CL | | | | 107 | 102 |
| Pioneer® 45Y93 CL | | 104 | 96 | 103 | 114 |
| Pioneer® 44Y90 CL | | 103 | 106 | | |
| Pioneer® 43Y92 CL | | | 115 | | |
| Saintly CL | | 106 | | | |
| Hyola® Equinox CL | | | 108 | 103 | 95 |
| VICTORY® V75-03CL | | 88 | 85 | | |
| VICTORY® V7002CL | | 88 | 85 | | |
| **Sowing date** | **9 May** | **6 May** | **28 Apr** | **25 May** | **26 May** |
| **Rainfall J–M (mm)** | **24** | **4** | **63** | **96** | **130** |
| **Rainfall A–O (mm)** | **277** | **196** | **313** | **219** | **321** |

Special thanks to 2022 trial cooperator, Chris Maloney.
Learn more via the NVT Long Term Yield Reporter

## Table 4: Riverton med-high rainfall IMI.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | | 1.72 | 2.83 | 3.18 | 3.65 |
| Pioneer® 45Y95 CL | Compromised trial | 108 | | 114 | 114 |
| Hyola® Solstice CL | | | | 111 | 104 |
| Pioneer® 44Y94 CL | | 105 | 108 | 111 | 110 |
| Pioneer® 45Y93 CL | | 103 | 108 | 107 | 112 |
| Pioneer® 44Y90 CL | | 101 | 104 | | |
| Hyola® Equinox CL | | | 104 | 104 | 98 |
| Pioneer® 43Y92 CL | | | 102 | 101 | 100 |
| Pioneer® 45Y91 CL | | 100 | 102 | | |
| VICTORY® V75-03CL | | 89 | 90 | | |
| VICTORY® V7002CL | | 92 | 90 | | |
| **Sowing date** | **8 May** | **13 May** | **28 Apr** | **27 May** | **30 May** |
| **Rainfall J–M (mm)** | **33** | **19** | **42** | **44** | **46** |
| **Rainfall A–O (mm)** | **249** | **267** | **388** | **378** | **449** |

Special thanks to 2022 trial cooperator, David Parkinson.
Learn more via the NVT Long Term Yield Reporter

## Table 5: Spalding med-high rainfall IMI.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | | 1.71 | | 3.08 | 3.52 |
| Pioneer® 45Y95 CL | Trial failed | | Compromised trial | 110 | 111 |
| Pioneer® 44Y94 CL | | 109 | | 111 | 108 |
| Hyola® Solstice CL | | | | 102 | 107 |
| Pioneer® 45Y93 CL | | 101 | | 107 | 107 |
| Pioneer® 44Y90 CL | | 102 | | | |
| Hyola® Equinox CL | | | | 97 | 102 |
| Pioneer® 43Y92 CL | | | | 102 | 101 |
| Saintly CL | | 107 | | | |
| Pioneer® 45Y91 CL | | 96 | | | |
| VICTORY® V75-03CL | | 88 | | 96 | |
| Sowing date | 6 May | 14 May | 27 Apr | 28 May | 30 May |
| Rainfall J–M (mm) | 20 | 22 | 78 | 31 | 46 |
| Rainfall A–O (mm) | 217 | 252 | 383 | 325 | 405 |

Special thanks to 2022 trial cooperator, Ben Sommerville.
Learn more via the NVT Long Term Yield Reporter

## Table 6: Turretfield/Wasleys med-high rainfall IMI.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 1.49 | 1.75 | 2.41 | 2.34 | 3.16 |
| Pioneer® 44Y94 CL | | 108 | 115 | 111 | 118 |
| Pioneer® 45Y95 CL | 113 | 110 | | 118 | 114 |
| Pioneer® 45Y93 CL | | 100 | 106 | 116 | 116 |
| Pioneer® 44Y90 CL | 105 | 101 | 106 | | |
| Hyola® Solstice CL | | | | 104 | 88 |
| Pioneer® 43Y92 CL | 105 | | 106 | 97 | 104 |
| Pioneer® 45Y91 CL | | 96 | 98 | | |
| Hyola® Equinox CL | | | 102 | 95 | 84 |
| VICTORY® V75-03CL | | 89 | 88 | 95 | |
| VICTORY® V7002CL | | 90 | 87 | | |
| Sowing date | 7 May | 13 May | 25 Apr | 27 May | 6 May |
| Rainfall J–M (mm) | 24 | 9 | 46 | 35 | 82 |
| Rainfall A–O (mm) | 201 | 224 | 360 | 297 | 370 |

Special thanks to 2022 trial cooperator, Josh Krieg.
Learn more via the NVT Long Term Yield Reporter

## Table 7: Arthurton med-high rainfall TT.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | | 1.19 | 1.19 | 2.23 | 3.05 |
| HyTTec® Trifecta | Trial failed | 120 | 113 | 115 | 118 |
| Hyola® Blazer TT | | | 112 | 114 | 120 |
| HyTTec® Trophy | | 114 | 118 | 116 | 113 |
| HyTTec® Trident | | 113 | 127 | 121 | 105 |
| SF Dynatron TT™ | | 113 | 115 | 112 | 115 |
| InVigor® T 4510 | | 113 | 120 | 113 | 108 |
| InVigor® T 4511 | | | | 113 | 109 |
| RGT Capacity™ TT | | 112 | 110 | 107 | 112 |
| InVigor® LT 4530P | | | | 109 | 104 |
| InVigor® T 6010 | | 111 | 97 | 101 | 114 |
| Sowing date | 9 May | 6 May | 28 Apr | 25 May | 26 May |
| Rainfall J–M (mm) | 24 | 4 | 63 | 96 | 130 |
| Rainfall A–O (mm) | 277 | 196 | 313 | 219 | 321 |

Special thanks to 2022 trial cooperator, Chris Maloney.
Learn more via the NVT Long Term Yield Reporter

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

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | | 1.46 | 2.64 | 2.86 | 3.43 |
| HyTTec® Trifecta | Compromised trial | 115 | 114 | 119 | 115 |
| Hyola® Blazer TT | | | 112 | 117 | 116 |
| SF Dynatron TT™ | | 112 | 112 | 109 | 111 |
| HyTTec® Trophy | | 109 | 108 | 115 | 110 |
| PY520TC | | | | 113 | 113 |
| RGT Baseline TT | | | | 108 | 113 |
| RGT Capacity™ TT | | 114 | 112 | 104 | 108 |
| HyTTec® Trident | | 104 | 102 | 120 | 106 |
| InVigor® T 4511 | | | | 110 | 107 |
| InVigor® T 4510 | | 113 | 109 | 107 | 106 |
| Sowing date | 8 May | 13 May | 28 Apr | 27 May | 30 May |
| Rainfall J–M (mm) | 33 | 19 | 42 | 44 | 46 |
| Rainfall A–O (mm) | 249 | 267 | 388 | 378 | 449 |

Special thanks to 2022 trial cooperator, David Parkinson.
Learn more via the NVT Long Term Yield Reporter

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

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | | 1.47 | | 2.56 | 3.10 |
| HyTTec® Trifecta | Trial failed | | Compromised trial | 114 | 114 |
| HyTTec® Trident | | 119 | | 117 | 109 |
| Hyola® Blazer TT | | | | 115 | 113 |
| HyTTec® Trophy | | 116 | | 113 | 110 |
| PY520TC | | | | | 110 |
| SF Dynatron TT™ | | 113 | | 108 | 110 |
| InVigor® T 4511 | | | | 108 | 108 |
| InVigor® T 4510 | | 116 | | 106 | 107 |
| HyTTec® Velocity | | | | | 106 |
| RGT Capacity™ TT | | | | 103 | 108 |
| Sowing date | 6 May | 14 May | 27 Apr | 28 May | 30 May |
| Rainfall J–M (mm) | 20 | 22 | 78 | 31 | 46 |
| Rainfall A–O (mm) | 217 | 252 | 383 | 325 | 405 |

Special thanks to 2022 trial cooperator, Ben Sommerville.
Learn more via the NVT Long Term Yield Reporter

## Table 10: Turretfield/Wasleys med-high rainfall TT.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 1.31 | 1.38 | 2.34 | 2.11 | 2.85 |
| Hyola® Blazer TT | | | 114 | 121 | 118 |
| HyTTec® Trifecta | 119 | 121 | 115 | 121 | 112 |
| PY520TC | | | | 120 | 117 |
| SF Dynatron TT™ | | 113 | 114 | 111 | 117 |
| HyTTec® Trophy | 118 | 116 | 113 | 113 | 110 |
| HyTTec® Trident | 126 | 120 | 112 | 110 | 100 |
| InVigor® T 4511 | | | | 106 | 107 |
| RGT Baseline TT | | | | 121 | 116 |
| InVigor® T 4510 | 112 | 116 | 113 | 103 | 108 |
| RGT Capacity™ TT | | 112 | 111 | 106 | 112 |
| Sowing date | 7 May | 13 May | 25 Apr | 27 May | 6 May |
| Rainfall J–M (mm) | 24 | 9 | 46 | 35 | 82 |
| Rainfall A–O (mm) | 201 | 224 | 360 | 297 | 370 |

Special thanks to 2022 trial cooperator, Josh Krieg.
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 2023.**
Varieties are listed in alphabetical order and disease ratings are colour-coded to match resistance and susceptibility ratings.

**Table 11: Canola disease guide – autumn 2023 ratings.**

| Variety | 2023 autumn blackleg rating | | | Type |
|---|---|---|---|---|
| | Bare | Fluopyram (e.g. ILeVO®) | Pydiflumetofen (e.g. Saltro®) | |
| CONVENTIONAL VARIETIES | | | | |
| Nuseed® Quartz | R | | | Hybrid |
| Nuseed® Diamond | RMR | R | R | Hybrid |
| Outlaw$^{\Phi}$ | RMR | R | R | Open pollinated |
| **TRIAZINE-TOLERANT VARIETIES** | | | | |
| HyTTec® Trident | R | | | Hybrid |
| HyTTec® Trifecta | R | | | Hybrid |
| HyTTec® Trophy | R | R | R | Hybrid |
| Hyola® Blazer TT | R | | | Hybrid |
| DG BIDGEE TT$^{\Phi}$ | R | R | R | Open pollinated |
| InVigor® T 4511 | R | R | | Hybrid |
| DG MURRAY TT$^{\Phi}$ | R | | | Open pollinated |
| DG Torrens TT$^{\Phi}$ | R | | R | Open pollinated |
| *Monola*® H421TT | RMR | | | High stability oil, hybrid |
| *Monola*® 420TT | RMR | | | High stability oil, open pollinated |
| ATR-Bluefin$^{\Phi}$ | RMR | | | Open pollinated |
| InVigor® T 4510 | MR | R | R | Hybrid |
| SF Spark TT | MR | R | R | Hybrid |
| HyTTec® Velocity | MR | | | Hybrid |
| Renegade TT$^{\Phi}$ | MR | R | R | Open pollinated |
| *Monola*® 422TT | MR | | | High stability oil, open pollinated |
| ATR-Stingray$^{\Phi}$ | MRMS | R | R | Open pollinated |
| RGT Baseline™ TT | MRMS | R | R | Hybrid |
| ATR-Swordfish$^{\Phi}$ | MRMS | | | Open pollinated |
| SF Dynatron™ TT | MRMS | R | R | Hybrid |
| InVigor® T 6010 | MRMS | R | R | Hybrid |
| RGT Capacity™ TT | MRMS | R | R | Hybrid |
| Bandit TT$^{\Phi}$ | MRMS | R | R | Open pollinated |
| AFP Cutubury$^{\Phi}$ | MS | RMR | RMR | Open pollinated |
| ATR-Bonito$^{\Phi}$ | MS | RMR | R | Open pollinated |
| **IMIDAZOLINONE-TOLERANT VARIETIES** | | | | |
| Hyola® Feast CL | R | | | Winter, hybrid, Clearfield® |
| RGT Nizza CL | R | | | Winter, hybrid, Clearfield® |
| Hyola® Solstice CL | R | | | Hybrid, Clearfield® |
| Captain CL | R | | | Winter, hybrid, Clearfield® |
| Hyola® Equinox CL | R | | | Hybrid, Clearfield® |
| Pioneer® 45Y93 CL | R | | R | Hybrid, Clearfield® |
| RGT Clavier™ CL | R | | | Winter, hybrid, Clearfield® |
| Hyola® 970CL | R | | | Winter, hybrid, Clearfield® |
| Phoenix CL | R | | | Winter, hybrid, Clearfield® |
| Nuseed® Ceres IMI | R | | | Hybrid |
| VICTORY® V7002CL | R | | | High stability oil, hybrid, Clearfield® |

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible.
Please check updated ratings using the Blackleg Management Guide or the NVT Disease Ratings.

| Table 11: Canola disease guide – autumn 2023 ratings (continued). | | | | |
|---|---|---|---|---|
| | 2023 autumn blackleg rating | | | |
| Variety | Bare | Fluopyram (e.g. ILeVO®) | Pydiflumetofen (e.g. Saltro®) | Type |
| Pioneer® 43Y92 CL | R | | R | Hybrid, Clearfield® |
| Pioneer® 45Y95 CL | R | | R | Hybrid, Clearfield® |
| Pioneer® 44Y94 CL | R | | R | Hybrid, Clearfield® |
| VICTORY® V75-03CL | RMR | R | | High stability oil, hybrid, Clearfield® |
| **IMIDAZOLINONE AND TRIAZINE-TOLERANT VARIETIES** | | | | |
| Hyola® Enforcer CT | R | | | Hybrid, Clearfield®, Triazine |
| Pioneer® PY520 TC | RMR | R | R | Hybrid, Clearfield®, Triazine |
| **GLYPHOSATE-TOLERANT VARIETIES** | | | | |
| Nuseed® Raptor TF | R | | | Hybrid, TruFlex® |
| Nuseed® Eagle TF | R | | R | Hybrid, TruFlex® |
| DG Hotham TF | R | | R | Hybrid, TruFlex® |
| VICTORY® V55-04TF | R | R | | High stability oil, hybrid, TruFlex® |
| VICTORY® V5003RR | R | R | | High stability oil, hybrid, Roundup Ready® |
| DG Lofty TF | R | | R | Hybrid, TruFlex® |
| Pioneer® 45Y28RR | RMR | | R | Hybrid, Roundup Ready® |
| Nuseed® Hunter TF | RMR | | R | Hybrid, TruFlex® |
| Pioneer® 44Y27 RR | RMR | R | R | Hybrid, Roundup Ready® |
| InVigor® LR 4540P | RMR | R | | Hybrid, LibertyLink®, TruFlex® |
| Pioneer® 44Y30 RR | RMR | | R | Hybrid, Roundup Ready® |
| Nuseed® Emu TF | MR | | R | Hybrid, TruFlex® |
| Hyola® 410XX | MR | | | Hybrid, TruFlex® |
| DG Bindo TF | MR | | | Hybrid, TruFlex® |
| InVigor® R 4022P | MR | R | | Hybrid, TruFlex® |
| InVigor® R 4520P | MRMS | R | | Hybrid, TruFlex® |
| **GLYPHOSATE AND IMIDAZOLINONE-TOLERANT VARIETIES** | | | | |
| Hyola® Regiment XC | R | | | Hybrid, TruFlex®, Clearfield® |
| Hyola® Battalion XC | R | | | Hybrid, TruFlex®, Clearfield® |
| Hyola® Garrison XC | R | | | Hybrid, TruFlex®, Clearfield® |
| **GLUFOSINATE AND TRIAZINE-TOLERANT VARIETIES** | | | | |
| InVigor® LT 4530P | RMR | R | | Hybrid, LibertyLink®, Triazine |

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible.
Please check updated ratings using the Blackleg Management Guide or the NVT Disease Ratings.

# CHICKPEA

## Chickpea variety yield performance – Central South Australia

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: Kulpara desi chickpea.**

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| **Mean yield (t/ha)** | | | | **0.57** | **2.53** |
| PBA Slasher(Ф) | No trial | No trial | Compromised trial | 98 | 103 |
| PBA Striker(Ф) | | | | 89 | 102 |
| CBA Captain(Ф) | | | | 106 | 96 |
| Neelam(Ф) | | | | 95 | 98 |
| PBA Maiden(Ф) | | | | 74 | 102 |
| PBA Seamer(Ф) | | | | | 98 |
| **Sowing date** | | | **24 May** | **2 Jun** | **8 Jun** |
| **Rainfall J–M (mm)** | | | **39** | **33** | **96** |
| **Rainfall A–O (mm)** | | | **268** | **229** | **290** |

Special thanks to 2022 trial cooperator, Graham Pridman.
Learn more via the NVT Long Term Yield Reporter.

**Table 2: Kulpara kabuli chickpea.**

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| **Mean yield (t/ha)** | | | | **0.51** | **2.45** |
| PBA Monarch(Ф) | No trial | No trial | Compromised trial | 84 | 109 |
| Almaz(Ф) | | | | 96 | 106 |
| Genesis™ 090 | | | | 117 | 97 |
| PBA Magnus(Ф) | | | | 97 | 99 |
| Genesis™ Kalkee | | | | 79 | 101 |
| PBA Royal(Ф) | | | | 95 | 97 |
| **Sowing date** | | | **24 May** | **2 Jun** | **8 Jun** |
| **Rainfall J–M (mm)** | | | **39** | **33** | **96** |
| **Rainfall A–O (mm)** | | | **268** | **229** | **290** |

Special thanks to 2022 trial cooperator, Graham Pridman.
Learn more via the NVT Long Term Yield Reporter.



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

# Chickpea variety disease ratings – South Australia

The following table contains varietal ratings for the predominant diseases of chickpea in South Australia. These ratings are updated annually by crop pathologists and were released in March 2023.

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

**Table 3: Chickpea disease guide for South Australia.**

| Variety | Ascochyta blight (pathogen group 1 – south) | Phytophthora root rot | RLN resistance (*Pratylenchus neglectus*) | RLN resistance (*Pratylenchus thornei*) |
|---|---|---|---|---|
| **DESI** | | | | |
| CBA Captain(Φ) | S | S | MR | MS |
| Neelam(Φ) | S | | MRMS | MS |
| PBA Maiden(Φ) | S | | MRMS | MRMS |
| PBA Seamer(Φ) | S | S | MRMS | MRMS |
| PBA Slasher(Φ) | S | | MRMS | MRMS |
| PBA Striker(Φ) | S | | MRMS | MRMS |
| **KABULI** | | | | |
| Almaz(Φ) | S | | MRMS | S |
| Genesis™ 090 | MS | | MRMS | MSS |
| Genesis™ Kalkee | S | | MRMS | MS |
| PBA Magnus(Φ) | S | | MR | MSS |
| PBA Monarch(Φ) | S | | MRMS | MS |
| PBA Royal(Φ) | MS | | MR | MS |

Learn more via the NVT Disease Ratings.

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible.

# FABA BEAN

## Faba bean variety yield performance – Central South Australia

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: Laura faba bean.**

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 2.07 | 1.48 | 5.11 | 3.04 | 6.97 |
| PBA Samira(Ф) | 99 | 95 | 105 | 99 | 100 |
| PBA Amberley(Ф) | 99 | 95 | 104 | 99 | 99 |
| PBA Zahra(Ф) | 98 | 98 | 102 | 98 | 99 |
| Farah(Ф) | 96 | 97 | 101 | 98 | 95 |
| PBA Bendoc(Ф) | 95 | 103 | 99 | 100 | 94 |
| Fiesta VF | 96 | 96 | 101 | 97 | 95 |
| PBA Rana(Ф) | 88 | 81 | | 95 | 89 |
| Nura(Ф) | 92 | 99 | 101 | 98 | 91 |
| PBA Marne(Ф) | 101 | 106 | 85 | 96 | 96 |
| **Sowing date** | **29 May** | **28 May** | **21 May** | **28 May** | **25 May** |
| **Rainfall J–M (mm)** | **23** | **23** | **102** | **36** | **46** |
| **Rainfall A–O (mm)** | **206** | **231** | **413** | **282** | **388** |

Special thanks to 2022 trial cooperator, Fraser Smith.
Learn more via the NVT Long Term Yield Reporter

**Table 2: Maitland faba bean.**

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 3.70 | 3.15 | 5.30 | 5.08 | 4.69 |
| PBA Zahra(Ф) | 102 | 97 | 101 | 107 | 98 |
| PBA Samira(Ф) | 100 | 98 | 104 | 102 | 99 |
| PBA Amberley(Ф) | 99 | 98 | 103 | 100 | 98 |
| PBA Bendoc(Ф) | 99 | 97 | 96 | 101 | 95 |
| PBA Marne(Ф) | 98 | 104 | 92 | 95 | 102 |
| Farah(Ф) | 96 | 97 | 100 | 98 | 95 |
| Fiesta VF | 96 | 97 | 100 | 97 | 96 |
| Nura(Ф) | 94 | 95 | 97 | 95 | 92 |
| PBA Rana(Ф) | 90 | 86 | | 95 | 85 |
| **Sowing date** | **22 May** | **20 May** | **13 May** | **14 May** | **2 Jun** |
| **Rainfall J–M (mm)** | **82** | **8** | **47** | **71** | **97** |
| **Rainfall A–O (mm)** | **232** | **267** | **344** | **219** | **417** |

Special thanks to 2022 trial cooperator, Adam Schulz.
Learn more via the NVT Long Term Yield Reporter



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

| Table 3: Tarlee faba bean. | | | | | |
|---|---|---|---|---|---|
| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
| Mean yield (t/ha) | 1.59 | 2.41 | 4.33 | 5.51 | 6.80 |
| PBA Zahra(Ф) | 94 | 102 | 97 | 102 | 105 |
| PBA Samira(Ф) | 96 | 99 | 106 | 99 | 101 |
| PBA Amberley(Ф) | 96 | 97 | 105 | 98 | 100 |
| PBA Marne(Ф) | 103 | 97 | 88 | 101 | 103 |
| Fiesta VF | 96 | 94 | 99 | 95 | 96 |
| Farah(Ф) | 96 | 95 | 96 | 95 | 96 |
| PBA Bendoc(Ф) | 99 | 102 | 84 | 99 | 95 |
| Nura(Ф) | 97 | 95 | 87 | 93 | 89 |
| PBA Rana(Ф) | 83 | 84 | | 84 | 86 |
| **Sowing date** | **14 May** | **21 May** | **26 May** | **19 May** | **27 May** |
| **Rainfall J–M (mm)** | **30** | **10** | **34** | **43** | **59** |
| **Rainfall A–O (mm)** | **211** | **247** | **355** | **410** | **484** |

Special thanks to 2022 trial cooperator, Daryl Behn.
Learn more via the NVT Long Term Yield Reporter

## Faba bean variety disease ratings – South Australia

The following table contains varietal ratings for the predominant diseases of faba bean in South Australia. These ratings are updated annually by crop pathologists and were released in March 2023.

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

| Table 4: Faba bean disease guide for South Australia. | | | | | |
|---|---|---|---|---|---|
| Variety | Ascochyta blight | Cercospora leaf spot | Chocolate spot (Botrytis) | RLN resistance (*Pratylenchus thornei*) | Leaf rust |
| Farah(Ф) | S | S | S | MS | VS |
| Fiesta VF | S | S | S | MS | VS |
| Nura(Ф) | MR (P) | S | MS | MS | VS |
| PBA Amberley(Ф) | MR | S | MRMS | MS | VS |
| PBA Bendoc(Ф) | MR | S | S | MRMS | VS |
| PBA Marne(Ф) | MS (P) | S | MS (P) | MS | MRMS |
| PBA Rana(Ф) | MRMS | S | MS | MS | VS |
| PBA Samira(Ф) | MR (P) | S | MS | MRMS | S |
| PBA Zahra(Ф) | MRMS | S | MS | MRMS | S |

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 – Central South Australia

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: Laura field pea.**

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 2.13 | 1.55 | 3.12 | 2.24 | 4.94 |
| PBA Pearl | 110 | 97 | 100 | 118 | 122 |
| PBA Butler[Ф] | 101 | 93 | | 107 | 112 |
| PBA Taylor[Ф] | 107 | 95 | 112 | 101 | 104 |
| PBA Percy | 95 | 111 | 101 | 104 | 102 |
| PBA Noosa[Ф] | 110 | 89 | 86 | 107 | 108 |
| PBA Oura[Ф] | 101 | 104 | 97 | 101 | 99 |
| PBA Wharton[Ф] | 105 | 100 | 103 | 95 | 94 |
| Kaspa[Ф] | 90 | 92 | 94 | 98 | 100 |
| PBA Gunyah[Ф] | 97 | 93 | | 98 | 99 |
| GIA Ourstar[Ф]* | | | 84 | 91 | 83 |
| **Sowing date** | **29 May** | **28 May** | **21 May** | **28 May** | **25 May** |
| **Rainfall J–M (mm)** | **23** | **23** | **102** | **36** | **46** |
| **Rainfall A–O (mm)** | **206** | **231** | **413** | **282** | **388** |

Special thanks to 2022 trial cooperator, Fraser Smith.
* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

**Table 2: Minlaton field pea.**

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 2.80 | 2.43 | | 4.25 | 3.60 |
| PBA Taylor[Ф] | 104 | 103 | Compromised trial | 116 | 112 |
| PBA Butler[Ф] | 104 | 108 | | 111 | 108 |
| PBA Pearl | 101 | 107 | | 108 | 111 |
| PBA Noosa[Ф] | 95 | 96 | | 118 | 105 |
| PBA Wharton[Ф] | 100 | 95 | | 106 | 103 |
| Kaspa[Ф] | 100 | 104 | | 102 | 95 |
| PBA Gunyah[Ф] | 97 | 98 | | 104 | 96 |
| PBA Oura[Ф] | 98 | 98 | | 95 | 98 |
| PBA Percy | 100 | 103 | | 81 | 94 |
| GIA Kastar[Ф]* | | | | 78 | 80 |
| **Sowing date** | **23 May** | **8 May** | **21 May** | **1 Jun** | **10 Jun** |
| **Rainfall J–M (mm)** | **14** | **5** | **45** | **51** | **92** |
| **Rainfall A–O (mm)** | **285** | **243** | **410** | **308** | **286** |

Special thanks to 2022 trial cooperator, Adam Cook.
* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

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

**Table 3: Riverton field pea.**

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 2.41 | 2.32 | 3.08 | 4.39 | 3.66 |
| PBA Pearl | 101 | 110 | 107 | 106 | 129 |
| PBA Butler(b) | 102 | 101 | | 106 | 122 |
| PBA Taylor(b) | 106 | 99 | 123 | 107 | 109 |
| PBA Noosa(b) | 99 | 102 | 90 | 103 | 115 |
| Kaspa(b) | 97 | 94 | 95 | 100 | 107 |
| PBA Wharton(b) | 103 | 99 | 104 | 100 | 91 |
| PBA Oura(b) | 99 | 102 | 93 | 98 | 95 |
| PBA Percy | 97 | 105 | 93 | 96 | 96 |
| PBA Gunyah(b) | 97 | 96 | | 99 | 102 |
| GIA Ourstar(b)* | | | 63 | 87 | 68 |
| **Sowing date** | **6 Jun** | **5 Jun** | **27 May** | **2 Jun** | **27 May** |
| **Rainfall J–M (mm)** | **28** | **15** | **42** | **45** | **59** |
| **Rainfall A–O (mm)** | **248** | **313** | **401** | **354** | **484** |

Special thanks to 2022 trial cooperator, Daryl Behn.
* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

**Table 4: Willamulka field pea.**

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 1.48 | 1.33 | 1.34 | 2.26 | 2.14 |
| PBA Butler(b) | 105 | 105 | | 113 | 107 |
| PBA Taylor(b) | 103 | 103 | 113 | 106 | 105 |
| PBA Pearl | 101 | 111 | 98 | 103 | 110 |
| Kaspa(b) | 103 | 99 | 105 | 108 | 99 |
| PBA Percy | 99 | 99 | 91 | 102 | 100 |
| PBA Gunyah(b) | 99 | 100 | | 96 | 98 |
| PBA Noosa(b) | 97 | 107 | 96 | 89 | 103 |
| PBA Wharton(b) | 99 | 98 | 102 | 94 | 98 |
| PBA Oura(b) | 98 | 100 | 94 | 95 | 99 |
| GIA Kastar(b)* | | | 91 | 88 | 84 |
| **Sowing date** | **17 May** | **18 May** | **21 May** | **27 May** | **8 Jun** |
| **Rainfall J–M (mm)** | **26** | **5** | **32** | **36** | **135** |
| **Rainfall A–O (mm)** | **177** | **212** | **273** | **234** | **238** |

Special thanks to 2022 trial cooperator, Brenton Koch.
* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

## Field pea variety disease ratings – South Australia

The following table contains varietal ratings for the predominant diseases of field pea in South Australia. These ratings are updated annually by crop pathologists and were released in March 2023.

Selected varieties of most relevance to South 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 South Australia.**

| Variety | Bacterial blight | Downy mildew | Powdery mildew | RLN resistance (*Pratylenchus neglectus*) | RLN resistance (*Pratylenchus thornei*) |
|---|---|---|---|---|---|
| GIA Kastar(b) | S | S | RMR | MR | MS |
| GIA Ourstar(b) | S (P) | S | S | MRMS | MSS |
| Kaspa(b) | S | S | S | RMR | MRMS |
| PBA Butler(b) | MS | S | S | RMR | MRMS |
| PBA Gunyah(b) | S | S | S | RMR | MRMS |
| PBA Noosa(b) | S | MS | S | MR | MRMS |
| PBA Oura(b) | MS | S | S | MR | MRMS |
| PBA Pearl | MS | S | S | MR | MRMS |
| PBA Percy | MRMS | S | S | RMR | RMR |
| PBA Taylor(b) | S | S | S | RMR | MRMS |
| PBA Twilight(b) | S | S | S | MR | MRMS |
| PBA Wharton(b) | S | S | RMR | MR | MRMS |

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

# LENTIL

## New lentil varieties

The following information is for lentil varieties released in the 12 months to the date when the MET analysis was published on NVT online.

| Variety | Variety owner | Grain classification | End point royalty* ($) | Comments supplied by variety owner |
|---|---|---|---|---|
| GIA Leader(Φ) | Grains Innovation Australia | Red | 5.40 | An imidazolinone-tolerant red lentil variety well suited to reliable lentil growing areas in medium to higher-rainfall zones. GIA Leader(Φ) has a good level of foliar disease resistance (both Botrytis grey mould (BGM) and Ascochyta blight) and improved vegetative frost tolerance compared to PBA Hurricane XT(Φ). This variety has imidazolinone and soil residue sulfonylurea herbicide tolerance similar to existing XT varieties. GIA Leader(Φ) has mid to late flowering and maturity, similar to Nugget, making it well suited to early sowing. It has a spreading plant type that can assist protection of pods at maturity. Uniform grey seed coat and the grain is well suited to the medium-sized Nugget-type market. |
| GIA Lightning(Φ) | Grains Innovation Australia | Red | 5.40 | An imidazolinone-tolerant, high-yielding small round red lentil with superior adaptation to light textured sandy soils than other lentil varieties, making it suitable for growing in Mallee regions. GIA Lightning(Φ) has an upright plant type, which aids harvestability. This variety has imidazolinone and soil residue sulfonylurea herbicide tolerance similar to existing XT varieties. GIA Lightning(Φ) is mid to late flowering with mid-maturity, has moderate resistance to pod drop and lodging, and is resistant/moderately resistant to shattering at maturity. GIA Lightning(Φ) has the same Ascochyta blight disease rating as GIA Thunder(Φ) but is more susceptible to BGM. GIA Lightning(Φ) is not well suited to soil types or regions prone to BGM. |
| GIA Metro(Φ) | Grains Innovation Australia | Red | 7.50 | The first lentil to combine imidazolinone and metribuzin herbicide tolerances. This unique combination of herbicide tolerance will expand weed control options in lentil, particularly in light-textured soils prone to damage from the application of Group 5 (previously Group C) herbicides. Grain yield is significantly lower than existing lentil varieties in the absence of weed pressure, or where weeds are controlled effectively without crop damage from Group 5 herbicides. GIA Metro(Φ) is a large, lens-shaped red lentil with a grey seed coat. |
| GIA Sire(Φ) | Grains Innovation Australia | Red | TBC | The first lentil with improved tolerance to Clopyralid soil residues from a prior crop applied according to product label directions. GIA Sire(Φ) is a premium, small, round red lentil with a grey seed coat. Its tolerance to imidazolinone and soil residue sulfonylurea is similar to existing XT varieties. GIA Sire(Φ) is slow-growing with smaller plant parts, increased basal branching and shorter plant height compared to other lentil varieties. It is best suited to agronomic practices such as early sowing and lentil growing environments that maximise growth, harvest height and grain yield. Avoid growing this variety in low-fertility sandy soils or low-rainfall, frost-prone environments. Seed of GIA Sire(Φ) is available only under small, scale-controlled release. |
| GIA Thunder(Φ) | Grains Innovation Australia | Red | 5.40 | A broadly adapted, imidazolinone-tolerant, small, round red lentil, offering growers high and stable yields across all lentil growing regions. GIA Thunder(Φ) is a mid-flowering and mid-maturing variety, with better vegetative frost tolerance than PBA HighlandXT(Φ), PBA Hallmark XT(Φ), PBA Hurricane XT(Φ) and GIA Lightning(Φ). GIA Thunder(Φ) has similar Group 2 (imidazolinone and soil residue sulfonylurea) herbicide tolerance to existing XT varieties. GIA Thunder(Φ) has the same Ascochyta blight disease rating as PBA Hurricane XT(Φ) and GIA Lightning(Φ) but an improved BGM rating over both. The grain is well suited to the small premium round grain market with a uniform grey seed coat with seed size similar to PBA Hurricane XT(Φ). |

* EPR amount is ex-GST, (Φ) denotes Plant Breeder's Rights apply, TBC denotes to be confirmed.

The table above has been updated in this ***Revised May 2023*** harvest report. Please disregard all previous versions of this report, which regrettably contained incorrect information. Of specific importance, it should be noted that GIA Thunder(Φ) lentil is in the same small round lentil market class as PBA Hurricane XT(Φ); this was incorrectly stated in previous editions.

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

# Lentil variety yield performance – Central South Australia

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: Laura lentil.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 1.70 | 1.50 | 1.57 | | 3.64 |
| GIA Thunder(Ф)* | | | 120 | Trial failed | 143 |
| PBA Jumbo2(Ф) | 107 | 112 | 111 | | 113 |
| GIA Leader(Ф)* | | 83 | 106 | | 112 |
| PBA Hurricane XT(Ф)* | 102 | 91 | 103 | | 106 |
| PBA Hallmark XT(Ф)* | 102 | 84 | 103 | | 108 |
| PBA Kelpie XT(Ф)* | 88 | 120 | 93 | | 99 |
| GIA Lightning(Ф)* | | | 108 | | 91 |
| PBA HighlandXT(Ф)* | 99 | 109 | 100 | | 87 |
| PBA Ace(Ф) | | 94 | 103 | | 77 |
| Nipper(Ф) | 91 | 80 | 79 | | 98 |
| **Sowing date** | **29 May** | **28 May** | **21 May** | **28 May** | **25 May** |
| **Rainfall J–M (mm)** | **23** | **23** | **102** | **36** | **46** |
| **Rainfall A–O (mm)** | **206** | **231** | **413** | **282** | **388** |

Special thanks to 2022 trial cooperator, Fraser Smith.
* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

## Table 2: Maitland lentil.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 3.23 | 2.46 | | 3.47 | 2.43 |
| GIA Thunder(Ф)* | | | Compromised trial | 110 | 131 |
| PBA Kelpie XT(Ф)* | 106 | 110 | | 102 | 114 |
| PBA Jumbo2(Ф) | 108 | 111 | | 100 | 111 |
| GIA Lightning(Ф)* | | | | 111 | 93 |
| PBA HighlandXT(Ф)* | 103 | 103 | | 106 | 96 |
| PBA Hurricane XT(Ф)* | 98 | 95 | | 102 | 99 |
| PBA Blitz(Ф) | 100 | 105 | | | 95 |
| PBA Hallmark XT(Ф)* | 95 | 92 | | 101 | 98 |
| GIA Leader(Ф)* | | 92 | | 100 | 98 |
| PBA Bolt(Ф) | 99 | 98 | | 101 | 72 |
| **Sowing date** | **22 May** | **21 May** | **14 May** | **1 Jun** | **2 Jun** |
| **Rainfall J–M (mm)** | **82** | **8** | **47** | **71** | **97** |
| **Rainfall A–O (mm)** | **232** | **267** | **344** | **219** | **417** |

Special thanks to 2022 trial cooperator, Adam Schulz.
* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

## Table 3: Minlaton lentil.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 2.08 | 1.32 | 3.52 | | 3.58 |
| PBA Jumbo2(Ф) | 111 | 109 | 105 | Compromised trial | 107 |
| GIA Thunder(Ф)* | | | 105 | | 110 |
| GIA Lightning(Ф)* | | | 104 | | 101 |
| PBA Ace(Ф) | | 111 | 105 | | 94 |
| GIA Leader(Ф)* | | 105 | 104 | | 97 |
| PBA HighlandXT(Ф)* | 100 | 101 | 100 | | 101 |
| PBA Hurricane XT(Ф)* | 98 | 102 | 102 | | 98 |
| PBA Hallmark XT(Ф)* | 96 | 102 | 102 | | 96 |
| PBA Bolt(Ф) | 102 | 100 | 99 | | 95 |
| PBA Kelpie XT(Ф)* | 96 | 89 | 94 | | 106 |
| **Sowing date** | **23 May** | **8 May** | **21 May** | **1 Jun** | **10 Jun** |
| **Rainfall J–M (mm)** | **14** | **5** | **45** | **51** | **92** |
| **Rainfall A–O (mm)** | **285** | **243** | **410** | **308** | **286** |

Special thanks to 2022 trial cooperator, Adam Cook.
* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

## Table 4: Riverton lentil.

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Mean yield (t/ha) | 2.61 | 2.42 | 4.01 | 4.03 | 4.96 |
| GIA Thunder(Ф)* | | | 110 | 107 | 125 |
| PBA Jumbo2(Ф) | 113 | 108 | 109 | 111 | 116 |
| PBA Flash(Ф) | 101 | | | | |
| PBA Kelpie XT(Ф)* | 91 | 111 | 103 | 104 | 111 |
| PBA HighlandXT(Ф)* | 99 | 104 | 102 | 103 | 90 |
| PBA Blitz(Ф) | 89 | 106 | 96 | | 100 |
| PBA Hurricane XT(Ф)* | 100 | 96 | 99 | 97 | 97 |
| GIA Lightning(Ф)* | | | 104 | 102 | 84 |
| GIA Leader(Ф)* | | 92 | 97 | 95 | 98 |
| PBA Hallmark XT(Ф)* | 99 | 92 | 96 | 94 | 96 |
| **Sowing date** | **6 Jun** | **5 Jun** | **27 May** | **2 Jun** | **27 May** |
| **Rainfall J–M (mm)** | **28** | **15** | **42** | **45** | **59** |
| **Rainfall A–O (mm)** | **248** | **313** | **401** | **354** | **484** |

Special thanks to 2022 trial cooperator, Daryl Behn.
* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

| Table 5: Willamulka lentil. | | | | | |
|---|---|---|---|---|---|
| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
| Mean yield (t/ha) | 1.18 | | 1.45 | | |
| GIA Lightning(Ф)* | | Trial failed | 109 | Trial failed | Compromised trial |
| GIA Thunder(Ф)* | | | 112 | | |
| GIA Leader(Ф)* | | | 112 | | |
| PBA Hallmark XT(Ф)* | 98 | | 111 | | |
| PBA Hurricane XT(Ф)* | 100 | | 108 | | |
| PBA Ace(Ф) | | | 103 | | |
| PBA HighlandXT(Ф)* | 106 | | 99 | | |
| PBA Jumbo2(Ф) | 102 | | 95 | | |
| PBA Bolt(Ф) | 105 | | 92 | | |
| PBA Kelpie XT(Ф)* | 102 | | 89 | | |
| **Sowing date** | **17 May** | **18 May** | **21 May** | **27 May** | **8 Jun** |
| **Rainfall J–M (mm)** | **26** | **5** | **32** | **36** | **135** |
| **Rainfall A–O (mm)** | **177** | **212** | **273** | **234** | **238** |

Special thanks to 2022 trial cooperator, Brenton Koch.
* herbicide-tolerant variety. Learn more via the NVT Long Term Yield Reporter

## Lentil variety disease ratings – South Australia

The following table contains varietal ratings for the predominant diseases of lentil in South Australia. These ratings are updated annually by crop pathologists and were released in March 2023.

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

| Table 6: Lentil disease guide for South Australia. | | | | | |
|---|---|---|---|---|---|
| Variety | Ascochyta blight (Pathotype 2 PBA Hurricane XT(Ф) virulent) | Ascochyta blight (Pathotype 1 Nipper(Ф) virulent) | Botrytis grey mould | RLN resistance (*Pratylenchus neglectus*) | RLN resistance (*Pratylenchus thornei*) |
| GIA Leader(Ф) | MR | MR | MRMS (P) | R | MR |
| GIA Lightning(Ф) | MRMS | R | MS | R | MR |
| GIA Metro(Ф) | RMR | MR | MRMS | MR | MRMS |
| GIA Sire(Ф) | MRMS (P) | R | MS | MR | MR |
| GIA Thunder(Ф) | MRMS | R | MRMS | MR | R |
| Nipper(Ф) | MR | MRMS | MRMS (P) | RMR | MR |
| PBA Ace(Ф) | MR | R | MS | MR | MRMS |
| PBA Blitz(Ф) | MR | MRMS | MS (P) | MR | MRMS |
| PBA Bolt(Ф) | MRMS | MR | S | MR | MR |
| PBA Hallmark XT(Ф) | MRMS | RMR | MRMS (P) | MR | MRMS |
| PBA HighlandXT(Ф) | MR | MR | MS | MR | MRMS |
| PBA Hurricane XT(Ф) | MRMS | RMR | MS | MRMS | MRMS |
| PBA Jumbo2(Ф) | RMR (P) | R | MR (P) | MR | MRMS |
| PBA Kelpie XT(Ф) | MRMS | MRMS | MS (P) | MRMS | MRMS |

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

# LUPIN

## New lupin varieties

The following information is for lupin varieties released in the 12 months to the date when the MET analysis was published on NVT online.

| Variety | Variety owner | End point royalty* ($) | Comments supplied by variety owner |
|---|---|---|---|
| Lawler(b) | Australian Grain Technologies | 4.00 | A widely adapted variety, offering growers high and stable yields across all NSW, Victorian and South Australian lupin growing regions. |

* EPR amount is ex-GST, (b) denotes Plant Breeder's Rights apply.



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

# Lupin variety yield performance – Central South Australia

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: Spalding narrow-leaf lupin.**

| Year | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| **Mean yield (t/ha)** | **1.35** | **1.52** | **2.12** | **1.38** | **4.74** |
| PBA Jurien[Φ] | | 101 | 82 | 104 | 113 |
| PBA Barlock[Φ] | | 98 | 87 | 99 | 109 |
| Mandelup[Φ] | | 98 | 89 | 104 | 106 |
| Lawler[Φ] | | | 89 | 110 | 105 |
| PBA Bateman[Φ] | 118 | 104 | 95 | 99 | 105 |
| Coyote[Φ] | 117 | | 91 | 110 | 105 |
| Jenabillup[Φ] | 107 | 102 | 102 | 90 | 101 |
| PBA Gunyidi[Φ] | | 105 | 106 | 92 | 99 |
| Wonga | 117 | 89 | 99 | 92 | 97 |
| Jindalee | | 73 | 101 | 98 | 87 |
| **Sowing date** | **6 May** | **14 May** | **27 Apr** | **31 May** | **26 May** |
| **Rainfall J–M (mm)** | **20** | **8** | **84** | **42** | **42** |
| **Rainfall A–O (mm)** | **217** | **267** | **411** | **290** | **458** |

Special thanks to 2022 trial cooperator, David Bruce.
Learn more via the NVT Long Term Yield Reporter

# Lupin variety disease ratings – South Australia

The following table contains varietal ratings for the predominant diseases of lupin in South Australia. These ratings are updated annually by crop pathologists and were released in March 2023.

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

**Table : Lupin disease guide for South Australia.**

| Variety | Anthracnose resistance | Cucumber mosaic virus (CMV) | Phomopsis pod infection | Phomopsis stem infection |
|---|---|---|---|---|
| Coyote[Φ] | MRMS | MRMS | MRMS | S |
| Jenabillup[Φ] | MS | MRMS | MR | MS |
| Jindalee | MRMS | S | MR | RMR |
| Lawler[Φ] | MR | MRMS | MS | MR |
| Mandelup[Φ] | MRMS | MRMS | S | RMR |
| PBA Barlock[Φ] | RMR | MR | MR | MR |
| PBA Bateman[Φ] | MRMS | MR | MS | RMR |
| PBA Gunyidi[Φ] | MRMS | MRMS | MRMS | RMR |
| PBA Jurien[Φ] | RMR | MS | MR | RMR |
| Quilinock | VS | MS | S | S |
| Wonga | RMR | MR | MR | MR |

Learn more via the NVT Disease Ratings.
R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible.

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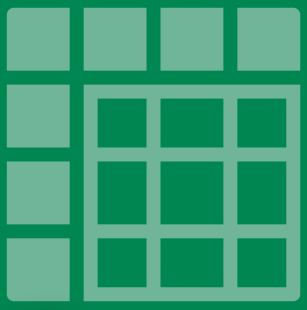

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